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Release Package 6.19c

Release Date (yyyy/mm/dd) 2026/05/16

Item	Version
Latest O/S tested	J06.23.01 - L25.09.00
Client Version	6.19c Build 933
Server Version (VPROC)	6.19a T0000G06___V6_19a___2026_05_11
Buffer Version	Client 21.81 Server 21.81
History database	3.10
CONFMOMI	6.03
OBYMOMI	6.01
OBYCSQL	5.02
MomiFTP.exe	2.17
CentralServer.exe	1.8
ssMOMI.scr	6.00
MomiEMail.exe	1.12
SendMail.exe	1.01
IPCalc.exe	1.3.3
Oldest client version tested with server	5.93

Clients 5.15 and earlier may fail on connect.

New Features / Bugs Fixed

(see MOMI HISTORY.RTF for previous versions)

Common new features (requires current client and server)

*If you are using Client Access, newly added screens in a MOMI release update are not available to users by default. This action may be changed on the screen **Configure / Client Access / Global Settings** by checking the option **New screens enabled by default**. The user that started MOMI, known as the **Default Security User**, always has new screens enabled by default.*

Installer

- None

Help

- The navigation panel on the left for PDF and Microsoft Word Help documents have some misplaced entries following the section PC Client. This is a known issue with our help authoring software.

Installation Files

•None

MOMI Client

New Screens:

•None

New Features:

•None

Bug Fixes

- **Overview / CPU Info**
  - When the user right-clicked the Chart selector button it would jump to the Configure screen to allow changing the threshold values but the values currently set for that setting were not correctly shown. Fixed.
- **Overview / EMS Msgs**
  - When Client Access had EMS Message viewing turned off for a user it Would still be available. Fixed.
- **SubSystems / Spooler / View Job**
  - If the job to view was open data accumulated up to the 'open' End Of File error was not displayed. This was broken in 6.18h. Fixed.

Misc. Items:

•None

Known issues:

•**Systems / File Transfer / SFTP**

- If file is transferred as a Key-Sequenced structured file sometimes SFTP will think the transfer is successful but the host file is left empty. A check is now done and an error shows if this happened. Note: Sometimes making the **REC LEN** even will succeed. Some failures are caused by unknown factors and seem to be a failure in the SFTP Server on the NonStop.

•**SubSystems / Discovery**

- Feature is still under development and subject to change. Comments and suggestions are invited and welcome.

MOMI Server

New Features:

- The CONFMOMI keyword LOGON-ALLOW-NUMERIC-UID is now available to permit a numeric User ID at login (this turns off bit <12> of the *options* parameter of the Guardian procedure USER_AUTHENTICATE_).

Bug Fixes:

- None

- None

Misc. Items:

- None

Known Issues:

- None

MOMIFTP

- None

ssMOMI

- None

MomiEmail

- None

SendMail

- None

CentralServer

- None

IPCalc

- None

Release Package 6.19b

```
Release Date (yyyy/mm/dd)  2026/05/11

Item                       Version
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Latest O/S tested          J06.23.01 - L25.09.00

Client Version             6.19b Build 932
Server Version (VPROC)     6.19a T0000G06___V6_19a___2026_05_11

Buffer Version             Client 21.81   Server 21.81
History database           3.10
CONFMOMI                   6.03
OBYMOMI                    6.01
OBYCSQL                    5.02
MomiFTP.exe                2.17
CentralServer.exe          1.8
ssMOMI.scr                 6.00
MomiEMail.exe              1.12
SendMail.exe               1.01
IPCalc.exe                 1.3.3
```

Oldest client version
tested with server 5.93
Clients 5.15 and earlier may fail on connect.

New Features / Bugs Fixed

(see MOMI HISTORY.RTF for previous versions)

Common new features (requires current client and server)

*If you are using Client Access, newly added screens in a MOMI release update are not available to users by default. This action may be changed on the screen **Configure / Client Access / Global Settings** by checking the option **New screens enabled by default**. The user that started MOMI, known as the **Default Security User**, always has new screens enabled by default.*

Installer

•None

Help

•The navigation panel on the left for PDF and Microsoft Word Help documents have some misplaced entries following the section PC Client. This is a known issue with our help authoring software.

Installation Files

•None

MOMI Client

New Screens:

•None

New Features:

- **Overview**
  - Most buttons that have color thresholds now have a right click to jump directly to their threshold settings.
- **Systems / Probe / All Sys**
  - 'All Sys' button now has right-click to set if rows contain 2 or 3 systems.
  - Mouse moving over a CPU busy chart bar will auto display top processes in that Cpu.
- **Systems / Probe / 1-4 Sys**
  - If CPU is displaying as 2D then mouse moving over a CPU busy chart bar will auto display top processes in that Cpu. 3D still requires clicks on the bar.
- **Configure / Client / Single Screen / System / Probe**
  - Now has ability to set if 'All Systems' rows contain 2 or 3 systems.

Bug Fixes

- Under some extreme memory usage conditions, the client would crash. Fixed.
- When Logging on, some failures would be detected but the error was not displayed so it appeared as if the Logon screen needed to be closed but no indication as to why. Fixed.
- **Systems / File Transfer / MFTP**
  - File transfers would fail if the PC filename contained a UNC filename (i.e. a UNC name like '\\bws-vs-1\dir\subdir\file.txt'). Fixed.
- **Alarms / Alarm Define**
  - Whenever an Alarm is selected the status from the last update was not cleared. Fixed.

Misc. Items:

- **Systems / Probe**
  - When multiple copies of the Client select to display the small independent Probe windows only a single copy of the Probe window will now appear. Probe windows may be started and stopped by any client. (for Jon H.)

- When multiple copies of the Client select to probe a system (for System Probes, TCP/IP probes, Expand, or User Defined) all clients will now be set to probe that system also.

- **Files / Explorer / OSS**
  - Made some changes to Sorting and filtering to allow Filenames and Directories to be sorted with Directories and other type separate from filenames. (for Gary B.)

- **SubSystems / Logs / EMS Logs**
  - EMS Detail screen for EventBX now shows entire EventBX record.

- **SubSystems / Spooler / View Job**
  - When doing a search thru a list of jobs the "search" value will remain between jobs. (For Gary B).

Known issues:

- **Systems / File Transfer / SFTP**
  - If file is transferred as a Key-Sequenced structured file sometimes SFTP will think the transfer is successful but the host file is left empty. A check is now done and an error shows if this happened. Note: Sometimes making the **REC LEN** even will succeed. Some failures are caused by unknown factors and seem to be a failure in the SFTP Server on the NonStop.

- **SubSystems / Discovery**
  - Feature is still under development and subject to change. Comments and suggestions are invited and welcome.

- **Alarms / Define / Alarm**
  - Alarms from older versions of the server (i.e. pre 6.18d) will not display correctly. This is addressed in the next client version. However, defining or viewing alarms with features of 6.18 (such as user formatted alarms) will require a newer client.

MOMI Server

New Features:

- The CONFMOMI keyword LOGON-ALLOW-NUMERIC-UID is now available to permit a numeric User ID at login (this turns off bit <12> of the *options* parameter of the Guardian procedure USER_AUTHENTICATE_).

Bug Fixes:

- None

- None

Misc. Items:

- None

Known Issues:

- None

MOMIFTP

- None

ssMOMI

- None

MomiEmail

- None

SendMail

- None

CentralServer

- None

IPCalc

- None

Release Package 6.19a

```
Release Date (yyyy/mm/dd)  2026/03/24

Item                       Version
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Latest O/S tested          J06.23.01 - L25.09.00

Client Version             6.19a Build 931
Server Version (VPROC)     6.19  T0000G06___V6_19____2026_03_03

Buffer Version             Client 21.80   Server 21.79
History database           3.10
CONFMOMI                   6.03
```

OBYMOMI	6.01
OBYCSQL	5.02
MomiFTP.exe	2.17
CentralServer.exe	1.8
ssMOMI.scr	6.00
MomiEMail.exe	1.12
SendMail.exe	1.01
IPCalc.exe	1.3.3

Oldest client version
tested with server 5.93
Clients 5.15 and earlier may fail on connect.

New Features / Bugs Fixed

(see MOMI HISTORY.RTF for previous versions)

Common new features (requires current client and server)

*If you are using Client Access, newly added screens in a MOMI release update are not available to users by default. This action may be changed on the screen **Configure / Client Access / Global Settings** by checking the option **New screens enabled by default**. The user that started MOMI, known as the **Default Security User**, always has new screens enabled by default.*

Installer

- None

Help

- The navigation panel on the left for PDF and Microsoft Word Help documents have some misplaced entries following the section PC Client. This is a known issue with our help authoring software.

Installation Files

- None

MOMI Client

New Screens:

- None

New Features:

- **Overview**
  - Most buttons that have color thresholds now have a right click to jump directly to their threshold settings.

Bug Fixes

- Sometimes the client would crash when operating in a remote-access environment and the client would auto-resize if the monitor size was different from the host location. Fixed.

- **History / Process**
  - When searching for list of processes in a time period but only if a Process exists the Backward and Forward buttons did not work correctly. Fixed.

Misc. Items:

- None

Known issues:

- **Systems / File Transfer / SFTP**
  - If file is transferred as a Key-Sequenced structured file sometimes SFTP will think the transfer is successful but the host file is left empty. A check is now done and an error shows if this happened. Note: Sometimes making the **REC LEN** even will succeed. Some failures are caused by unknown factors and seem to be a failure in the SFTP Server on the NonStop.

- **SubSystems / Discovery**
  - Feature is still under development and subject to change. Comments and suggestions are invited and welcome.

- **Alarms / Define / Alarm**
  - Alarms from older versions of the server (i.e. pre 6.18d) will not display correctly. This is addressed in the next client version. However, defining or viewing alarms with features of 6.18 (such as user formatted alarms) will require a newer client.

MOMI Server

New Features:

- KLT reporting now automatically enables under L25.09 or later.

Bug Fixes:

- The count of TCP/IP processes is no longer reported as zero for information used by the screen **Configure / Server / Server Info**.

- The Disk Volume active alarm no longer appends a trailing -P, -M, -B, or -MB when the client jumps to (for example) the screen **Files / Enscribe / Volume.**

Misc. Items:

- None

Known Issues:

- None

MOMIFTP

- None

ssMOMI

- None

MomiEmail

- None

SendMail

- None

CentralServer

- None

IPCalc

- None

Release Package 6.19

```
Release Date (yyyy/mm/dd)  2026/03/09

Item                       Version
----                       -------
Latest O/S tested          J06.23.01 - L25.09.00

Client Version             6.19  Build 930
Server Version (VPROC)     6.19  T0000G06___V6_19____2026_03_03

Buffer Version             Client 21.79   Server 21.79
History database           3.10
CONFMOMI                   6.03
OBYMOMI                    6.01
OBYCSQL                    5.02
MomiFTP.exe                2.17
CentralServer.exe          1.8
ssMOMI.scr                 6.00
MomiEMail.exe              1.12
SendMail.exe               1.01
IPCalc.exe                 1.3.3

Oldest client version
 tested with server        5.93
Clients 5.15 and earlier may fail on connect.
```

New Features / Bugs Fixed

(see MOMI HISTORY.RTF for previous versions)

Common new features (requires current client and server)

If you are using Client Access, newly added screens in a MOMI release update are not available to users by default. This action may be changed on the screen ***Configure / Client Access / Global Settings*** *by checking the option* ***New screens enabled by default****. The user that started MOMI, known as the* ***Default Security User****, always has new screens enabled by default.*

Installer

- None

Help

- The navigation panel on the left for PDF and Microsoft Word Help documents have some misplaced entries following the section PC Client. This is a known issue with our help authoring software.

Installation Files

- None

MOMI Client

New Screens:

- None

New Features:

- All HTTP accesses by the client to the BlackWood Web Site have been removed and replaced with the more secure HTTPS accesses.

- The Client will now detect the MOMI Release version that is currently installed and will use that version number to set the default help file location if Web help is being used.

Bug Fixes

- Grids that have Columns with shortened Values (i.e. text... or ...textfilter) would sometimes fail if the filtered part of the text was cut off by being displayed as shortened (i.e. text... or ...text). Fixed.

- **Systems / Ping and**
- **Systems / TraceRoute**
  - Client would crash when Ping or TraceRoute was performed. Bug introduced in 6.18g. Fixed.

- **SubSystems / Logs / EMS Logs**
  - When changing the text for the colors the progress display would not go away once the progress was no longer needed. Fixed.

- **SubSystems / Spooler / View Jobs**

  - When using the next/prev on the selected jobs from list it was possible to crash the client. Fixed.

- **Alarms / Active**
  - The Client would crash when trying to display the list of active alarms when the alarms were defined on a earlier Client version. Fixed.

- **Systems / Probe**
  - Independent probe windows no longer crash if grabbed in the graph area while moving them. Reported by Jon H.

Misc. Items:

- If the client is started with an expired or invalid password the client will now display that error immediately.

- Various improvements for High-Contrast color schemes visibility.

- **Systems / Probe**
  - Added a save button to save the state and position of all System probes. This is normally done when the client shuts down but this will enable the values to be saved without exiting the client. For Jon H.
  - Changed how independent probe windows resize to make font sizing more consistent. For Jon H.

- **Alarms / Active**
  - Improved overall performance and consistency.

- **Configure / Client / General / Actions**
  - The ReadMe and History files are now returned from a secure Https location instead of Http.
  - HTTP Proxy Server settings were removed. The HTTP proxy is now set by the Windows setting.

- **Configure / Server / Server Info**
  - Improved speed creating the screen.

- **Configure / Server / Client Connections**
  - Now retains filters when updated.

- **Configure / Reference / BlackWood**
  - HTML display replaced with new high-speed version.
  - ReadMe and History files are now used in the following order (HTML then if not found use RTF).

Known issues:

- **Systems / File Transfer / SFTP**
  - If file is transferred as a Key-Sequenced structured file sometimes SFTP will think the transfer is successful but the host file is left empty. A check is now done and an error shows if this happened. Note: Sometimes making the **REC LEN** even will succeed. Some failures are caused by unknown factors and seem to be a failure in the SFTP Server on the NonStop.

- **SubSystems / Discovery**
  - Feature is still under development and subject to change. Comments and suggestions are invited and welcome.

- **Alarms / Define / Alarm**
  - Alarms from older versions of the server (i.e. pre 6.18d) will not display correctly. This is addressed in the next client version.

However, defining or viewing alarms with features of 6.18 (such as user formatted alarms) will require a newer client.

MOMI Server

New Features:

- KLT reporting now automatically enables under L25.09 or later.

Bug Fixes:

- The count of TCP/IP processes is no longer reported as zero for information used by the screen **Configure / Server / Server Info**.
- The Disk Volume active alarm no longer appends a trailing -P, -M, -B, or -MB when the client jumps to (for example) the screen **Files / Enscribe / Volume**.

Misc. Items:

- None

Known Issues:

- None

MOMIFTP

- 2.17 – Increased default window size if monitor is 4k.
  - Added ability to set which files in TANFILES are transferred by default.

ssMOMI

- None

MomiEmail

- None

SendMail

- None

CentralServer

- None

IPCalc

- None

Release Package 6.18g

Release Date (yyyy/mm/dd)	2025/11/26

Item	Version
Latest O/S tested	J06.23.01 – L25.09.00
Client Version	6.18f Build 926

```
Server Version (VPROC)      6.18f  T0000G06___V6_18f___2025_11_23

Buffer Version              Client 21.78   Server 21.78
History database            3.10
CONFMOMI                    6.03
OBYMOMI                     6.01
OBYCSQL                     5.02
MomiFTP.exe                 2.17
CentralServer.exe           1.8
ssMOMI.scr                  6.00
MomiEMail.exe               1.12
SendMail.exe                1.01
IPCalc.exe                  1.3.3

Oldest client version
 tested with server         5.93
Clients 5.15 and earlier may fail on connect.
```

New Features / Bugs Fixed

(see MOMI HISTORY.RTF for previous versions)

Common new features (requires current client and server)

*If you are using Client Access, newly added screens in a MOMI release update are not available to users by default. This action may be changed on the screen **Configure / Client Access / Global Settings** by checking the option **New screens enabled by default**. The user that started MOMI, known as the **Default Security User**, always has new screens enabled by default.*

Installer

- **None**

Help

- The navigation panel in the left for PDF and Microsoft Word Help documents have some misplaced entries following the section PC Client.

Installation Files

- **None**

MOMI Client

New Screens:

- **None**

New Features:

- All HTTP accesses by the client to the BlackWood Web Site have been removed and replaced with the more secure HTTPS accesses.

- Help is displayed by default from local files. If local files are not present help is displayed from our website. Previously, the version

selected was the same as the client. A new file RLSEID.txt now provides the release package version which may reference more relevant content. A setting **Help via Web** is found under **Configure / Client / General – File Locations** to modify automatic actions.

Bug Fixes:

- None

Misc. Items:

- **Configure / Client / General / Actions**
  - The ReadMe and History files are now returned from a secure HTTPS location instead of HTTP.
  - HTTP Proxy Server settings were removed. The HTTP proxy is now set by the Windows setting.

- **Configure / Reference / BlackWood**
  - HTML display replaced with new high-speed version.
  - ReadMe and History files are now used in the following order (First HTML then RTF).

- The client can now display alarm definitions from older versions of the MOMI server.

Known issues:

- **Systems / File Transfer / SFTP**
  - If file is transferred as a Key-Sequenced structured file sometimes SFTP will think the transfer is successful but the host file is left empty. A check is now done and an error shows if this happened. Note: Sometimes making the **REC LEN** even will succeed. Some failures are caused by unknown factors and seem to be a failure in the SFTP Server on the NonStop.

- **SubSystems / Discovery**
  - Feature is still under development and subject to change. Comments and suggestions are invited and welcome.

- **Alarms / Define / Alarm**
  - Alarms from older versions of the server (i.e. pre 6.18d) will not display correctly. This is addressed in the next client version. However, defining or viewing alarms with features of 6.18 (such as user formatted alarms) will require a newer client.

MOMI Server

New Features:

- None

Bug Fixes:

- Corrected a problem in file name validation that caused, for example, the alarm **DiskFile / Percent full** with an Entity Name of $*.*.* to generate a

"was not found" error.

- Corrected a problem with the 6.18e server where did not report alarm definition information on the screen **Alarms / Define / Alarm** correctly to older client versions. This appeared as no to few options available for any alarm definition.

Misc. Items:

- None

Known Issues:

- None

MOMIFTP

- 2.17 - Increased default window size if monitor is 4k.
  - Added ability to set which files in TANFILES are transferred by default.

ssMOMI

- None

MomiEmail

- None

SendMail

- None

CentralServer

- None

IPCalc

- None

Release Package 6.18f

Release Date (yyyy/mm/dd)	2025/11/23
Item	Version
Latest O/S tested	J06.23.01 - L25.09.00
Client Version	6.18d Build 924
Server Version (VPROC)	6.18f T0000G06___V6_18f___2025_11_23
Buffer Version	Client 21.77 Server 21.78
History database	3.10
CONFMOMI	6.03
OBYMOMI	6.01

```
OBYCSQL                    5.02
MomiFTP.exe                2.16
CentralServer.exe          1.8
ssMOMI.scr                 6.00
MomiEMail.exe              1.12
SendMail.exe               1.01
IPCalc.exe                 1.3.3

Oldest client version
 tested with server        5.80
Clients 5.15 and earlier may fail on connect.
```

New Features / Bugs Fixed

(see MOMI HISTORY.RTF for previous versions)

Common new features (requires current client and server)

*If you are using Client Access, newly added screens in a MOMI release update are not available to users by default. This action may be changed on the screen **Configure / Client Access / Global Settings** by checking the option **New screens enabled by default**. The user that started MOMI, known as the **Default Security User**, always has new screens enabled by default.*

Installer

- **None**

Help

- The navigation panel in the left for PDF and Microsoft Word Help documents have some misplaced entries following the section PC Client.

Installation Files

- **None**

MOMI Client

New Screens:

- **None**

New Features:

- Some Grids now have a setting in the Tools popup that allows the user to set the default sort column.

- Grids that contain an 'X' checkbox to select the row now have new checkboxes that resize with the grid. Previously on a full screen client on a 4k monitor the checkbox was too small to see.

- Grids that contain a precent progress bar now will resize with the grid. Previously on a full screen client on a 4k monitor the nn% was too small to see.

- **CPUs / Detail Chart L/H**
  - Detail Chart now has the ability to view the detail info from the various History databases as well as the live data.

- **Overview**
  - Overview now allows EMS messages to display if the client is in Mini-MOMI mode. The main EMS Logs screen is still not available in Mini-MOMI. (For Vikas K.)
  - When the mouse is over the top/left 1/3 of the "BlackWood" or "Alarms" of the client and if allowed by Configure/Client/Single Screen/Alarms "Allow display of Logo/Alarm Popup" and User is allowed to view Active alarms and Popup screen will display of all monitored systems. This popup will remain up until the mouse leaves the "BlackWood" or "Alarms".

- **Files / File View**
  SubSystems / Spooler / View Job
  - added ability to print only selected lines when using the export 'Print to PC Printer'.

  SubSystems / Expand /Lines / Detail
  SubSystems / Expand /Lines / Info
  - Added Query Packet Size values.

- **Alarms / Define / Actions**
  - The Alarm Display text can now be customized similar to the EMS Message and the Email.
  - When creating screenprints for email to BlackWood now screenprints include all EMS and Email set and clear screens.

- **Alarms / List / Alarms**
  - Alarms can be temporarily turned off.
  - Added 'Delete Alarm' to right-click action menu.

- **Configure / Client / General / Logon & Connections**
  - added check to cause jump to Overview screen when a Logon is successful
  - added check to cause jump to Overview screen when a system change is successful.

Bug Fixes:

- When a user logged on all alarm info was discarded and re-requested causing a delay in the display of Alarms. Fixed.

- When the client was on one of the alarm screens and the connection to the server failed, when the client reconnected, it would not reload the alarm info until the user clicked on an alarm tab. Fixed.

- **Files / File Explorer / NSK**
  Files / Enscribe / Files
  Files / File Entity
  Processes / Process Detail
  - When switching to get File Detail, if the File was an ANSI name it would not correctly get the Partition, Alternate Keys and Alternate Key Files data. Fixed.

- **Files / Enscribe / SubVols**
  - If a request for a subvol that did not exist was sent to a server version that was prior to 6.18d the client would crash. Fixed.
  - If a volume was an SSD drive they were mistakenly colored as Virtual disks. Fixed.

- **SubSystems / Logs / EMS Log**
  - If invalid Distributor Filter name or Template Name was used no records were returned but the error did not display. Fixed.

- **SubSystems / Logs / VHS Log**
  - If the first request was for 'CURRENT ACTIVE VHS LOG' and sent by moving the scroll speed and direction indicator instead of using the Request button the request would fail with the error 'File System Error(13) The Filename was not specified in the proper form [CURRENT ACTIVE VHS LOG]' Fixed.

- **SubSystems / Logs / EMS EventBX**
  - Vertical scrollbar did not show when needed. (broken in version 6.18) Fixed.

- **SubSystems / LogViewer**
  - Save buttons were not always enabled when they should be. Fixed.

- **SubSystems / Expand / $NCP**
  SubSystems / Expand / $ZEXP
  - Screens would only load when the screen was requested the first time, so when the system changed the data for the new system was not loaded. Fixed.

- **History / Chart**
  - The starting point of the Initial chart was incorrect on Windows 11 PCs. Fixed.

- **Alarm / Active**
  - When attempting to temporarily turn off an alarm the popup would disappear when and update to the screen arrived. Fixed.

- **Alarm / Define / Alarm**
  - The ability to display and set the Interval times for a TCP/IP Ping was not visible. Fixed.

Misc. Items:

- **SubSystems / Logs / EMS Log**
  - Config Request for "Lightning Mode" is now bigger.

- **Alarms / Active**
  - When the alarm active screen is displayed for the first time it now loads much faster.

- **Configure / Client / General / Fonts**
  - For ‘Character Display’ only the character sets installed on the PC will be enabled on 'Available Additional Character Set’.

Known issues:

- **Systems / File Transfer / SFTP**
  - If file is transferred as a Key-Sequenced structured file sometimes SFTP will think the transfer is successful but the host file is left empty. A check is now done and an error shows if this happened. Note: Sometimes making the **REC LEN** even will succeed. Some failures are caused by unknown factors and seem to be a failure in the SFTP Server on the NonStop.

- **SubSystems / Discovery**
  - Feature is still under development and subject to change. Comments and suggestions are invited and welcome.

- **Alarms / Define / Alarm**
  - Alarms from older versions of the server (i.e. pre 6.18d) will not display correctly. This is addressed in the next client version. However, defining or viewing alarms with features of 6.18 (such as user formatted alarms) will require a newer client.

MOMI Server

New Features:

- None

Bug Fixes:

- Corrected a problem in file name validation that caused, for example, the alarm **DiskFile / Percent full** with an Entity Name of $*.*.* to generate a "was not found" error.

- Corrected a problem with the 6.18e server where did not report alarm definition information on the screen **Alarms / Define / Alarm** correctly to older client versions. This appeared as no to few options available for any alarm definition.

Misc. Items:

- None

Known Issues:

- None

MOMIFTP

- 2.16 - Fixed bug that a very large file would fail on transfer.

ssMOMI

- None

MomiEmail

- None

SendMail

- None

CentralServer

- None

IPCalc

- None

Release Package 6.18e

```
Release Date (yyyy/mm/dd)  2025/11/16

Item                       Version
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Latest O/S tested          J06.23.01 - L25.09.00

Client Version             6.18d  Build 924
Server Version (VPROC)     6.18e  T0000G06___V6_18e___2025_11_13

Buffer Version             Client 21.77   Server 21.77
History database           3.10
CONFMOMI                   6.03
OBYMOMI                    6.01
OBYCSQL                    5.02
MomiFTP.exe                2.16
CentralServer.exe          1.8
ssMOMI.scr                 6.00
MomiEMail.exe              1.12
SendMail.exe               1.01
IPCalc.exe                 1.3.3

Oldest client version
 tested with server        5.80
Clients 5.15 and earlier may fail on connect.
```

New Features / Bugs Fixed

(see MOMI HISTORY.RTF for previous versions)

Common new features (requires current client and server)

If you are using Client Access, newly added screens in a MOMI release update are not available to users by default. This action may be changed on the screen ***Configure / Client Access / Global Settings*** *by checking the option* ***New screens enabled by default.*** *The user that started MOMI, known as the* ***Default Security User,*** *always has new screens enabled by default.*

Installer

- The installer now references Readme.PDF instead of Readme.RTF. This reflects the removal of Wordpad, previously the default RTF file viewer, in recent versions of Windows 11. Shortcuts created for MOMI ReadMe and History in Windows Start also now reference PDF files. Microsoft Edge, the O/S browser, had a built-in ability to display PDF files.

Help

- **None**

Installation Files

- **None**

MOMI Client

New Screens:

- **None**

New Features:

- Some Grids now have a setting in the Tools popup that allows the user to set the default sort column.

- Grids that contain an 'X' checkbox to select the row now have new checkboxes that resize with the grid. Previously on a full screen client on a 4k monitor the checkbox was too small to see.

- Grids that contain a precent progress bar now will resize with the grid. Previously on a full screen client on a 4k monitor the nn% was too small to see.

- **CPUs / Detail Chart L/H**
  - Detail Chart now has the ability to view the detail info from the various History databases as well as the live data.

- **Overview**
  - Overview now allows EMS messages to display if the client is in Mini-MOMI mode. The main EMS Logs screen is still not available in Mini-MOMI. (For Vikas K.)
  - When the mouse is over the top/left 1/3 of the "BlackWood" or "Alarms" of the client and if allowed by Configure/Client/Single Screen/Alarms "Allow display of Logo/Alarm Popup" and User is allowed to view Active alarms and Popup screen will display of all monitored systems. This popup will remain up until the mouse leaves the "BlackWood" or "Alarms".

- **Files / File View**
  SubSystems / Spooler / View Job
  - added ability to print only selected lines when using the export 'Print to PC Printer'.

  SubSystems / Expand /Lines / Detail
  SubSystems / Expand /Lines / Info
  - Added Query Packet Size values.

- **Alarms / Define / Actions**
  - The Alarm Display text can now be customized similar to the EMS Message and the Email.
  - When creating screenprints for email to BlackWood now screenprints include all EMS and Email set and clear screens.

- **Alarms / List / Alarms**
  - Alarms can be temporarily turned off.
  - Added 'Delete Alarm' to right-click action menu.

- **Configure / Client / General / Logon & Connections**
  - added check to cause jump to Overview screen when a Logon is successful
  - added check to cause jump to Overview screen when a system change is

successful.

Bug Fixes:

- When a user logged on all alarm info was discarded and re-requested causing a delay in the display of Alarms. Fixed.

- When the client was on one of the alarm screens and the connection to the server failed, when the client reconnected, it would not reload the alarm info until the user clicked on an alarm tab. Fixed.

- **Files / File Explorer / NSK**
  Files / Enscribe / Files
  Files / File Entity
  Processes / Process Detail
  - When switching to get File Detail, if the File was an ANSI name it would not correctly get the Partition, Alternate Keys and Alternate Key Files data. Fixed.

- **Files / Enscribe / SubVols**
  - If a request for a subvol that did not exist was sent to a server version that was prior to 6.18d the client would crash. Fixed.
  - If a volume was an SSD drive they were mistakenly colored as Virtual disks. Fixed.

- **SubSystems / Logs / EMS Log**
  - If invalid Distributor Filter name or Template Name was used no records were returned but the error did not display. Fixed.

- **SubSystems / Logs / VHS Log**
  - If the first request was for 'CURRENT ACTIVE VHS LOG' and sent by moving the scroll speed and direction indicator instead of using the Request button the request would fail with the error 'File System Error(13) The Filename was not specified in the proper form [CURRENT ACTIVE VHS LOG]' Fixed.

- **SubSystems / Logs / EMS EventBX**
  - Vertical scrollbar did not show when needed. (broken in version 6.18) Fixed.

- **SubSystems / LogViewer**
  - Save buttons were not always enabled when they should be. Fixed.

- **SubSystems / Expand / $NCP**
  SubSystems / Expand / $ZEXP
  - Screens would only load when the screen was requested the first time, so when the system changed the data for the new system was not loaded. Fixed.

- **History / Chart**
  - The starting point of the Initial chart was incorrect on Windows 11 PCs. Fixed.

- **Alarm / Active**
  - When attempting to temporarily turn off an alarm the popup would disappear when and update to the screen arrived. Fixed.

- **Alarm / Define / Alarm**
  - The ability to display and set the Interval times for a TCP/IP Ping was not visible. Fixed.

Misc. Items:

- **SubSystems / Logs / EMS Log**
  - Config Request for "Lightning Mode" is now bigger.

- **Alarms / Active**
  - When the alarm active screen is displayed for the first time it now loads much faster.

- **Configure / Client / General / Fonts**
  - For 'Character Display' only the character sets installed on the PC will be enabled on 'Available Additional Character Set'.

Known issues:

- **Systems / File Transfer / SFTP**
  - If file is transferred as a Key-Sequenced structured file sometimes SFTP will think the transfer is successful but the host file is left empty. A check is now done and an error shows if this happened. Note: Sometimes making the **REC LEN** even will succeed. Some failures are caused by unknown factors and seem to be a failure in the SFTP Server on the NonStop.

- **SubSystems / Discovery**
  - Feature is still under development and subject to change. Comments and suggestions are invited and welcome.

MOMI Server

New Features:

- None

Bug Fixes:

- Corrected validation issues that caused the following alarms to report as purple alarms in the client. 6.18d had introduced more in depth entity validation within alarms that triggered this problem:

  TMF / Subsystem down
  System / Busy percent
  Expand / Line quality
  Expand / Line state up/down
  Expand / Path state up/down
  Expand / Link-Time

Misc. Items:

- None

Known Issues:

- None

MOMIFTP

- 2.16 - Fixed bug that a very large file would fail on transfer.

ssMOMI

- None

MomiEmail

- None

SendMail

- None

CentralServer

- None

IPCalc

- None

Additional releases follow (not in navigation panel)

CURRENT VERSIONS

Release Package	6.18d
Release Date (yyyy/mm/dd)	2025/10/24

Item	Version
Latest O/S tested	J06.23.01 - L25.02.00
Client Version	6.18d Build 924
Server Version (VPROC)	6.18d T0000G06___V6_18d___2025_10_24
Buffer Version	Client 21.77 Server 21.77
History database	3.10
CONFMOMI	6.03
OBYMOMI	6.01
OBYCSQL	5.02
MomiFTP.exe	2.16
CentralServer.exe	1.8
ssMOMI.scr	6.00
MomiEMail.exe	1.12
SendMail.exe	1.01
IPCalc.exe	1.3.3

Oldest client version
tested with server 5.80
Clients 5.15 and earlier may fail on connect.

NEW FEATURES / BUGS FIXED

(see MOMI HISTORY.RTF for previous versions)

Common new features (requires current client and server)

*If you are using Client Access, newly added screens in a MOMI release update are not available to users by default. This action may be changed on the screen **Configure / Client Access / Global Settings** by checking the option **New screens enabled by default.** The user that started MOMI, known as the **Default Security User**, always has new screens enabled by default.*

Installer

- **None**

Help

- **None**

Installation Files

- The OBYMOMI file on the NonStop System now specifies DEFMODE OFF when starting the MOMI server. This is to prevent the accidental specification of an alternate EMS templates file which may result in the alarm **EMS / User defined** failing to match text as intended.

MOMI Client

New Screens:

- **None**

New Features:

- Some Grids now have a setting in the Tools popup that allows the user to set the default sort column.

- Grids that contain an 'X' checkbox to select the row now have new checkboxes that resize with the grid. Previously on a full screen client on a 4k monitor the checkbox was too small to see.

- Grids that contain a precent progress bar now will resize with the grid. Previously on a full screen client on a 4k monitor the nn% was too small to see.

- **CPUs / Detail Chart L/H**
  - Detail Chart now has the ability to view the detail info from the various History databases as well as the live data.

- **Overview**
  - Overview now allows EMS messages to display if the client is in Mini-MOMI mode. The main EMS Logs screen is still not available in Mini-MOMI. (For Vikas K.)

- When the mouse is over the top/left 1/3 of the "BlackWood" or "Alarms" of the client and if allowed by Configure/Client/Single Screen/Alarms "Allow display of Logo/Alarm Popup" and User is allowed to view Active alarms and Popup screen will display of all monitored systems. This popup will remain up until the mouse leaves the "BlackWood" or "Alarms".

- **Files / File View and SubSystems / Spooler / View Job**
  - added ability to print only selected lines when using the export 'Print to PC Printer'.

- **SubSystems / Expand /Lines / Detail and SubSystems / Expand /Lines / Info**
  - Added Query Packet Size values.

- **Alarms / Define / Actions**
  - The Alarm Display text can now be customized similar to the EMS Message and the EMail.
  - When creating screenprints for email to BlackWood now screenprints include all EMS and EMail set and clear screens.

- **Alarms / List / Alarms**
  - Alarms can be temporarily turned off.
  - Added 'Delete Alarm' to right-click action menu.

- **Configure / Client / General / Logon & Connections**
  - added check to cause jump to Overview screen when a Logon is successful
  - added check to cause jump to Overview screen when a system change is successful.

Bug Fixes:

- When a user logged on all alarm info was discarded and re-requested causing a delay in the display of Alarms. Fixed.

- When the client was on one of the alarm screens and the connection to the server failed, when the client reconnected it would not reload the alarm info until the user clicked on an alarm tab. Fixed.

- **Files / File Explorer / NSK and Files / Enscribe / Files and Files / File Entity and Processes / Process Detail**
  - When switching to get File Detail, if the File was an ANSI name it would not correctly get the Partition, Alternate Keys and Alternate Key Files data. Fixed.

- **Files / Enscribe / SubVols**
  - If a request for a subvol that did not exist was sent to a server version that was prior to 6.18d the client would crash. Fixed.
  - If a volume was an SSD drive they were mistakenly colored as Virtual disks. Fixed.

- **SubSystems / Logs / EMS Log**

- If invalid Distributor Filter name or Template Name was used no records were returned but the error did not display. Fixed.

- **SubSystems / Logs / VHS Log**
  - If the first request was for 'CURRENT ACTIVE VHS LOG' and sent by moving the scroll speed and direction indicator instead of using the Request button the request would fail with the error 'File System Error(13) The Filename was not specified in the proper form [CURRENT ACTIVE VHS LOG]' Fixed.

- **SubSystems / Logs / EMS EventBX**
  - Vertical scrollbar did not show when needed. (broken in version 6.18) Fixed.

- **SubSystems / LogViewer**
  - Save buttons were not always enabled when they should be. Fixed.

- **SubSystems / Expand / $NCP and SubSystems / Expand / $ZEXP**
  - Screens would only load when the screen was requested the first time, so when the system changed the data for the new system was not loaded. Fixed.

- **History / Chart**
  - The starting point of the Initial chart was incorrect on Windows 11 PCs. Fixed.

- **Alarm / Active**
  - When attempting to temporarily turn off an alarm the popup would disappear when and update to the screen arrived. Fixed.

- **Alarm / Define / Alarm**
  - The ability to display and set the Interval times for a TCP/IP Ping was not visible. Fixed.

Misc. Items:

- **SubSystems / Logs / EMS Log**
  - Config Request for "Lightning Mode" is now bigger.

- **Alarms / Active**
  - When the alarm active screen is displayed for the first time it now loads much faster.

- **Configure / Client / General / Fonts**
  - For 'Character Display' only the character sets installed on the PC will be enabled on 'Available Additional Character Set'.

Known issues:

- **Systems / File Transfer / SFTP**
  - If file is transferred as a Key-Sequenced structured file sometimes SFTP will think the transfer is successful but the host file is left empty. A check is now done and an error shows if this happened. Note: Sometimes making the **REC LEN** even will succeed. Some failures are caused by unknown factors and seem to be a failure in the SFTP Server on the NonStop.

- **SubSystems / Discovery**
  - Feature is still under development and subject to change.
    Comments and suggestions are invited and welcome.

MOMI Server

New Features:

- On the screen **Alarms / Define / Alarm** the **Entity Name** field and "File=", where supported, now support expanded comments as shown below:

```
$name == comment text (remainder of line)
! comment text (remainder of line)
! comment text (in-between) ! valid-stuff
```

- The alarm **Volume / Percent full** now supports "File=".

- Added CONFMOMI keyword DISK-B-MB-DOWN-OVERRIDE to force all disk Backup and Mirror Backup paths to report as not configured (and set state to DOWN). This prevents path down alarms on NonStop Virtual Systems which apparently do not provide B & MB paths but erroneously report them as down.

- Additional disk types of SAS, ESS, and JBOD are now reported.

- Added support for custom display text for Alarm Actions.

Bug Fixes:

- The variable <%Ancestor%> associated with the alarm **Process / State running/stopped** is now updated if the process is restarted. Previously, once the ancestor was obtained it was not changed.

- A sequence of an alarm being triggered, automatically deleted, trigged, and automatically deleted could have resulted in a 'lost' alarm and notification. Code was restructured to prevent losing an alarm in this situation.

- Several situations were addressed where an alarm being temporarily turned off resulted in an error message to the client and/or the alarm not automatically reenabling. A temporary turn-off of all instances of an alarm definition now first removes any individual instances. Also, when an alarm resumes processing it effectively starts over so that full initial notification now occurs.

- A possible process abend was corrected if an Alarm Action referenced variables for Destination email address or description.

- If an alarm trigged off of an ANSI name and then the user clicked on the alarm on the screens **Alarms / Active** to jump to a detail screen the name was effectively limited the name to 47 characters resulting in a 'not found' type of error. This character limit was raised to 200.

- The server no longer returns blank records when listing subvolumes and the underlying file disappears in-between obtaining the file name then trying to obtain information about the file name.

- The server supports history for the screen **CPUs / Detail Chart L/H**.

- Expand screens now function under L25.02. LDEV's (Logical Device numbers) now report as 32-bit were provided (many fields were 16-bit).

- The usage of the CONFMOMI keyword ALARM-SUSPEND-DELAY now resumes when the time expires.

- An alarm definition of *** -1 -2** now processes correctly. Previously, the **-1 -2** prevented some internal processing resulting in no match.

Misc. Items:

- The server in several cases where the client was requesting file names was automatically adding a *.* to fill in the name. This was removed so the user may need to add an *. This gives the user more control in the situation where they were looking for $fred.#qual and did not want an additional * tacked on to the end of the file name. Also, file name validation was tightened in several areas to help catch typo's.

- Listing of file names may be somewhat faster in cases where the server was using a .01 second delay every 100 files. Now, the same delay but occurs every 1 second.

- Some situations where SQL/MX is involved partitions may now list correctly instead of displaying an error 2.

- The MOMI server, after an initial query, no longer continues to query the TAPE subsystem unless a Tape mount alarm is defined (**Tape / Tape mount, TMF / Tape mount**).

Known Issues:

- None

MOMIFTP

- 2.16 - Fixed bug that a very large file would fail on transfer.

ssMOMI

- None

MomiEmail

- None

SendMail

- None

CentralServer

- None

IPCalc

- None

****

Release Package	6.18b
Release Date (yyyy/mm/dd)	2025/04/04

Item	Version
Latest O/S tested	J06.23.01 - L24.08.00
Client Version	6.18b Build 922
Server Version (VPROC)	6.18b T0000G06___V6_18b___2025_04_03
Buffer Version	Client 21.75 Server 21.75
History database	3.10
CONFMOMI	6.03
OBYMOMI	6.01
OBYCSQL	5.02
MomiFTP.exe	2.15
CentralServer.exe	1.8
ssMOMI.scr	6.00
MomiEMail.exe	1.12
SendMail.exe	1.01
IPCalc.exe	1.3.3
Oldest client version tested with server	5.80

Clients 5.15 and earlier may fail on connect.

NEW FEATURES / BUGS FIXED

(see MOMI HISTORY.RTF for previous versions)

Common new features (requires current client and server)

*If you are using Client Access, newly added screens in a MOMI release update are not available to users by default. This action may be changed on the screen **Configure / Client Access / Global Settings** by checking the option **New screens enabled by default**. The user that started MOMI, known as the **Default Security User**, always has new screens enabled by default.*

Installer

- **None**

Help

- **None**

Installation Files

- The OBYMOMI file on the NonStop System now specifies DEFMODE OFF when starting the MOMI server. This is to prevent the accidental specification of an alternate EMS templates file which may result in the alarm **EMS / User defined** failing to match text as intended.

MOMI Client

New Screens:

· **None**

New Features:

· Added ability to temporarily see spaces in some client fields.
If the Client was NOT started with the run time parameter 'dontshowspaces' and the Client does NOT have an 'Additional Character Set' selected in 'Configure / Client / Fonts-Misc.' and the cursor is within some text fields (Edits, Memos, etc.) and the ESCAPE key is pressed then spaces will be temporarily replaced with a dot and hard spaces will be replaces with a degree.

·'BlackWood/Alarm' in the Top-left corner of the client.
- Added ability to Popup a list of remote systems and their alarm state by
  1) Right-clicking the 'BlackWood/Alarm Indication' Button in the top left corner of the screen.
  2) 'Configure / Client / General' has a checkbox to disable/enable display of the Logo/Alarm popup.
- When the mouse moves over the 'BlackWood/Alarm' a 'System Alarms' popup will display showing all defined systems allowing the user to jump to that system by left-clicking on the system name.
  if they are being probed for alarms the number of alarms is displayed and
  1) by putting the mouse over the 'cpu' cell the cpu busy popup for that system will display until the mouse leaves the 'cpu' cell.
  2) by checking on a 'cpu' cell the cpu busy popup for that system will display and will remain up until uncheck or the 'System Alarms' popup disappears.

  The 'System Alarms' popup will disappear when the mouse leaves the popup.

· **Files / File Explorer / NSK** and
· **Files / Enscribe / File** and
· **Files / Enscribe / File Detail**
- If file name or OSS File name are displayed as a shortened name, the copy to clipboard will contain the full length file name.

·**SubSystems / Logs / MOMI Log**
- Added ability to filter on Record Type field.

·**SubSystems / OSS / OSS Charts**
- Changed AF-INet Sockets and UNIX Sockets into 2 charts each, One for Opens and one for Buffers.

·**Alarms / Define / Action**
- EMail Custom Subject and Text now have their own available Variables.

· **Configure / Client / General**
- Added 'Allow Auto Logon when changing systems' checkbox into System Setting section. This will enable the ability to Auto-Logon to other systems using the logon credentials currently in use.
  When this is checked, the Logon popup has a new option on it labeled 'Use this UserId when changing systems to AutoLogon'. If this is checked and once the user successfully logs on when the user changes

to another system ,that is not currently logged on, the client will attempt to logon as that saved user.
When a client is logged on to a system with the ability to autoLogon the 'Logon' button will display orange.
NOTE: This feature is only useful if the systems do not use multi-factor authentication and all systems have the same UserID and Passwords.

Bug Fixes:

- Under some conditions where the PC is in an error state the client would hang on startup when it tried to get info on the printers installed. Fixed.

- **Systems / Probe / Base**
  - Sometimes the cpu busy bar for a cpu would not only display the current value but also the previous value, causing the bar to have the old bar behind the new. Fixed.

- **SubSystems / OSS / OSS Charts**
  - Some charts would have their chart title change occasionally then reset to the correct title. Fixed.

- **Alarms / Active**
  - When switching between 'Active/All/Type/Hidden' some columns would not resize correctly for the data in the column. Fixed.

- **Alarms / Define / Action**
  - The 'Send EMAIL when Alarm is Cleared' setting was not correctly displayed on the screen, The record did process as saved but the 'Display' did not reset the checkbox. Fixed.

Misc. Items:

- **Configure / Client**
  - Re-configured the screen to put items into more logical grouping.

Known issues:

- **Systems / File Transfer / SFTP**
  - If file is transferred as a Key-Sequenced structured file sometimes SFTP will think the transfer is successful but the host file is left empty. A check is now done and an error shows if this happened. Note: Sometimes making the **REC LEN** even will succeed. Some failures are caused by unknown factors and seem to be a failure in the SFTP Server on the NonStop.

- **SubSystems / Discovery**
  - Feature is still under development and subject to change. Comments and suggestions are invited and welcome.

MOMI Server

New Features:

- The alarm **EMS / User defined** now allows both options of *Multiple alarms allowed* and *Key alarm by process $name.* When enabled alarms are tracked independently by $name. Previously, a clear removed all alarms for the definition.

- On the screen **Alarms / Define / Action** the following variables were added (see client tool-tip for descriptions):

  Alarm-Text-All-ML
  Alarm-Text-Extra-All-ML
  EMS-Generator

- The server now longer fills in a trailing .*.* on the MEASURE entity FILE. This allows the user to specify a smaller file set as desired.

Bug Fixes:

- The screen **SubSystems / Logs / MOMI Log** no longer displays an erroneous message *Resources were released...* when an alternate LOG01DB file is specified. This feature was introduced in 6.18a.

- The screen **Alarms / Define / Action** variable **Ancestor** is now correctly reported after the second pass of processing. Previously, after correctly obtaining the ancestor it could then be corrupted.

- Email addresses enclosed with the characters < > now have the trailing character removed. Previously, only the leading character was automatically removed.

Misc. Items:

- On the screen **Alarms / Define / Action** the variable list for an **Email Subject** no longer includes multi-line items.

- The caption for alarm **EMS / User defined** *Multiple alarms allowed* changed to *Multiple active alarms allowed*.

- On the screen **Alarms / Define / Action** the variable **Entity-Name** now returns the EMS Collector $name for the alarm **EMS / User defined**.

- Messages written to LOG01DB how have an effective maximum length of 254 bytes instead of 132.

- Server now provides the name of the file if the define =_EMS_TEMPLATES is present.

- If the file EMSEXPO (a compiled EMS distributor filter) is not present when the server is started the error message generated now includes the missing file name.

Known Issues:

- None

MOMIFTP

- None

ssMOMI

- None

MomiEmail
- None

SendMail
- None

CentralServer
- None

IPCalc
- None

****

Release Package	6.18a
Release Date (yyyy/mm/dd)	2025/01/14

Item	Version
Latest O/S tested	J06.23.01 - L24.08.00
Client Version	6.18a Build 921
Server Version (VPROC)	6.18a T0000G06___V6_18a___2025_01_14
Buffer Version	Client 21.74 Server 21.74
History database	3.10
CONFMOMI	6.03
OBYMOMI	6.00
OBYCSQL	5.02
MomiFTP.exe	2.15
CentralServer.exe	1.8
ssMOMI.scr	6.00
MomiEMail.exe	1.12
SendMail.exe	1.01
IPCalc.exe	1.3.3
Oldest client version tested with server	5.80

Clients 5.15 and earlier may fail on connect.

NEW FEATURES / BUGS FIXED

(see MOMI HISTORY.RTF for previous versions)

Common new features (requires current client and server)

*If you are using Client Access, newly added screens in a MOMI release update are not available to users by default. This action may be changed on the screen **Configure / Client Access / Global Settings** by checking the option **New screens enabled by default**. The user that started MOMI, known as the **Default Security User**, always has new screens enabled by default.*

Installer

- **None**

Help

- **None**

MOMI Client

New Screens:

- **None**

New Features:

·Added ability to disable the client resizing. It can be disabled/enabled either by

1) Right-clicking the 'BlackWood/Alarm Indicaton' Button in the top left corner of the screen.
2) 'Configure / Client / General' has a checkbox to disable/enable Resizing.

The change is immediate and will be in effect even after restarting the client. (for John H.)

· 'BlackWood/Alarm' in the Top-left corner of the client.
- When the mouse moves over the 'BlackWood' a popup will display showing all defined systems, if they are being probed for alarms the number of alarms is displayed and the user can jump to that system. The popup will disappear when the mouse leaves the popup.

·**SubSystems / Logs / MOMI Log**
- Added ability to view alternate log files(not just active one). The Alternate log is entered on the Config popup.

Bug Fixes:

· **Alarms / Define / Action**
- If a version 6.18 client was talking to a server version older than 6.18 and the 'Var' button was pressed the client would crash. Fixed.

Misc. Items:

- **None**

Known issues:

· **Systems / File Transfer / SFTP**
- If file is transferred as a Key-Sequenced structured file sometimes SFTP will think the transfer is successful but the host file is left empty. A check is now done and an error shows if this happened. Note: Sometimes making the **REC LEN** even will succeed. Some failures are caused by unknown factors and seem to be a failure in the SFTP Server on the NonStop.

· **SubSystems / Discovery**
- Feature is still under development and subject to change. Comments and suggestions are invited and welcome.

MOMI Server

New Features:

· The server for **Alarm Action** will internally use for Clear, if blank, the

Set value. This applies to both EMS and Email user defined text.

- The server now supports an alternate file specification for LOG01DB on the screen **SubSystems / Logs / EMS Msg**s.

Bug Fixes:

- A crash in a MOMI server (Master CPU collector) will no longer occur if a CPU collector is hung on the system call FILE_GETINFOBYNAME_ for several weeks. The situation was a message was send to a subtype 30 process that had a full $RECEIVE queue and it was in the same processor as the CPU collector. The timeout to the system call was not honored resulting in the hang.

Misc. Items:

- The system name, if not referencing the current system, is now removed from the field **ancestor-program-file-name** on the screen **Processes / All Processes.**

Known Issues:

- Some variables for **Alarm Action** are not yet returning data.

MOMIFTP

- None

ssMOMI

- None

MomiEmail

- None

SendMail

- None

CentralServer

- None

IPCalc

- None

****

Release Package	6.18
Release Date (yyyy/mm/dd)	2024/12/19

Item	Version
Latest O/S tested	J06.23.01 - L24.08.00
Client Version	6.18 Build 919
Server Version (VPROC)	6.18 T0000G06___V6_18____2024_12_18

Buffer Version	Client 21.73	Server 21.73
History database	3.10	
CONFMOMI	6.03	
OBYMOMI	6.00	
OBYCSQL	5.02	
MomiFTP.exe	2.15	
CentralServer.exe	1.8	
ssMOMI.scr	6.00	
MomiEMail.exe	1.12	
SendMail.exe	1.01	
IPCalc.exe	1.3.3	
Oldest client version tested with server	5.80	

Clients 5.15 and earlier may fail on connect.

NEW FEATURES / BUGS FIXED

(see MOMI HISTORY.RTF for previous versions)

Common new features (requires current client and server)

*If you are using Client Access, newly added screens in a MOMI release update are not available to users by default. This action may be changed on the screen **Configure / Client Access / Global Settings** by checking the option **New screens enabled by default**. The user that started MOMI, known as the **Default Security User**, always has new screens enabled by default.*

Installer

- **None**

Help

- **None**

MOMI Client

New Screens:

- **None**

New Features:

- Added ability to display KLT (Kernal Level Threads)
  - Configure / Client / General
    - Add selection to determine 'CPU Percent Display' format. The calculations are dependent on number of KLT (Kernal Level Tread) the process is using. This will be used everywhere a Percent is displayed for a process. i.e. Cpu Busy, Ready time etc.
    - Where Cpu Busy is displayed if the process is KLT a blue indicator will display
- PCs with a Windows font character set of GREEK (LCID=0408) will now display Greek characters when needed.
- Grid columns that are strings now can filter using a range mask. Either '[a-g]' for single character(alpha or numeric) ranges or

'[03..12]' for numeric ranges from 1 to 9 or 001 to 999.

- **Overview**
  - CPU Busy charts can now right-click on a CPU bar and jump to the Process Entity screen for all processes in that CPU.
- **CPU / PCBs/TLEs**
  - Added Left-click on 'Current' Low and High PCBs for each CPU to jump to Processes / Process All with the needed selection criteria.
- **Processes / All Processes**
  - Added column for ancestor program file name(for Gary B.)
- **Processes / All Processes / Config**
  - Added ability to set AutoUpdate interval.
  - If auto updating the process busy% will display.
  - Added checkbox to only show Low-Pin or high-pin processes.
  - Multiple single limits can be set at the same time.
- **Processes / Process Detail**
  - Added new fields on 'File Entity has Open' and 'File Entity Opened by' for Request, Request QTime, Replies, Replies QTime.
- **Files / File Entity**
  - Added new fields for Request, Request QTime, Replies, Replies QTime.
- **History / Export**
  - When the mouse is over the Database selector a popup will show the date and times of the records that are within the databases,
- **Alarms / Active**
  - If alarm was for a low or high pin alarm a right-click on the Alarm Info data on that alarm will jump to All Processes limited by CPU and High/Low pins.
- **Alarms / Define / Alarm**
  - On alarms that allow the 'File=' keyword in the Entity name, the right-click now allows viewing or editing that file.
- **Alarms / Define / Action**
  - Added ability to set custom alarm EMS Event number and message text and custom alarm EMail subject and additional email body text. Custom text can have embedded variables to be replaced with corresponding values. This functionality will only work with a Server version of 6.18 or later.
- **Configure / Client / Actions**
  - On the "Display MOMI.INI actions" popup added ability to start Explorer at the directory that contains MOMI.INI.
- **Configure / Client Access / User Define**
  - Added ability to set 'New Screens enabled by default' at the user/group level. If screens were enabled at the global level the user/group setting does not matter but if the global level does not have it set the user/group setting will be used.
- **Configure / Tools / Numbers**
  - Added to "Convert Number base" any base from 2-35(Base 2-Z)
  - Calculator now has an result field that contains the calculation result and is able to be copied into clipboard. Also the result will be fully displayed even if the value is too long to fit in the calculator display.

Bug Fixes:

- If MOMI server executable security was incorrectly set on the NonStop and a command requiring the user to be 'logged on' a Fatal Error would occur disconnecting the client from the server but the client never displayed why the disconnect happened. Fixed.

- Run-Time parameter CLIENTID="<text>" did not work. Now works and will display the client id on the Client title bar. Fixed.
- On Grids that contained a percentage gauge the number would be too small to be read on a client that was resized to be large. Fixed.
- On Grids the Tool default Export location on a Windows 11 PC was documents instead of the DeskTop. Fixed.
- Progress bar display did not always correctly resize when client was resized. Fixed.
- AutoUpdate on screens that have that option would only start AutoUpdate if it was selected before the request was pressed. Now a new request with AutoUpdate is performed. Fixed.
- When Client was resized very wide but left short the tabs would not display correctly. Fixed.
- **Logon to Host**
  - If user pressed Ctrl=Z the client would crash. Fixed.
- **Systems / File Transfer**
  - On some grids if the mouse was over columns that did not have a popup Hint defined the hint should display as a empty yellow hint box. Fixed.
- **Systems / File Transfer / MFTP**
  - If a text file was over 27K in length and was transferred as ascii the resulting Nonstop Edit file might have been corrupted. Fixed.
  - If the user right-clicked on a NonStop file to edit then tried to put the edited file back on the NonStop the transfer would fail and the original file was deleted. Fixed.
- **Systems / TraceRoute**
  - When first going to the TraceRoute screen the error 'Coding Error Detected' was mistakenly displayed. Fixed.
- **Overview**
  - 'CPU Info' button mistakenly had a right-click action menu active that would cause crash when 'Copy to Clipboard' was pressed. Fixed.
  - When 3D charts are selected and the connection is lost to a system the IPU values would not clear. Fixed.
- **Processes / Process Detail**
  - The 'File Busy Time' Columns were incorrectly sized the first display of data if the Display is set for Rated. Fixed.
  - If the OSS Arguments was shortened to fit the display when the user right-clicked to copy the argument to the clipboard the shortened name not the whole name was copied. Fixed.
- **Processes / Process Entity**
  - 'Tool-tip' hint for some cells was a blank hint. Fixed.
- **Files / File Explorer / OSS**
  - Under some circumstances a double-click on a directory would cause the sub-directories under it to display twice. Fixed.
- **Files / Disk Entity L/H**
  - When server was set to not get the Disk Entities, the client would display "Not Found" instead of indicating the data was not collected. Fixed.
  - When changing from Live to History then back the History Selection would be disabled unless the user was logged on. History should have been available as long as History was available. Fixed,
- **SubSystems / Logs / EMS Msgs**
  - Stop message count could only be a max of 9,999 records now limit is 65,535. Fixed.

- EMS Message Detail no longer wrapped the message and needed scroll bar instead. Fixed.
- When Using "lighting Mode" with a filter the count was not reset with a new request. Fixed.
- Sometimes when turning off a filter high-light color the client would crash. Fixed.

· **SubSystems / Logs / EventBX**
- Sometimes when the mouse had been over the "?" button to display the info of the text at the current mouse location the popup would not disappear when the mouse moved off. Fixed.

· **SubSystems / TCP/IP / Process Status**
- Mini-Reports did not correctly display counts when multiple lines were the same. Fixed.

· **SubSystems / Spooler / Job**
- If filter was set and grid was empty, clear did not clear the filter. Fixed.

· **History / Chart**
- When defining a chart element if the 'Clear All Elements' was pressed the Type line spacing would be wrong. Fixed.

· **Alarm / Define / Alarm**
- When a type "Volume" and subtype "Physical state Up/Down" or "Virtual State Up/Down" the '$' selector would display all volumes not just physical or Virtual. Fixed.
- Sometimes the "Include if ANY" tab was mislabeled as "Exclude if ANY". Fixed.

· **Alarm / List / Alarm**
- When exporting the data only the shortened name for "entity Name" was exported. Fixed.

· **Configure / Client / General**
- if User has set Font adjustment to smaller the group heading were too small. Fixed.

· **Configure / Client / Actions**
- Changes made to 'Display the MOMI.INI actions' screen.

· **Configure / Client / Tools / Others**
- PState2 would not accept cpu,pin if either CPU or pin had leading zeros. Fixed.

Misc. Items:

· When a right-click on a process name is used to bring up the 'PState...' the config for the PState/PState2 is now displayed.

· 'Popup Memo' from the 'Printer' right-click now resizes along with the rest of the client.

· **Overview**
- Added tool tips when over the Overview and Discovery 'Process detail' popup.

· **CPU / Memory Detail**
- Increased size of memory fields to allow for larger memory amounts.

· **Processes / All Processes**
- Grid Header now 2 rows to make label more readable.
- JobID will now display as blank instead of 0 if no Jobid is set.
- Tree will now always display the sequence number if multiple processes with the same name are detected.

· **SubSystems / Logs / EMS Msgs**
- On the config popup, moved the 'Client Filter' from the 'Display' tab

to the 'Request' tab. Some people did not realize the client filter could be set at the config/request time.
- Dups button now is a toggle to hide and show Exact duplicate records. If dups are being hidden the button will be light purple and the Header for the message column will show number of dups.

· **SubSystems / Spooler / Jobs**
- Added Date and Time to display of 'Config / Age of Job / Set Previous Days and Hours'.

· **SubSystems / OSS / Name Server and**

· **SubSystems / OSS / Name Server Charts**
- OSS Name server info is now not requested from the server unless one of these screens is displayed.

· **SubSystems / Discovery**
- Added '?' button on process boxes to display extra process detail.
- if Process Detail is locked it will have a '?' button to display extra process detail.

· **History / Chart**
- Enhance chart so chart lines display better on 4K monitors.
- Chart now has indicators to show which way is the past and which is the future

· **Configure / Server / Server Info**
- Changed print logic so output is consistent regardless if client is Maximized or not.

· **Configure / Server / Server Info**
- Added Date MOMI server was compiled.
- CNF01DB and LOG01DB added Right-Click on 'Max Ext.' will allow user to set max extents if authorized.

· **Configure / Client / Misc. Settings**
- Changed to Configure / Client / Fonts-Misc.

· **Configure / Client / General and**

· **Configure / Client / Fonts-Misc.**
- Altered to divide the items into better groups.
- Added ability to see currently installed Display language and to set Additional character set for Display of characters not in the PC display language.

· **Configure / Client / Fonts-Misc.**
- 'Allow Multi-Byte Characters' setting now replaces the individual settings for EMS, VHS Log and MOMI Log.

Known issues:

· **Systems / File Transfer / SFTP**
- If file is transferred as a Key-Sequenced structured file sometimes SFTP will think the transfer is successful but the host file is left empty. A check is now done and an error shows if this happened. Note: Sometimes making the **REC LEN** even will succeed. Some failures are caused by unknown factors and seem to be a failure in the SFTP Server on the NonStop.

· **SubSystems / Discovery**
- Feature is still under development and subject to change. Comments and suggestions are invited and welcome.

MOMI Server

New Features:

- Server now reports KLT (Kernel Level Threads) related information. A 6.18 or later client is also required. Additionally, at this time it is necessary to specify the CONFMOMI keyword KLT TRUE to enable the feature.

- The MEASURE entity PROCESS now provides the following new fields (details of what they are reporting was not yet available):

  process_launches
  process_launch_qtime
  thread_launches
  thread_launch_qtime
  file_awaitio_calls
  file_awaitio_qtime
  file_nowait_completed
  file_nowait_initiated
  file_reads
  file_writes
  open_closes

- The MEASURE entity FILE now provides the following new fields (details of what they are reporting was not yet available):

  requests
  requests_qtime
  replies
  replies_qtime

- The following alarms now indicate the method of percentage computation:

  Process / Busy percent
  Process / Ready Time percent
  process / Ready Time Only percent

- Added the alarm **DiskFile / Percent full consider partitions(s)**. See MOMI help for additional information.

- Now support in **Alarm / Action** user defined EMS and Email messages.

- The following alarm now sets a variable of the process ancestor. Note that MOMI must see the process running once in order to capture the information:

  Process / State running/stopped

- The ancestor object file name is now reported on the client screen **Processes / All Processes**.

Bug Fixes:

- An internal problem was addressed where the server was not correctly marking the busiest CPU in the system.

- Processes that only have a change in READY-TIME are now always reported to the main MOMI. Previously, it was possible this update could be

skipped.

Misc. Items:

- Various minor changes in memory allocation were made to improve performance.
- Additional information is now logged when a MOMI server stops.
- The server no longer limits the return of certain data when processes in a particular CPU was specified. This is related to the changes on the client screen **Processes / All Processes – Config**.

Known Issues:

- None

MOMIFTP

- None

ssMOMI

- None

MomiEmail

- Version 1.12 - Fixed email send failure, and lack of an error message, if using Blackwood EMail Server.

SendMail

- None

CentralServer

- None

IPCalc

- None

****

Release Package	6.17k
Release Date (yyyy/mm/dd)	2024/09/17

Item	Version
Latest O/S tested	J06.23.01 – L23.08.00
Client Version	6.17k Build 918
Server Version (VPROC)	6.17j T0000G06___V6_17j___2024_09_16
Buffer Version	Client 21.72 Server 21.72
History database	3.10
CONFMOMI	6.02
OBYMOMI	6.00

OBYCSQL	5.02
MomiFTP.exe	2.15
CentralServer.exe	1.8
ssMOMI.scr	6.00
MomiEMail.exe	1.12
SendMail.exe	1.01
IPCalc.exe	1.3.3

Oldest client version tested with server 5.80

Clients 5.15 and earlier may fail on connect.

NEW FEATURES / BUGS FIXED

(see MOMI HISTORY.RTF for previous versions)

Common new features (requires current client and server)

*If you are using Client Access, newly added screens in a MOMI release update are not available to users by default. This action may be changed on the screen **Configure / Client Access / Global Settings** by checking the option **New screens enabled by default**. The user that started MOMI, known as the **Default Security User**, always has new screens enabled by default.*

Installer

- The MSI file is not marked as requiring Administrative Privileges. Normally, this should not be required if installing **Only for me** (i.e. the local user).

  If the intent is to install MOMI for all users of the PC, right-click on the MSI and select **Run As Administrator.**

  This change is to assist users where their environment monitors for a possible Administrative elevation request (previously a UAC Prompt would only occur if **Anyone who uses this computer (all users)** was selected).

Help

- MOMI help is now created with an updated version of the generator software (Madcap Software - Flare) and its release notes report several HTML5 security vulnerabilities are corrected. They list that DOMPurify was updated to 3.0.8 (previous 2.3.6). (this is all internal to the help generator and relates to the HTML5 help output)

MOMI Client

New Screens:

- **None**

New Features:

- **None**

Bug Fixes:

- **Alarm / Define / Alarm**

- The alarm **EMS / User defined** under **EMS Clear** sometimes the tab ***Include if ANY*** was mislabeled as ***Exclude if ANY***. The logical operation still functioned correctly, it was just a wrong label. Fixed.

Misc. Items:

- **None**

Known issues:

- **Systems / File Transfer / MFTP**
  - Using MFTP and Editing a NSK edit file on the PC is now disabled. This will be corrected in the next version.

- **Systems / File Transfer / SFTP**
  - If file is transferred as a Key-Sequenced structured file sometimes SFTP will think the transfer is successful but the host file is left empty. A check is now done and an error shows if this happened. Note: Sometimes making the **REC LEN** even will succeed. Some failures are caused by unknown factors and seem to be a failure in the SFTP Server on the NonStop.

- **SubSystems / Discovery**
  - Feature is still under development and subject to change. Comments and suggestions are invited and welcome.

MOMI Server

New Features:

- None

Bug Fixes:

- The CONFMOMI keyword TCPIP-THREADS is no longer erroneously limited to an upper value of 199.
- A limit by location, such as on the screen **SubSystems / Spooler / Job**, now accepts up to 17 characters instead of 16.
- An internal count of the number of top processes reported by the server for CPU 0 reported the count for CPU 15. This was not apparent to the user.
- When attempting to write to a Guardian file in binary, where the file should not already be present, the server now reports ***File already exists*** instead of ***Not an edit file***.

Misc. Items:

- The TNS/X version of the server is now constructed with a newer compiler which may translate into improved performance in some circumstances.

Known Issues:

- None

MOMIFTP
- None

ssMOMI
- None

MomiEmail
- Version 1.12 - Fixed email send failure, and lack of an error message, if using Blackwood EMail Server.

SendMail
- None

CentralServer
- None

IPCalc
- None

****

Release Package 6.17j
Release Date (yyyy/mm/dd) 2024/05/01

Item	Version
Latest O/S tested	J06.23.01 - L23.08.00
Client Version	6.17j Build 917
Server Version (VPROC)	6.17i T0000G06___V6_17i___2024_04_25
Buffer Version	Client 21.72 Server 21.72
History database	3.10
CONFMOMI	6.02
OBYMOMI	6.00
OBYCSQL	5.02
MomiFTP.exe	2.15
CentralServer.exe	1.8
ssMOMI.scr	6.00
MomiEMail.exe	1.11
SendMail.exe	1.01
IPCalc.exe	1.3.3
Oldest client version tested with server	5.80

Clients 5.15 and earlier may fail on connect.

NEW FEATURES / BUGS FIXED

(see MOMI HISTORY.RTF for previous versions)

Common new features (requires current client and server)

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Installer

- The MSI file is no longer marked as requiring Administrative Privileges. Normally, this should not be required if installing **Only for me** (i.e. the local user).

  If the intent is to install MOMI for all users of the PC, right-click on the MSI and select **Run As Administrator**.

  This change is to assist users where their environment monitors for a possible Administrative elevation request (previously a UAC Prompt would only occur if **Anyone who uses this computer (all users)** was selected).

MOMI Client

New Screens:

- **None**

New Features:

- Grid columns that are strings now can filter using a range mask. Either '[a-g]' for single character(alpha or numeric) ranges or '[03..12]' for numeric ranges from 001 up to 999.

- **Alarms / Active**
  - If more than 25 alarms are active the **Duration** column is no longer shown.

Bug Fixes:

- Improved ability of Client to re-connect with the server if the communications link was down for an extended time(2+ minutes). Fixed.

- **SubSystems / Expand / System Entity L/H** and
- **SubSystems / Disk Entity L/H**
  - When switching from Live to History the Live updates were still being requested. Fixed.

- **SubSystems/ Logs / EMS Log**
  - When using "Lighting Mode" with a filter the filter count was not reset with a new request. Fixed.

- **Alarms / Active**
  - In "Started" column date was always display even when it should have been Time because date was today. Fixed.

- **Alarms / Define / Alarms**
  - If any lines of data in **EMS Set/Clear** had trailing spaces they were saved and unfortunately were not plainly visible (unless the text was selected to cause a highlight). This might situation might cause

unexpected and difficult to diagnose alarm failures. The client now removes leading and trailing spaces. To force leading or trailing spaces " quote " the text with desired spacing. Note that this change may break existing alarms when updated by this client. Changed.

- If **Preload Alarms** was not set (Configure / Client / Single Screen / Alarms) they were still loaded at connection to system. Now they correctly load the first time the user goes to the Alarm screen. Fixed.

- If an alarm name somehow (probably Import) contained lower case letters it could not be accessed. Fixed.

Misc. Items:

· Improved messages displayed if a MOMI Server password failure is encountered.

· **Alarms / Active**

- Improved performance of scrolling when a large number of alarms are present.

Known issues:

· **Systems / File Transfer / SFTP**

- If file is transferred as a Key-Sequenced structured file sometimes SFTP will think the transfer is successful but the host file is left empty. A check is now done and an error shows if this happened. Note: Sometimes making the **REC LEN** even will succeed. Some failures are caused by unknown factors and seem to be a failure in the SFTP Server on the NonStop.

· **SubSystems / Discovery**

- Feature is still under development and subject to change. Comments and suggestions are invited and welcome.

MOMI Server

New Features:

· None

Bug Fixes:

· A possible memory leak no longer occurs when reading the CNF01DB file.

· An internal mechanism (DDF) for providing updates to the client no longer queues. This could setup a situation that when a client disconnects a MOMI server could use a large amount of CPU causing its priority to drop to 1 while releasing an enormous amount of memory.

· MOMI CPU collectors, one per processor, no longer abend on startup if the maximum number of PCBs on the system was 32,100. Other values could also cause the abend. The underlying fix addresses all cases.

Misc. Items:

- The server now provides to the client the system serial number of a failed password.

Known Issues:

- None

MOMIFTP

- None

ssMOMI

- None

MomiEmail

- None

SendMail

- None

CentralServer

- None

IPCalc

- None

****

Release Package	6.17i
Release Date (yyyy/mm/dd)	2024/03/01

Item	Version
Latest O/S tested	G06.32.01 J06.23.01 - L23.08.00
Client Version	6.17i Build 916
Server Version (VPROC)	6.17h T0000G06___V6_17h___2023_12_22
Buffer Version	Client 21.72 Server 21.72
History database	3.10
CONFMOMI	6.02
OBYMOMI	6.00
OBYCSQL	5.02
MomiFTP.exe	2.15
CentralServer.exe	1.8
ssMOMI.scr	6.00
MomiEMail.exe	1.11
SendMail.exe	1.01
IPCalc.exe	1.3.3
Oldest client version tested with server	5.80

Clients 5.15 and earlier may fail on connect.

NEW FEATURES / BUGS FIXED

(see MOMI HISTORY.RTF for previous versions)

Common new features (requires current client and server)

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Installer

- The MSI file is no longer marked as requiring Administrative Privileges. Normally, this should not be required if installing **Only for me** (i.e. the local user).

  If the intent is to install MOMI for all users of the PC, right-click on the MSI and select **Run As Administrator.**

  This change is to assist users where their environment monitors for a possible Administrative elevation request (previously a UAC Prompt would only occur if **Anyone who uses this computer (all users)** was selected).

MOMI Client

New Screens:

- **None**

New Features:

- **SubSystems/ Logs / EMS Log**
  - Config now has setting under 'Client Filter' to allow the Request to either use a PreFilter or a normal filter. (For Gary B.)

Bug Fixes:

- **Systems / File Transfer**
  - When a user tried to rename a file on the Host and pressed return on the new name instead of pressing the OK button the client would crash. Fixed.
- **SubSystems/ Logs / EMS Log**
  - With some Client sizes the EMS message for multi-line displays would not always show the complete message. Fixed.
  - PreFilter button never became active. Fixed.
  - EMS Message Detail no longer wrapped the message and needed scroll bar instead. Fixed.
  - EMS Configuration options list of Collectors did not always show if a collector had an error on the second line. Fixed.
  - Reverse scrolling did not correctly display the records. fixed.
  - Stop Message count allowed 250,000 but maximum is actually 65,535. Fixed.

· **Alarms / Define / Alarm / Extras**
  - User was allowed to type in Alarm name instead of forcing to choose valid name. Fixed.

Misc. Items:
· A few more fixes for High-Contrast screen settings.

Known issues:
· **Systems / File Transfer / SFTP**
  - If file is transferred as a Key-Sequenced structured file sometimes SFTP will think the transfer is successful but the host file is left empty. A check is now done and an error shows if this happened. Note: Sometimes making the **REC LEN** even will succeed. Some failures are caused by unknown factors and seem to be a failure in the SFTP Server on the NonStop.
· **SubSystems / Discovery**
  - Feature is still under development and subject to change. Comments and suggestions are invited and welcome.

MOMI Server

New Features:

· The CONFMOMI keyword PASSWORD may be replaced with the keyword LICENSE-KEY. We will be migrating, over time, to the new keyword but both have the same meaning.

Bug Fixes:

· Various corrections and changes were made to the SMTP protocol used to generate alarm email to enhance message reliability especially when network congestion is present.

· **EMS / User defined** alarms that automatically delete no longer generate superfluous updates to the client.

Misc. Items:

· The server now provides the client information for the alarms **CPU / PCBs low** and **CPU / PCBs high** to allow it to jump to a helpful page when right-clicking on these active alarms on the screen **Alarms / Active**.

· The MOMI server DB Alarm, which maintains an in memory database of active alarms, now has a default restriction to consume no more than 10% of a CPU. This change is a result of a customer report of a high rate of CPU consumption by this process. This value can be changed with the advanced CONFMOMI keyword CPU-LIMIT-DB-ALARM.

Known Issues:
· None

MOMIFTP
- None

ssMOMI
- None

MomiEmail
- None

SendMail
- None

CentralServer
- None

IPCalc
- None

****

Release Package	6.17h
Release Date (yyyy/mm/dd)	2023/12/26

Item	Version
Latest O/S tested	G06.32.01
	J06.23.01 - L23.08.00
Client Version	6.17g Build 915
Server Version (VPROC)	6.17h T0000G06___V6_17h___2023_12_22
Buffer Version	Client 21.71 Server 21.72
History database	3.10
CONFMOMI	6.02
OBYMOMI	6.00
OBYCSQL	5.02
MomiFTP.exe	2.15
CentralServer.exe	1.8
ssMOMI.scr	6.00
MomiEMail.exe	1.11
SendMail.exe	1.01
IPCalc.exe	1.3.3
Oldest client version tested with server	5.80

Clients 5.15 and earlier may fail on connect.

NEW FEATURES / BUGS FIXED

(see MOMI HISTORY.RTF for previous versions)

Common new features (requires current client and server)

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Installer

- None.

Help Documentation

- The PDF format currently starts with a blank page.

MOMI Client

New Screens:

- **None**

New Features:

- Grid Tools now allows the grid string display to chop off leading and trailing characters without replacing them with '...'.
- **Configure / Client Access / Global Settings**
  - now shows current state of CLIENT-LOCKDOWN-MODE.

Bug Fixes:

- **Overview**
  - 'CPU Info' button mistakenly had a right-click action menu active that would cause crash when 'Copy to Clipboard' was pressed. Fixed.
- **History**
  - If History was enabled but the server did not have history databases defined, the client might crash on some of the History screens. Fixed.
- **SubSystems/ Logs / EMS Log**
  - Find would not always scroll to the found matching record if a filter was applied. Fixed.
- **History / Chart**
  - When changing systems, if the History Elements available on the newly selected system were different than the previous system might not clear any types no longer available. Fixed.
  - When defining a chart element if the 'Clear All Elements' was pressed the Type line spacing would be wrong. Fixed.

Misc. Items:

- **SubSystems/ Logs / EMS Log**
  - Stop message count limit raised from 9,999 records to 250,000. Requires a server version 6.17g or later.

Known issues:

- **Systems / File Transfer / SFTP**
  - If file is transferred as a Key-Sequenced structured file sometimes SFTP will think the transfer is successful but the host file is left empty. A check is now done and an error shows if this happened. Note: Sometimes making the **REC LEN** even will succeed. Some failures are caused by unknown factors and seem to be a failure in the SFTP Server

on the NonStop.

- **SubSystems / Discovery**
  - Feature is still under development and subject to change. Comments and suggestions are invited and welcome.

MOMI Server

New Features:

- The CONFMOMI keyword PASSWORD may be replaced with the keyword LICENSE-KEY. We will be migrating, over time, to the new keyword but both have the same meaning.

Bug Fixes:

- Various corrections and changes were made to the SMTP protocol used to generate alarm email to enhance message reliability especially when network congestion is present.
- **EMS / User defined** alarms that automatically delete no longer generate superfluous updates to the client.

Misc. Items:

- The server now provides the client information for the alarms **CPU / PCBs low** and **CPU / PCBs high** to allow it to jump to a helpful page when right-clicking on these active alarms on the screen **Alarms / Active**.
- The MOMI server DB Alarm, which maintains an in memory database of active alarms, now has a default restriction to consume no more than 10% of a CPU. This change is a result of a customer report of a high rate of CPU consumption by this process. This value can be changed with the advanced CONFMOMI keyword CPU-LIMIT-DB-ALARM.

Known Issues:

- None

MOMIFTP

- None

ssMOMI

- None

MomiEmail

- None

SendMail

- None

CentralServer

- None

IPCalc

- None

****

Release Package	6.17g
Release Date (yyyy/mm/dd)	2023/11/02

Item	Version
Latest O/S tested	G06.32.01 J06.23.01 - L23.08.00
Client Version	6.17g Build 915
Server Version (VPROC)	6.17g T0000G06___V6_17g___2023_11_01
Buffer Version	Client 21.71 Server 21.71
History database	3.10
CONFMOMI	6.02
OBYMOMI	6.00
OBYCSQL	5.02
MomiFTP.exe	2.15
CentralServer.exe	1.8
ssMOMI.scr	6.00
MomiEMail.exe	1.11
SendMail.exe	1.01
IPCalc.exe	1.3.3
Oldest client version tested with server	5.80

Clients 5.15 and earlier may fail on connect.

NEW FEATURES / BUGS FIXED

(see MOMI HISTORY.RTF for previous versions)

Common new features (requires current client and server)

*If you are using Client Access, newly added screens in a MOMI release update are not available to users by default. This action may be changed on the screen **Configure / Client Access / Global Settings** by checking the option **New screens enabled by default**. The user that started MOMI, known as the **Default Security User**, always has new screens enabled by default.*

Installer

- None.

Help Documentation

- The PDF format currently starts with a blank page.
- The CHM format Search function now works. Function stopped working in 6.15g.

MOMI Client

New Screens:

- **None**

New Features:

- Grid Tools now allows the grid string display to chop off leading and trailing characters without replacing them with '...'.
- **Configure / Client Access / Global Settings**
  - now shows current state of CLIENT-LOCKDOWN-MODE.

Bug Fixes:

- **Overview**
  - 'CPU Info' button mistakenly had a right-click action menu active that would cause crash when 'Copy to Clipboard' was pressed. Fixed.
- **History**
  - If History was enabled but the server did not have history databases defined, the client might crash on some of the History screens. Fixed.
- **SubSystems/ Logs / EMS Log**
  - Find would not always scroll to the found matching record if a filter was applied. Fixed.
- **History / Chart**
  - When changing systems, if the History Elements available on the newly selected system were different than the previous system might not clear any types no longer available. Fixed.
  - When defining a chart element if the 'Clear All Elements' was pressed the Type line spacing would be wrong. Fixed.

Misc. Items:

- **SubSystems/ Logs / EMS Log**
  - Stop message count limit raised from 9,999 records to 250,000. Requires a server version 6.17g or later.

Known issues:

- **Systems / File Transfer / SFTP**
  - If file is transferred as a Key-Sequenced structured file sometimes SFTP will think the transfer is successful but the host file is left empty. A check is now done and an error shows if this happened. Note: Sometimes making the **REC LEN** even will succeed. Some failures are caused by unknown factors and seem to be a failure in the SFTP Server on the NonStop.
- **SubSystems / Discovery**
  - Feature is still under development and subject to change. Comments and suggestions are invited and welcome.

MOMI Server

New Features:

- None

Bug Fixes:

- The screen **Files / Disk Entity L/H** no longer causes a MOMI server process crash when examining history records and a period resulted in no usable records (could occur if only records with a window of zero

were present).

Misc. Items:

- The server no longer limits the stop message count to 9,999 (internally referenced as Maximum Number Responses). Requires a client version 6.17g or later.

Known Issues:

- None

MOMIFTP

- None

ssMOMI

- None

MomiEmail

- None

SendMail

- None

CentralServer

- None

IPCalc

- None

****

Release Package 6.17f
Release Date (yyyy/mm/dd) 2023/10/02

Item	Version
Latest O/S tested	G06.32.01 J06.23.01 - L22.09.00
Client Version	6.17f Build 914
Server Version (VPROC)	6.17f T0000G06___V6_17f___2023_10_01
Buffer Version	Client 21.71 Server 21.71
History database	3.10
CONFMOMI	6.02
OBYMOMI	6.00
OBYCSQL	5.02
MomiFTP.exe	2.15
CentralServer.exe	1.8
ssMOMI.scr	6.00
MomiEMail.exe	1.11

SendMail.exe	1.01
IPCalc.exe	1.3.3

Oldest client version tested with server	5.80

Clients 5.15 and earlier may fail on connect.

NEW FEATURES / BUGS FIXED

(see MOMI HISTORY.RTF for previous versions)

Common new features (requires current client and server)

If you are using Client Access, newly added screens in a MOMI release update are not available to users by default. This action may be changed on the screen ***Configure / Client Access / Global Settings*** *by checking the option* ***New screens enabled by default.*** *The user that started MOMI, known as the* ***Default Security User,*** *always has new screens enabled by default.*

Installer

- None.

Help Documentation

- The PDF and Word formats of help no longer contain unintentional roman numerals nor page number resets. The PDF format currently starts with a blank page.

MOMI Client

New Screens:

- **None**

New Features:

- **None**

Bug Fixes:

- If a Client crash log was created(MOMI.LOG) and the client version contained a subversion(i.e. 6.17f) the crash log did not correctly identify the subversion. Fixed.
- Once grids had a filter set the 'No Filter' button would not display all records. Fixed.
- SubSystems / Logs / EMS Msgs
  - Under some circumstances when using the 'Lightning Mode' and the records were really old the client could crash while calculating the percent done for a collector. Fixed.
  - if the client was switched from 'Display mode' to 'Lighting mode' and back the 'Lighting mode' passed filter and total counts would be wrong. Fixed.

Misc. Items:

- More display improvements if windows is in High-contrast mode.
- **SubSystems/ Logs / VHS Log**
  - Added VHS File being read to Grid in the header for the text column.

· **Configure / Diagnostics / Client**
- Added Client resize start and completion times.

Known issues:

· **Systems / File Transfer / SFTP**
- If file is transferred as a Key-Sequenced structured file sometimes SFTP will think the transfer is successful but the host file is left empty. A check is now done and an error shows if this happened. Note: Sometimes making the **REC LEN** even will succeed. Some failures are caused by unknown factors and seem to be a failure in the SFTP Server on the NonStop.

· **SubSystems / Discovery**
- Feature is still under development and subject to change. Comments and suggestions are invited and welcome.

MOMI Server

New Features:

· The CONFMOMI keyword SPOOLER-LOGIN may be used to direct MOMI to require login for ALL Spooler related commands. If enabled, the Spooler related commands would then operate under the current clientuser login. See MOMI help for more information.

example: SPOOLER-LOGIN TRUE

· The server now supports a message used on the screen **SubSystems / Discovery** to display additional details about a process.

Bug Fixes:

· On the screen **History / Chart** a process specification of cpu,pin (ex. 1,234) will now match unnamed processes. Previously, an unnamed process specification would fail to match.

Misc. Items:

· On the screen **SubSystems / Logs / VHS Log** error messages relating to the log file will now contain the file name of the log file in error.

· The default extent sizes have been increased in the MOMI history files. Below is a table of the old and new values:

file	old pri	old sec	old ext	new pri	new sec	new ext
hst01db	70000	70000	60	80000	80000	60
hst02db	60000	60000	50	70000	70000	50
hst03db	56000	56000	40	60000	60000	40
hst04db	50000	50000	30	50000	50000	30

Known Issues:

· None

MOMIFTP
· None

ssMOMI
· None

MomiEmail
· None

SendMail
· None

CentralServer
· None

IPCalc
· None

****

Release Package	6.17e
Release Date (yyyy/mm/dd)	2023/09/05

Item	Version
Latest O/S tested	G06.32.01 J06.23.01 - L22.09.00
Client Version	6.17e Build 913
Server Version (VPROC)	6.17e T0000G06___V6_17e___2023_09_01
Buffer Version	Client 21.70 Server 21.70
History database	3.10
CONFMOMI	6.02
OBYMOMI	6.00
OBYCSQL	5.02
MomiFTP.exe	2.15
CentralServer.exe	1.8
ssMOMI.scr	6.00
MomiEMail.exe	1.11
SendMail.exe	1.01
IPCalc.exe	1.3.3
Oldest client version tested with server	5.80

Clients 5.15 and earlier may fail on connect.

NEW FEATURES / BUGS FIXED

(see MOMI HISTORY.RTF for previous versions)

Common new features (requires current client and server)

*If you are using Client Access, newly added screens in a MOMI release update are not available to users by default. This action may be changed on the screen **Configure / Client Access / Global Settings** by checking the option **New screens enabled by default**. The user that started MOMI, known as the **Default Security User**, always has new screens enabled by default.*

Installer

- None.

MOMI Client

New Screens:

- **None**

New Features:

- **None**

Bug Fixes:

- When resizing the Client if it contained any Grids has a very large number of records(200,000 or more) the client would timeout waiting for the resize to complete. Fixed.
- The right-click option to jump to PGMRAY (optional screen) would not always be available. Fixed.
- Once the client was on a **mini-MOMI** system the indicator would not go away when the client was changed to a system that was not **mini-MOMI**. Fixed.
- If a client was logged on to multiple Mini-MOMI systems the user was unable to change the user or Logoff. Fixed.
- **Files / Enscribe / SubVolume**
  - When screen was cleared the **No Details** option was always checked, not set to the default state found in **Configure / Client / Single Screen - Files**. Fixed.
- **SubSystems / Logs / EMS Logs**
  - Under some circumstances if the 'Compress' checkbox was checked to signal to remove duplicate spaces from the message and the log message was empty the client would crash. Fixed.
- **Configure / Client / Actions**
  - Version Checking actions popup font size sometimes was incorrect. Fixed.
- **Configure / Define Systems**
  - Under some circumstances, when a system was deleted, later when changing systems the client could crash. Fixed.
  - Under some circumstances, when a system was deleted, it was possible to delete the current system. Fixed.

Misc. Items:

- **Configure / Client / General**
  - Default setting for "Retain Connection and logon state during system change" was changed from not checked to checked.

Known issues:

- **Systems / File Transfer / SFTP**
  - If file is transferred as a Key-Sequenced structured file sometimes SFTP will think the transfer is successful but the host file is left

empty. A check is now done and an error shows if this happened. Note: Sometimes making the **REC LEN** even will succeed. Some failures are caused by unknown factors and seem to be a failure in the SFTP Server on the NonStop.

- **SubSystems / Discovery**
  - Feature is still under development and subject to change. Comments and suggestions are invited and welcome.

MOMI Server

New Features:

- The CONFMOMI keyword SPOOLER-DEFINE may be used to expliciately specify Spooler Supervisors to MOMI by process name. Use multiple lines to define up to 100 Spooler Supervisors. When this keyword is used, the previous method of identifying Spooler Supervisors using object file names is disabled. See MOMI help for more information.

  ```
  example: SPOOER-DEFINE $SPLS
           SPOOER-DEFINE $plus1
  ```

- On the screen **Alarms / Define / Action** the field **Send to EMS Collector** now may send to an EMS collector name other than $0. While the field was displayed in the client, the feature had not been implemented in the server.

- The Alarm **Process / Looping** now includes a tolerance value were the process priority difference must exceed before triggering an alarm. The default value is zero which means no tolerance.

Bug Fixes:

- None

Misc. Items:

- None

Known Issues:

- None

MOMIFTP

- None

ssMOMI

- None

MomiEmail

- None

SendMail

- None

CentralServer

- None

IPCalc

- None

****

Release Package	6.17d
Release Date (yyyy/mm/dd)	2023/08/09

Item	Version
Latest O/S tested	G06.32.01 J06.23.00 - L22.09.00
Client Version	6.17d Build 912
Server Version (VPROC)	6.17d T0000G06___V6_17d___2023_08_09
Buffer Version	Client 21.70 Server 21.70
History database	3.10
CONFMOMI	6.02
OBYMOMI	6.00
OBYCSQL	5.02
MomiFTP.exe	2.15
CentralServer.exe	1.8
ssMOMI.scr	6.00
MomiEMail.exe	1.11
SendMail.exe	1.01
IPCalc.exe	1.3.3
Oldest client version tested with server	5.80

Clients 5.15 and earlier may fail on connect.

NEW FEATURES / BUGS FIXED

(see MOMI HISTORY.RTF for previous versions)

Common new features (requires current client and server)

*If you are using Client Access, newly added screens in a MOMI release update are not available to users by default. This action may be changed on the screen **Configure / Client Access / Global Settings** by checking the option **New screens enabled by default**. The user that started MOMI, known as the **Default Security User**, always has new screens enabled by default.*

Installer

- None.

MOMI Client

New Screens:

- **None**

New Features:

- For most grids if a string filter is used and the item in the column is a shortened text ("text..." or "...text") and the "Search item full

length" is checked the filter will use the full length text not the shown shorten text. (for Gary B.)

- For most grids if column is a string with a shortened text ("text..." or "...text") and the Column is exported the data exported will use the full length text. (for Gary B.)

Bug Fixes:

- Sometimes the HELP button when pressed while the help location was set to use the web help at BlackWood would access the backup site (www.blackwood-systems-b.com) instead of the primary site (www.blackwood-systems.com). Fixed.
- **SubSystems / Spooler / Spooler**
  SubSystems / Spooler / Collector
  SubSystems / Spooler / Device
  SubSystems / Spooler / Loc
  SubSystems / Spooler / Print
  - If the User requested the data and there was a security error preventing the retrieval the result would be nothing found and no error message indicating what failed. Fixed.
- **SubSystems / Logs / EMS Msgs**
  - The "Find" would not work correctly. It would not always find the next/prev record and would not correctly wrap from start to end of list. Fixed.
- **SubSystems / Logs / EventBX**
  - The "Find..." would not do a search in the UP direction. For now the Up/Down direction has been removed and only a find from the current location down is allowed.

Misc. Items:

- **None**

Known issues:

- **Systems / File Transfer / SFTP**
  - If file is transferred as a Key-Sequenced structured file sometimes SFTP will think the transfer is successful but the host file is left empty. A check is now done and an error shows if this happened. Note: Sometimes making the **REC LEN** even will succeed. Some failures are caused by unknown factors and seem to be a failure in the SFTP Server on the NonStop.

- **SubSystems / Discovery**
  - Feature is still under development and subject to change. Comments and suggestions are invited and welcome.

MOMI Server

New Features:

- The alarm **DiskFile / Broken or Corrupt** now has an option to examine files that are Broken or Corrupt (the default), Broken, or Corrupt. As the default has not changed pre-existing alarm definitions are unchanged.

- The alarm **EMS / User defined** limit by type Event number now supports an optional range specification in the format: <*EVENTNBR>[nn..nn]. For example, <*EVENTNBR>[10..20] represents Event Numbers 10 through 20

inclusive.

Bug Fixes:

- None

Misc. Items:

- Many additional messages may now be now logged to $0 and the MOMI Log regarding problems encountered at startup or I/O with the EMSDIST used to read EMS events associated with **Expand** monitoring and **EMS / User defined** alarms.

- The screen **Alarms / Define / Alarm Save** operations **Save New** or **Change** now performs more extensive data validation. Errors are displayed on the status line.

- The internal SPI interface to read EMS events now specifies an optional context token that functions as a checksum.

Known Issues:

- None

MOMIFTP
- None

ssMOMI
- None

MomiEmail
- None

SendMail
- None

CentralServer
- None

IPCalc
- None

****

Release Package 6.17c
Release Date (yyyy/mm/dd) 2023/07/10

Item	Version

Latest O/S tested	G06.32.01 J06.23.00 - L22.09.00
Client Version	6.17c Build 910
Server Version (VPROC)	6.17c T0000G06___V6_17c___2023_07_10
Buffer Version	Client 21.70 Server 21.70
History database	3.10
CONFMOMI	6.02
OBYMOMI	6.00
OBYCSQL	5.02
MomiFTP.exe	2.15
CentralServer.exe	1.8
ssMOMI.scr	6.00
MomiEMail.exe	1.11
SendMail.exe	1.01
IPCalc.exe	1.3.3
Oldest client version tested with server	5.80

Clients 5.15 and earlier may fail on connect.

NEW FEATURES / BUGS FIXED

(see MOMI HISTORY.RTF for previous versions)

Common new features (requires current client and server)

*If you are using Client Access, newly added screens in a MOMI release update are not available to users by default. This action may be changed on the screen **Configure / Client Access / Global Settings** by checking the option **New screens enabled by default**. The user that started MOMI, known as the **Default Security User**, always has new screens enabled by default.*

Installer

- None.

MOMI Client

New Screens:

- **None**

New Features:

- **None**

Bug Fixes:

- **Overview / EMS Log**
  - The display of the Message detail did not display multi-byte character sets. Fixed.

- **SubSystems / logs / EMS Log**
  - The display of the Message detail and Tokens did not display multi-byte character sets. Fixed.
  - Made some changes to the Right-click of the Config button to allow switching between Config and Collector Status more consistent and

preventing the occasional loss of the Collector status display. Fixed.

- **SubSystems / logs / MOMI Log**
  - The display of the Message detail did not display multi-byte character sets. Fixed.
  - Export of the log did not accept the **Allow Multi-Byte Character Sets** setting so multi-byte characters were not allowed. Fixed.

- **SubSystems / logs / VHS Log**
  - The display of the Message detail did not display multi-byte character sets. Fixed.

Misc. Items:

- **None**

Known issues:

- **Systems / File Transfer / SFTP**
  - If file is transferred as a Key-Sequenced structured file sometimes SFTP will think the transfer is successful but the host file is left empty. A check is now done and an error shows if this happened. Note: Sometimes making the **REC LEN** even will succeed. Some failures are caused by unknown factors and seem to be a failure in the SFTP Server on the NonStop.

- **SubSystems / Discovery**
  - Feature is still under development and subject to change. Comments and suggestions are invited and welcome.

MOMI Server

New Features:

- None

Bug Fixes:

- Corrected processing with the alarm **CPU / Busy percent with priority threshold** were it did not take into account the number of IPUs in its CPU busy calculation.

Misc. Items:

- Changed limits processing of alarm **CPU / Busy percent with priority threshold** where the upper priority limit is now 256 and the lower priority limit is now priority 0 (previous 255 and 1). The comparison operators are less than or greater than so the entire priority range may now be specified.

Known Issues:

- None

MOMIFTP
- None

ssMOMI
- None

MomiEmail
- None

SendMail
- None

CentralServer
- None

IPCalc
- None

****

Release Package 6.17b
Release Date (yyyy/mm/dd) 2023/05/11

Item	Version
Latest O/S tested	G06.32.01
	J06.23.00 - L22.09.00
Client Version	6.17b Build 907
Server Version (VPROC)	6.17b T0000G06___V6_17b___2023_05_11
Buffer Version	Client 21.70 Server 21.70
History database	3.10
CONFMOMI	6.01
OBYMOMI	6.00
OBYCSQL	5.02
MomiFTP.exe	2.15
CentralServer.exe	1.8
ssMOMI.scr	6.00
MomiEMail.exe	1.11
SendMail.exe	1.01
IPCalc.exe	1.3.3
Oldest client version tested with server	5.80

Clients 5.15 and earlier may fail on connect.

NEW FEATURES / BUGS FIXED

(see MOMI HISTORY.RTF for previous versions)

Common new features (requires current client and server)

*If you are using Client Access, newly added screens in a MOMI release update are not available to users by default. This action may be changed on the screen **Configure / Client Access / Global Settings** by checking the option **New screens enabled by default**. The user that started MOMI, known as the **Default Security User**, always has new screens enabled by default.*

Installer

- None.

MOMI Client

New Screens:

- **None**

New Features:

- **SubSystems / Logs / EMS Logs and**
  SubSystems / Logs / VHS Log and
  SubSystems / Logs / MOMI Log and
  SubSystems / Logs / LogViewer
  - Define Filters
    - Added AND/OR Methods to use to make filters more flexible.
    - 'Exclude Or' so record is excluded if either 'Exclude if Any' or 'Exclude if All' is matched.
    - 'Exclude And' so record is only excluded if 'Exclude if Any' and 'Exclude if All' are both matched.
    - 'Include Or' so record is included if either 'Include if Any' or 'Include if All' is matched.
    - 'Include And' so record is only Included if 'Include if Any' and 'Include if All' are both matched.
    - Added <*NOT> indicator to exclude item from list.
    - Added <*//> indicator to make line a comment and be ignored in filter.
    - <*NOT> and <*//> comment are Toggles.
    - Added tab and ability to 'Export and Import Multiple Filters' and added buttons to Import and Export single filters.
    - Added ability to surround search text with either " or '. This will allow for searching for whole word and not finding match when search is within another word.
      i.e. "fred " will find fred but not fredrica.

Bug Fixes:

- **Alarms / Define / Alarm**
  - On EMS type alarms when changing tabs between Set and Clear the count for remaining characters was not always set correctly. Fixed.

- **Configure / Client / General**
  - The Setting for 'Retain Connection and logon state during system change' was not being updated correctly when the 'Save' button was pressed. Fixed.

- **Configure / Client / Single Screen / Optional Screens**
  - if 'BlackWood Systems PgmRay' was not checked and the user changed to a system where Client Access allowed 'PgmRay' it would display. The setting in 'Optional Screens' if unchecked should always take

precedence. Fixed.

Misc. Items:

- **Alarms / Define / Alarm**
  - when Importing alarm records now the default is they will be imported as 'Disabled'.

Known issues:

- **Systems / File Transfer / SFTP**
  - If file is transferred as a Key-Sequenced structured file sometimes SFTP will think the transfer is successful but the host file is left empty. A check is now done and an error shows if this happened. Note: Sometimes making the **REC LEN** even will succeed. Some failures are caused by unknown factors and seem to be a failure in the SFTP Server on the NonStop.

- **SubSystems / Discovery**
  - Feature is still under development and subject to change. Comments and suggestions are invited and welcome.

MOMI Server

New Features:

- The MOMI alarm **DiskFile / Percent full** now has the option to select the file structure (i.e. key-sequence, relative, unstructured, etc...). The default remains all file structures.

- The MOMI alarm **EMS / User defined** may have embedded spaces within search strings by adding a leading and trailing quote or tic.

Bug Fixes:

- Corrected a bug that when a CPU failed which affected a NonStop process pair the process was marked as DOWN and then would later self-correct after it saw the other portion of the process. Now, a check is made and if one of the pair is running the process will not be marked as DOWN.

Misc. Items:

- MOMI alarm EMS message no longer filters unprintable characters. This allows the display of multi-byte characters such as Chinese.

Known Issues:

- None

MOMIFTP

- None

ssMOMI

- None

MomiEmail
- None

SendMail
- None

CentralServer
- None

IPCalc
- None

****

Release Package 6.17a
Release Date (yyyy/mm/dd) 2023/03/24

Item	Version
Latest O/S tested	G06.32.01
	J06.23.00 - L22.09.00
Client Version	6.17a Build 906
Server Version (VPROC)	6.17a T0000G06___V6_17a___2023_03_24
Buffer Version	Client 21.69 Server 21.69
History database	3.10
CONFMOMI	6.01
OBYMOMI	6.00
OBYCSQL	5.02
MomiFTP.exe	2.15
CentralServer.exe	1.8
ssMOMI.scr	6.00
MomiEMail.exe	1.11
SendMail.exe	1.01
IPCalc.exe	1.3.3
Oldest client version tested with server	5.80

Clients 5.15 and earlier may fail on connect.

NEW FEATURES / BUGS FIXED

(see MOMI HISTORY.RTF for previous versions)

Common new features (requires current client and server)

*If you are using Client Access, newly added screens in a MOMI release update are not available to users by default. This action may be changed on the screen **Configure / Client Access / Global Settings** by checking the option*

New screens enabled by default. *The user that started MOMI, known as the* ***Default Security User****, always has new screens enabled by default.*

Installer

- None.

MOMI Client

New Screens:

- **None**

New Features:

- **None**

Bug Fixes:

- When starting a **PSTATE** it would jump behind the client if a hint was displayed by the Client. Fixed.
- Help location on the was not always being set correctly if the help was not installed locally. Fixed.

Misc. Items:

- More work done to make sure Resizing works with all combinations of Monitor size, Font size and Windows Font adjustments.

Known issues:

- **Systems / File Transfer / SFTP**
  - If file is transferred as a Key-Sequenced structured file sometimes SFTP will think the transfer is successful but the host file is left empty. A check is now done and an error shows if this happened. Note: Sometimes making the **REC LEN** even will succeed. Some failures are caused by unknown factors and seem to be a failure in the SFTP Server on the NonStop.

- **SubSystems / Discovery**
  - Feature is still under development and subject to change. Comments and suggestions are invited and welcome.

MOMI Server

New Features:

- None

Bug Fixes:

- The alarm **Process / State running/stopped** now works. This problem was introduced in 6.17.

Misc. Items:

- The alarm **EMS / User defined** now ignores an empty section within **EMS SET** or **EMS Clear** for **AND** purposes (effectively reverting to **OR** if nothing was entered). The underlying code was also restructured and optimized.

Known Issues:

- None

MOMIFTP

- None

ssMOMI

- None

MomiEmail

- None

SendMail

- None

CentralServer

- None

IPCalc

- None

****

Release Package 6.17
Release Date (yyyy/mm/dd) 2023/03/15

Item	Version
Latest O/S tested	G06.32.01
	J06.23.00 - L22.09.00
Client Version	6.17 Build 905
Server Version (VPROC)	6.17 T0000G06___V6_17____2023_03_14
Buffer Version	Client 21.69 Server 21.69
History database	3.10
CONFMOMI	6.01
OBYMOMI	6.00
OBYCSQL	5.02
MomiFTP.exe	2.15
CentralServer.exe	1.7
ssMOMI.scr	6.00
MomiEMail.exe	1.10
SendMail.exe	1.01
IPCalc.exe	1.3.3

Oldest client version

tested with server 5.80

Clients 5.15 and earlier may fail on connect.

NEW FEATURES / BUGS FIXED

(see MOMI HISTORY.RTF for previous versions)

Common new features (requires current client and server)

*If you are using Client Access, newly added screens in a MOMI release update are not available to users by default. This action may be changed on the screen **Configure / Client Access / Global Settings** by checking the option **New screens enabled by default**. The user that started MOMI, known as the **Default Security User**, always has new screens enabled by default.*

Installer

- A new digital certificate and process is now used for signing the installer, executables, and other files. The short-cut for HTML help was removed.

MOMI Client

New Screens:

- **Configure / Tools / Others**
  - Added PSTATE to allow user to run PSTATE or PSTATE2 on the NonStop.
  - Added Right-click action menu items to many places to jump directly to the PSTATE screen when a process name, CPU,PIN, or OSS PID was selected.

New Features:

- **Systems / External**
  - Now has the ability to set parameters for programs to be started.

- **SubSystems / Logs / EMS Log**
  - **Process Name** picker now allows multiple process names to be selected at one time using Ctrl and Shift keys. (for Gary B.)

- **Alarms / Define / Alarm**
  - For **SubType / User Defined** / **EMS Set** and **EMS Clear** added ability to add <*NOT> indicator to exclude item from list. Also added <*COLLECTOR> for only selected collectors. Also <*NOT> and <*//> comment are now Toggles.

- **Alarms / List / Export**
  - Added ability to Export EMail/Group info to Tab-delimited file. (For McKim E.)

- **Configure / Client / General**
  - Added ability to save a Client size and a button to change to that size.

Bug Fixes:

- If a user connected to a system with an expired password then tried to change to a system that had a valid password it would not connect.

Fixed.

- If a user tried to generate a Support question Email before the connection was made to the server the Email program would not startup. Fixed.

- Logon Popup when on a Windows 11 machine would do a word wrap on then **Send Response** button. Fixed.

- If a user tried to paste a string into a Grid string Filter the paste would fail. Fixed.

- if a INI file was moved to another PC and the INI contained **Systems / External** programs and the program did not exist on the new PC the client would crash upon startup either with a *Out of System Resources* or *Range Check* error. Fixed.

- **Processes / Top Processes**
  - CPU,PIN(i) column was always hidden. Fixed
  - If user wanted to jump to **Process Detail** by selecting the object and the process was not named the screen never selected the process by CPU,PIN. Fixed.

- **Alarms / Active**
  - Duration would not always display the correct alarm duration. Fixed.

- **Alarms / List / Action**
  - Columns would not auto-size correctly. Fixed.

- **Alarms / List / Export**
  - **Collecting ...** popup while collecting alarm info never went away. Fixed.

- **Configure / Tools / Numbers**
  - On a 4K monitor the Calculator would not correctly resize and some of it was cut off Fixed.

Misc. Items:

- More work done to make sure Resizing works with all combinations of Monitor size, Font size and Windows Font adjustments.

- **Alarms / List / Alarms**
  - Change the format of the EMS Set/Clear display on the Event Checked column.

Known issues:

- **Systems / File Transfer / SFTP**
  - If file is transferred as a Key-Sequenced structured file sometimes SFTP will think the transfer is successful but the host file is left empty. A check is now done and an error shows if this happened. Note: Sometimes making the **REC LEN** even will succeed. Some failures are caused by unknown factors and seem to be a failure in the SFTP Server on the NonStop.

- **SubSystems / Discovery**

- Feature is still under development and subject to change.
  Comments and suggestions are invited and welcome.

MOMI Server

New Features:

- Support for PSTATE[2] and CONFMOMI keyword **LOGON-PSTATE**. See MOMI Help for additional information.

- Alarm **DiskFile / Broken or Corrupt** now has the file state options of **Open/Closed/Closed or Open**. Previously, the alarm triggered on **Closed or Open**.

- The alarm **EMS / User defined** now supports the tags of <*NOT>, <*//> (comment), <*COLLECTOR>, and <*ALL>. Spaces may now be present between the tag and parameter following.

- The alarm **EMS / User defined** now has the option to key the alarm by the process $Name generating the EMS event. See MOMI help for additional information.
- The alarm **EMS / User defined** now performs additional validation and returns additional error messages. These messages may be displayed on the screen **Alarms / Define / Alarm** when **Save New** or **Change** is pressed OR on the screen **Alarms / Active** (usually as a purple alarm).

- On the screen **Alarms / Define / Alarm** the server may now identify to the client a Help page specific to a particular alarm. The initial alarm with specific help is **EMS / User defined.**

Bug Fixes:

- The clear message in the alarm **EMS / User defined** now uses the Alarm Active label text instead the hard coded "EMS Based event" if present. Both are still followed by the word " cleared".

- An unnamed process of exactly 10 characters (i.e. $:12:34567) is no longer treated as exceeding an internal buffer. In this situation its length was reduced to 9 characters meaning only the first 4 characters of the PIN would be accepted.

Misc. Items:

- The internal protocol between the client and server has been revised to improve performance and correct some potential bugs. The green indicator light found on many screens that indicates the client is waiting for a response now stays green under more situations (i.e. it is more accurate).

- The server now issues a PROCESS_STOP_ against a TMFSERV it previously started if a new server is required. Previously, it was assumed the process would always automatically stop (added as just a precaution).

- The EMS event within an email generated as a result of the alarm **EMS / User defined** now provides the $name of the reporting process instead of the system number, CPU, and PIN. This was a regression introduced in 6.11 when support for a longer EMS message was introduced.

Known Issues:

- None

MOMIFTP

- None

ssMOMI

- None

MomiEmail

- version 1.11 Added MOMI Screen attributes to email

SendMail

- None

CentralServer

- version 1.8 removed HTML4 shortcut

IPCalc

- None

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Release Package 6.16
Release Date (yyyy/mm/dd) 2022/11/06

Item	Version
Latest O/S tested	G06.32.01 J06.23.00 - L22.09.00
Client Version	6.16 Build 903
Server Version (VPROC)	6.16 T0000G06___V6_16____2022_11_02
Buffer Version	Client 21.68 Server 21.68
History database	3.10
CONFMOMI	6.01
OBYMOMI	6.00
OBYCSQL	5.02
MomiFTP.exe	2.15
CentralServer.exe	1.7
ssMOMI.scr	6.00
MomiEMail.exe	1.10
SendMail.exe	1.01
IPCalc.exe	1.3.3

Oldest client version
tested with server 5.80

Clients 5.15 and earlier may fail on connect.

NEW FEATURES / BUGS FIXED

(see MOMI HISTORY.RTF for previous versions)

Common new features (requires current client and server)

*If you are using Client Access, newly added screens in a MOMI release update are not available to users by default. This action may be changed on the screen **Configure / Client Access / Global Settings** by checking the option **New screens enabled by default**. The user that started MOMI, known as the **Default Security User**, always has new screens enabled by default.*

Installer

- An uninstall no longer leaves behind short-cuts or files when two or more versions were present.

MOMI Client

New Screens:

- **None**

New Features:

- **Files / Enscribe / Volumes**
  - Added 'Mini-Report' to show space usage for Volumes. (for Jeff N.)

- **SubSystems / Logs / EMS Log**
  - If a filter is active during a Lightning-mode retrieval the screen will also display how many of the records passed the filter. (For Gary B.)
  - If a client filter is active the selection will display a light purple to differentiate it from a client filter that has been selected but not yet activated by the 'Filter' or 'PreFilter' button.

- **Alarms / Define / Alarm** and
  Alarms / List / Alarm and
  Alarms / List / Export and
  Alarms / List / Import
  - Added support for new alarm type event for number of Events Over Time (FCT=Flag/Count/Time). Currently only used on EMS message alarms. (for Eric S.)

- **Configure / Client / Actions / MOMI.INI actions**
  - Added section to allow user to edit the MOMI.INI file (using NOTEPAD) then restart the client using the newly changed file.

Bug Fixes:

- If the MOMI.INI did not exist and it was created, the default value for number of EMS Messages kept in memory was 100 not the correct default value of 5000. Fixed.

· If the client had the "Auto check for new versions" turned on at the same time the ReadMe.RTF was open using Microsoft Word, when the auto check was performed the client would crash. Fixed.

· Under some circumstances when text was retrieved from the Clipboard and the Clipboard was opened exclusive by either the client or another process the Client would crash. Fixed.

· Using the MOMI_INIT.INI to create the initial INI file would not always correctly create the MOMI.INI file. Fixed.

· **Files / Enscribe / View File** and
SubSystems / Spooler / View Job
- When a 'Search' or 'Export' was being performed and a 'Request' or 'Clear' was pressed the client could crash. Fixed.

· **SubSystems / Logs / EMS Log**
- If the 'Lightning' button was pressed during a normal record retrieval the Lightning retrieval would start over at the original data/time rather than just continue from where it was. Bug was introduced in 6.14. Fixed.
- The Export filters button never became active so it was impossible to export EMS Filters. Fixed.
- Lightning Filtered count was not reset when filter was cleared or changed. Fixed.

· **SubSystems / Spooler / Collector**
- Under some circumstances when a Spooler Collector was deleted the client would crash. Fixed.

· **SubSystems / Spooler / Jobs** and
SubSystems / Spooler / View Job
- A jump directly from Spooler Jobs to Spooler View Job when the Spooler View Job screen had not yet been created would sometimes cause the client to crash. Fixed.

· **SubSystems / Logs / EMS Log**
- If the 'Lightning' button was pressed during a normal record retrieval the Lightning retrieval would start over at the original data/time rather than just continue from where it was. Bug was introduced in 6.14. Fixed.
- The Export filters button never became active so it was impossible to export EMS Filters. Fixed.
- Lightning Filtered count was not reset when filter was cleared or changed. Fixed.

· **SubSystems / Spooler / Jobs and**
SubSystems / Spooler / View Job and
SubSystems / Logs / EMS EventBX and
Files / Enscribe / View File
- A 'Search' would not work correctly if both Wildcards and case-sensitive were selected. Fixed.

· **SubSystems / Spooler / Jobs**
- If using right-click to get to Process Detail screen it sometimes

would bring up the previous process name. Fixed.

· **SubSystems / Expand / Diagram**
  - Sometimes when multiple systems were being probed the display would not display all paths and lines. Fixed.

· **History / Export**
  - The runtime string created using "Create Runtime Export" would not work if ran from a command line, it only worked with the Test button. Fixed.

· **Alarms / Define / Alarm**
  - It was possible to display, save, change and/or delete an Alarm with the name <NONE>. Fixed.

· **Alarms / List / Alarm** and
  Alarms / List / EMail and
  Alarms / List / EMail Group and
  Alarms / List / Group List
  - When using an alternate Windows character set(Chinese-Taiwan-0404) the expanded '[+]' fields would display unwanted '?'. Fixed.

· **Configure / Client / Single Screen / Alarms**
  - When attempting to change the Alarm text color the client might crash. Fixed.

Misc. Items:

· Made improvements to make sure when the client is updating the MOMI.INI file it did not interfere with other clients accessing the file.

· **Security Logon** and
  File Transfer Logon
  - When the **Enter** key is pressed while entering UserID or Password the **Send Response** button is now clicked instead of tabbing to the button. (for Adam W.)

· **CPUs / CPU Info**
  - Added column of CIDs used (derived from Configured - Free). (for Gary B.)

· **SubSystems / Logs / EMS Log**
  - When exiting Lightning-mode the message scroll speed will revert to the speed last set by the user not the default value. (for Gary B.)

· **SubSystems / Spooler / Jobs**
  - Copy Jobs now displays all available collectors sorted by how full they are.

· **SubSystems / TCP/IP / Process Status**
  - Added column for Opener process file name(NSK or OSS). (for Gary B.)
  - Added 'View Process Detail' and 'Copy name to clipboard' to right-click menu item for 'Process' and 'OpenerPName'

· **SubSystems / Expand / Diagram**
  - Reworked the diagram to speed up the loading of the diagram objects

and make it flash less when it updates.

- **SubSystems / Expand / Paths / Detail** and
  SubSystems / Expand / Lines / Detail
  - Added ability to scroll using mouse wheel.

- **Alarms / Define**
  - Disabled alarm entities now display the screen in Orange to improve read-ability when user has display set to High-Contrast theme.

- **Alarms / Define / Alarm / EMS Set and EMS Clear**
  - If user tries to copy more data into the definition than allowed it will prevent it and beep to notify the user.
  - Any blank lines are now removed before being saved.

- **Alarms / List / Import**
  - Import now has more complete counts for number of each item type deleted or imported.

- **Configure / Client / General**
  - Added new section 'Character Display' this allows the user to globally set if Multibyte character sets (i.e. Chinese) are allowed for displays and set how the display of non-printable characters is handled if Multibyte are not allowed.
  - Removed individual setting for Allowing Multibyte character sets for following screens EMS Logs, View File, View Spooler Job, Overview EMS display and User-defined screens.

- **Configure / Client / File Locations**
  - Removed HTML4 help. Anyone that had selected HTML4 will auto-change to HTML5.

Known issues:

- **Systems / File Transfer / SFTP**
  - If file is transferred as a Key-Sequenced structured file sometimes SFTP will think the transfer is successful but the host file is left empty. A check is now done and an error shows if this happened. Note: Sometimes making the **REC LEN** even will succeed. Some failures are caused by unknown factors and seem to be a failure in the SFTP Server on the NonStop.

- **SubSystems / Discovery**
  - Feature is still under development and subject to change. Comments and suggestions are invited and welcome.

MOMI Server

New Features:

- None

Bug Fixes:

- Communication between the client and server no longer loops (showing

high CPU utilization on NonStop System) when reading more than one than 1 shorthand history record. This situation arose when the client was exporting Disk Entity History data for the current day. The looping would stop if the requesting client was stopped.

- Live history data no longer (possibly) delays by one period.

Misc. Items:

- Server can now provide a letter after the version (for example 6.15g).
- Minor coding cleanup and performance enhancements.

Known Issues:

- None

MOMIFTP

- version 2.15 Changed to work with new Installer and Added Stats(?) popup.

ssMOMI

- None

MomiEmail

- None

SendMail

- None

CentralServer

- version 1.7 Added Help and Stats(?) popup.

IPCalc

- None

****

Release Package	6.15g
Release Date (yyyy/mm/dd)	2022/08/10

Item	Version
Latest O/S tested	G06.32.01 J06.23.00 - L21.11.01
Client Version	6.15g Build 900
Server Version (VPROC)	6.15 T0000G06___V6_15____2022_05_05
Buffer Version	Client 21.67 Server 21.67
History database	3.10

CONFMOMI	6.01
OBYMOMI	6.00
OBYCSQL	5.02
MomiFTP.exe	2.15
CentralServer.exe	1.7
ssMOMI.scr	6.00
MomiEMail.exe	1.10
SendMail.exe	1.01
IPCalc.exe	1.3.3

Oldest client version tested with server 5.80

Clients 5.15 and earlier may fail on connect.

NEW FEATURES / BUGS FIXED

(see MOMI HISTORY.RTF for previous versions)

Common new features (requires current client and server)

*If you are using Client Access, newly added screens in a MOMI release update are not available to users by default. This action may be changed on the screen **Configure / Client Access / Global Settings** by checking the option **New screens enabled by default**. The user that started MOMI, known as the "Default Security User" always has new screens enabled by default.*

Impacts in this version

The Free version of the CAIL emulator is no longer provided with the MOMI client. If the user has the full-function purchased version installed it will continue to work. If the user has any 6530 Emulator programs on their PC that they want to start from within the MOMI client, the **Systems / External** screen will allow a button to be created to start their emulator.

MOMI Software short-cuts, as displayed by the Windows Start menu, now use the format of **BWS MOMI n.nn**. Previously, MOMI software short-cuts were located under **BlackWood Systems**. This change is for compatibility with Windows 10 which does not handle multiple levels within the Start menu.

Installer

- An uninstall no longer leaves behind short-cuts or files when two or more versions were present.

MOMI Client

New Screens:

- **None**

New Features:

- **Files / Enscribe / Volumes**
  - Added 'Mini-Report' to show space usage for Volumes. (for Jeff N.)

- **SubSystems / Logs / EMS Log**
  - If a filter is active during a Lightning-mode retrieval the screen will also display how many of the records passed the filter. (For Gary B.)
  - If a client filter is active the selection will display a light purple to differentiate it from a client filter that has been

selected but not yet activated by the 'Filter' or 'PreFilter' button.

- **Alarms / Define / Alarm** and
  Alarms / List / Alarm and
  Alarms / List / Export and
  Alarms / List / Import
  - Added support for new alarm type event for number of Events Over Time (FCT=Flag/Count/Time). Currently only used on EMS message alarms. (for Eric S.)

Bug Fixes:

- If the MOMI.INI did not exist and it was created, the default value for number of EMS Messages kept in memory was 100 not the correct default value of 5000. Fixed.

- If the client had the "Auto check for new versions" turned on at the same time the ReadMe.RTF was open using Microsoft Word, when the auto check was performed the client would crash. Fixed.

- **Files / Enscribe / View File** and
  SubSystems / Spooler / View Job
  - When a 'Search' or 'Export' was being performed and a 'Request' or 'Clear' was pressed the client could crash. Fixed.

- **SubSystems / Logs / EMS Log**
  - If the 'Lightning' button was pressed during a normal record retrieval the Lightning retrieval would start over at the original data/time rather than just continue from where it was. Bug was introduced in 6.14. Fixed.
  - The Export filters button never became active so it was impossible to export EMS Filters. Fixed.
  - Lightning Filtered count was not reset when filter was cleared or changed. Fixed.

- **SubSystems / Spooler / Jobs** and
  SubSystems / Spooler / View Job and
  SubSystems / Logs / EMS EventBX and
  Files / Enscribe / View File
  - A 'Search' would not work correctly if both Wildcards and case-sensitive were selected. Fixed.

- **SubSystems / Spooler / Jobs**
  - If using right-click to get to Process Detail screen it sometimes would bring up the previous process name. Fixed.

- **SubSystems / Expand / Diagram**
  - Sometimes when multiple systems were being probed the display would not display all paths and lines. Fixed.

- **History / Export**
  - The runtime string created using "Create Runtime Export" would not work if ran from a command line, it only worked with the Test button. Fixed.

- **Alarms / Define / Alarm**

- It was possible to display, save, change and/or delete an Alarm with the name <NONE>. Fixed.

· **Alarms / List / Alarm** and
Alarms / List / EMail and
Alarms / List / EMail Group and
Alarms / List / Group List
- When using an alternate Windows character set(Chinese-Taiwan-0404) the expanded '[+]' fields would display unwanted '?'. Fixed.

Misc. Items:

· Made improvements to make sure when the client is updating the MOMI.INI file it did not interfere with other clients accessing the file.

· **Security Logon** and
File Transfer Logon
- When the **Enter** key is pressed while entering UserID or Password the **Send Response** button is now clicked instead of tabbing to the button. (for Adam W.)

· **CPUs / CPU Info'**
- Added column of CIDs used (derived from Configured - Free). (for Gary B.)

· **SubSystems / Logs / EMS Log**
- When exiting Lightning-mode the message scroll speed will revert to the speed last set by the user not the default value. (for Gary B.)

· **SubSystems / Spooler / Jobs**
- Copy Jobs now displays all available collectors sorted by how full they are.

· **SubSystems / Expand / Diagram**
- Reworked the diagram to speed up the loading of the diagram objects and make it flash less when it updates.

· **SubSystems / Expand / Paths / Detail** and
SubSystems / Expand / Lines / Detail
- Added ability to scroll using mouse wheel.

· **Alarms / Define / Alarm / EMS Set and EMS Clear**
- If user tries to copy more data into the definition than allowed it will prevent it and beep to notify the user.
- Any blank lines are now removed before being saved.

· **Alarms / List / Import**
- Import now has more complete counts for number of each item type deleted or imported.

Known issues:

· The Firefox web browser does not display help correctly if HTML4 is selected. Use HTML5 or another browser instead.

· When using Windows 7 and a 4K monitor and the client is resized to full screen, the down-arrow on a drop box is very small. They do not resize

like other items. It works fine with Windows 10.

- When converting from Mini-MOMI to full MOMI it may be necessary to restart the client.

- **Systems / File Transfer / SFTP**
  - If file is transferred as a Key-Sequenced structured file sometimes SFTP will think the transfer is successful but the host file is left empty. A check is now done and an error shows if this happened. Note: Sometimes making the **REC LEN** even will succeed. Some failures are caused by unknown factors and seem to be a failure in the SFTP Server on the NonStop.

- **SubSystems / Discovery**
  - Feature is still under development and subject to change. Comments and suggestions are invited and welcome.

MOMI Server

New Features:

- The alarm **EMS / User defined** now has the optional ability to only trigger after reaching a specified count over time. For example, require 15 events over 10 minutes.

- Added alarm **CPU / CIDs** to generate an alarm if the number of MEASURE CIDs used exceeds a specified percentage.

Bug Fixes:

- The field path_ldev_name in Expand/Status/Line now loads ZCSM^LDEV instead of ZPATH^LDEV.

- Corrected memory leak when starting a measurement if no entity was specified. The situation was unlikely and the amount of memory potentially involved very small.

- Corrected a bug, or perhaps an interpretation, of an situation where the alarm **EMS / User defined** would fail to match text. During the internal construction of a single line of text from an EMS event, previously each line of text would have a space added when the another line was appended. Now, a space is not added if the new line begins with a space. Note that this change has the possibility to 'break' existing alarms. The single line interpretation of an EMS event may be seen on the screen **SubSystems / Logs / EMS Msgs** after clicking on an event to display detail then pressing the **1** to the left of the tab **Message** (which displays **EMS Message as single line**).

- The following MEASURE entity CPU field values are now divided by the number of IPUs to generate values more closely matching what MEASURE reports:
  intr^busy^time
  native^busy^time
  accel^busy^time
  tns^busy^time

Misc. Items:

- The processing of array entries obtained from Expand was changed to now search through all possible entries instead of only the ones indicated by the count. What we discovered, for example, is if line in a multi-line path was deleted the count was correctly reduced by 1 but the entries returned in the array were not always moved up to reflect one less item. This could have had the effect of 'effectively' losing a line or path and causing the Expand / Diagram to miss some information.

- In the event a server process started by MOMI does not receive an open (to initiate communication), added additional information was added to the log message to help identify the process having difficulty.

- ANSI name processing now correctly sets an error code when the server operates on older NonStop platform (was not an issue on newer platforms).

- Certain status updates to the client, for example when searching for a file, now update once a second instead of every n number of operations. This should result in the status updates appearing more consistently regardless of the speed of the NonStop Processor.

Known Issues:

- None

MOMIFTP

- version 2.15 Changed to work with new Installer and Added Stats(?) popup.

ssMOMI

- None

MomiEmail

- None

SendMail

- None

CentralServer

- version 1.7 Added Stats(?) popup.

IPCalc

- None

****

Release Package	6.14
Release Date (yyyy/mm/dd)	2021/11/04

Item	Version
Latest O/S tested	G06.32.01
	J06.23.00 - L21.06.00

Client Version	6.14	Build 896
Server Version (VPROC)	6.14	T0000G06___V6_14____2021_11_02
Buffer Version	Client 21.66	Server 21.66
History database	3.10	
CONFMOMI	6.01	
OBYMOMI	6.00	
OBYCSQL	5.02	
MomiFTP.exe	2.14	
CentralServer.exe	1.6	
ssMOMI.scr	6.00	
MomiEMail.exe	1.10	
SendMail.exe	1.01	
IPCalc.exe	1.3.3	
Oldest client version tested with server	5.80	

Clients 5.15 and earlier may fail on connect.

NEW FEATURES / BUGS FIXED

(see MOMI HISTORY.RTF for previous versions)

Common new features (requires current client and server)

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MOMI Client

New Screens:

- **None**

New Features:

- **Alarms / Define / Alarm**
  - Added fields needed for 'Alarm Dependency'. If set, the alarm being set will not be reported if the 'Dependent alarm' is already in an alarm state. (For Diana K.)

- **Alarms / List / Import**
  - Added ability to import alarms as Disabled. (for Al H.)

- **Spooler / Collector** and
- **Spooler / Job**
  - Right-Click action on Collector name column to goto Process Detail for that COllector and display what has the collector open.

- **Calendar**
  - Added 'Load latest dates' button that will get the latest Calendar dates from the BlackWood Website and merge them into the clients calendar items.

Bug Fixes:

- If Server was in 'LockDown Mode' and the client had not had any of its EMS configuration changed from the default values the client might crash on startup. Fixed.

- If user attempted to logon while NonStop had logons suspended for short period the client would not always display the fact it was already waiting for a response. Fixed.

- If the user switched to a server that had 'Client Access' enabled but did not yet have its records defined the screen would get messed up and the user might not be able to logon. Fixed.

- **SubSystems / Logs / EMS Logs**
  - If while in Lightning-mode the user went into the config screen and then pressed the Lighting request button, the client would either appear to hang or resume using its old config setting. Now the request is resent with either the new config(if changed) or the previous config. Fixed.

Misc. Items:

- If a screen is in 'AutoUpdate' mode its tab will have the * indicator and be colored blue even when the screen is between updates.

- **Configure / Client Access**
  - Settings may now only be changed when 'Enable Client Access checking on this System' is checked and a user that has the ability to make that change is logged on.

Known issues:

- The FireFox web browser does not display help correctly if HTML4 is selected. Use HTML5 or another browser instead.

- When using Windows 7 and a 4K monitor and the client is resized to full screen, the down-arrow on a drop box is very small. They do not resize like other items. It works fine with Windows 10.

- When converting from Mini-MOMI to full MOMI it may be necessary to restart the client.

- **Systems / File Transfer / SFTP**
  - If file is transferred as a Key-Sequenced structured file sometimes SFTP will think the transfer is successful but the host file is left empty. A check is now done and an error shows if this happened. Note:

Sometimes making the **REC LEN** even will succeed. Some failures are caused by unknown factors and seem to be a failure in the SFTP Server on the NonStop.

- **SubSystems / Discovery**
  - Feature is still under development and subject to change. Comments and suggestions are invited and welcome.

MOMI Server

New Features:

- Added support for Alarm Dependency found on **Alarms / Define / Alarm**. Note that some aspects of this support are still limited. For example, if an Expand Line is dependent on an Expand Path there is not a common **Entity Name** currently available.

Bug Fixes:

- None

Misc. Items:

- An unnecessary screen update has been removed if alarm is present on **Alarms / Active** and the alarm record is deleted or disabled.

- Alarm text is changed to now display *Alarm disabled:* at the beginning of the message instead of at the end.

- The EMS collector name is now displayed if an error occurs while started the EMS Distributor process. Also changed text of the messages generated when an error is encountered with and EMS Distributor to more clearly indicate where the error occurred.

- Version 6.12 of the Server failed to display data on the screen **Files / Enscribe / File** when operating on a NonStop Integrity System. Internally, a file system 590 occurred on a call to FILE_GETINFOLISTBYNAME_ as the calculation for the number of item codes yielded a large negative invalid value. The correction was to disable compiler optimization (only on the NonStop Integrity platform). Additionally, any non-expected file system error stops further processing and is displayed by the client.

Known Issues:

- None

MOMIFTP

- None

ssMOMI

- None

MomiEmail

- None

SendMail

- None

CentralServer

- Added File Explorer to look at Shortcuts

IPCalc

- None

****

Release Package	6.12
Release Date (yyyy/mm/dd)	2021/08/11

Item	Version
Latest O/S tested	G06.32.01 J06.23.00 - L20.10.00
Client Version	6.12 Build 894
Server Version (VPROC)	6.12 T0000G06___V6_12____2021_08_03
Buffer Version	Client 21.65 Server 21.65
History database	3.10
CONFMOMI	6.01
OBYMOMI	6.00
OBYCSQL	5.02
MomiFTP.exe	2.14
CentralServer.exe	1.5
ssMOMI.scr	6.00
MomiEMail.exe	1.10
SendMail.exe	1.01
IPCalc.exe	1.3.3
Oldest client version tested with server	5.80

Clients 5.15 and earlier may fail on connect.

NEW FEATURES / BUGS FIXED

(see MOMI HISTORY.RTF for previous versions)

Common new features (requires current client and server)

*If you are using Client Access, newly added screens in a MOMI release update are not available to users by default. This action may be changed on the screen **Configure / Client Access / Global Settings** by checking the option **New screens enabled by default**. The user that started MOMI, known as the "Default Security User" always has new screens enabled by default.*

Impacts in this version

The Free version of the CAIL emulator is no longer provided with the MOMI client. If the user has the full-function purchased version installed it will continue to work. If the user has any 6530 Emulator programs on their PC that they want to start from within the MOMI client, the **Systems / External** screen will allow a button to be created to start their emulator.

MOMI Software short-cuts, as displayed by the Windows Start menu, now use the format of **BWS MOMI n.nn**. Previously, MOMI software short-cuts were located under **BlackWood Systems**. This change is for compatibility with Windows 10 which does not handle multiple levels within the Start menu.

MOMI Client

New Screens:

- **None**

New Features:

- **Files / File Explorer / OSS**
  - Added right click menu item to allow "View File contents by .EXT". this will downoad the file to the PC then Open the file using the pc defined program for that .ext.

- **SubSystems / Logs / EMS Log**
  - Added a Button in the 'Client Filter' section labeled 'Dups'. This button will filter out any duplicate records. The duplicates mill only filter out if the exactly match(Date/Time,Owner, SubSystem,SSID, and text'. (For Gary B.)

Changes from version 6.11 Build 892

- A screen that is retrieving data per a user request will have the tabs label start with a '*' and have the tab colored light blue.

- When Running as Mini-MOMI the disabled screens now have a tab colored light orange.

- The Client has been changed to display better when the PC is configured to use the 'High-Contrast' setting.

- **SubSystems / Spooler / Jobs**
  - The Clear button now can clear the data without clearing the filters. Right-click will clear the data but leave the filters active Left-click will clear all data and filters (For Gary B.)

- The Search Jobs for text will now only clear the selected jobs when the search popup is closed. This will allow searching the same jobs for different text without having to re-select the jobs.

- When loading the jobs the user may now pause and resume the collection.

- When actions are being done on selected jobs (changing report etc.) the user may now pause and resume the actions.

Bug Fixes:

- When Logging on sometimes the 'Client Access' screen settings were not being honored and screens would display that were not enabled. Fixed.

· When the user did not have read/write/create access to the location for the MOMI.INI file the Client would crash rather than just warn of the problem. Fixed.

· When the File picker was used for a OSS file and the path or filename contained a space it would not always execute properly. Fixed.

· Using the MOMI_INIT.INI to create the initial INI file would not correctly create the MOMI.INI file. Fixed.

· **Systems / File Transfer**
  - When user 'Quit' and closed the FTP connection the 'Host' side data was still displayed. Fixed.

· **Configure / Client / Single Screen / SubSystems / Spooler**
  - Config settings for 'Put on Screen Options' were not being updated on Spooler Job Config screen. Fixed.

Changes from version 6.11 Build 892

· Logic was put in to prevent multiple copies of the MOMI client trying to write to the INI file at the same time. This could cause a crash of one of the clients. Usually at client startup or shutdown. Fixed.

· When a Logon failed the screens allowed by Client Access were not always correctly set to the user **NOT LOGGED ON** user settings. Fixed.

· **Files / File Explorer**
  - If the screen was busy collecting data and a new request (either 'Update' or clicking on new Volume or SubVolume) the client would duplicate records and occasionally hang. Fixed.

· **SubSystems / Logs / EMS Logs**
  - Under some circumstances it was possible to lock-up the client by setting the "message Count" to 0 while data was being retrieved. Fixed.

  - Prefilter would start discarding oldest messages when the incoming record count reached the defined Message count instead of when the number of records that matched the passed the Prefilter and were displayed. Fixed.

  - When jumping from Message detail to the EventBX definition and the record was not found the Owner, SubSystem and Event Nbr were cleared. Fixed.

  - The default Client Filter set in the Configure screen was not used when the clear button was pressed. Fixed.

· **SubSystems / Spooler / Job**
  - If the 'Clear' button was pressed while a list of jobs was being collected some of the jobs would not clear. Fixed.

· **SubSystems / TCP/IP / Process Info**
  SubSystems / TCP/IP / Process Status
  SubSystems / TCP/IP / Process Route

SubSystems / TCP/IP / Process Subnet

- Prevented client timeouts during loading, filters, and mini-reports. Fixed.

- Improved speed when generating a mini-report for a very large number of Sockets.

- Improved speed when loading (with 6.11 server).

Misc. Items:

· For all grids the speed of Filtering has been sped up.

· Changed AutoUpdate logic to work better with screens with large amounts of data.

· The **Print Screen** button (lower right hand corner of the screen) now has a right-click option of **Copy to Clipboard**.

· **Files / Enscribe / View File**

- Improved speed when loading (with 6.11 or later server).

· **SubSystems / Logs / MOMI Log**

- Record detail now includes all available data about record. Previously only Alarms would display all data.

· **Alarms / List / Alarm**

- When Enable or Disable alarm is selected the grid will no longer scroll to the top row.

Known issues:

· The FireFox web browser does not display help correctly if HTML4 is selected. Use HTML5 or another browser instead.

· When using Windows 7 and a 4K monitor and the client is resized to full screen, the down-arrow on a drop box is very small. They do not resize like other items. It works fine with Windows 10.

· When converting from Mini-MOMI to full MOMI it may be necessary to restart the client.

· **Systems / File Transfer / SFTP**

- If file is transferred as a Key-Sequenced structured file sometimes SFTP will think the transfer is successful but the host file is left empty. A check is now done and an error shows if this happened. Note: Sometimes making the **REC LEN** even will succeed. Some failures are caused by unknown factors and seem to be a failure in the SFTP Server on the NonStop.

· **SubSystems / Discovery**

- Feature is still under development and subject to change. Comments and suggestions are invited and welcome.

MOMI Server

New Features:

- **TCP/IP / Process Status** now loads cpu,pin (cc,ppppp) for an unnamed process for a CLIM to replace the single $ of an opener process.

- **TCP/IP / Process Status** now returns for the **State** when unknown 0x0 instead of ?%H (followed by the value of the state in HEX) to more closely match SCF output.

- **TCP/IP / Process Status** for **State** now assigns *ESTAB* for the translation of %h81A2%D.

- ANSI Names are now accepted for the MOMI **Alarm File / Percent full** if the underlying files are Guardian. An ANSI Name must follow the MEASURE syntax and be enclosed in a single quotes (‘).

- OSS operations, such as chmod - create - rename, now optionally accept double-quotes ("") around an entire path name to support embedded spaces.

- The screen **Files / Enscribe / File** field **File Name** now accepts an ANSI name. This allows display of the underlying Guardian Files if present. An ANSI Name must follow the MEASURE syntax and be enclosed in a single quotes ('').

From server 6.11

- Now provides the *Client Version* on the screen **Configure / Server / Client Connections**.

- Alarm Emails now support multiple lines. Previously, an alarm email was limited to two lines and the subject. Multiple lines, with **EMS / User defined alarms**, are as the original EMS message decoded by the O/S for display.

- The Collector or LogFile field in Config of the screen **EMS Msgs** now accepts a wild-card for a LogFile. This allows, for example, the specification of all EMS Log files (any file code except 843 are skipped) within a subvolume (example $DATA1.EMSLOG.ZZEV*). The total number of files are limited to 100 (more may be examined but matches are stored only to the limit).

- Supports more efficient processing for screens:

  Files / Enscribe / View File
  SubSystems / Spooler / Job

Bug Fixes:

- On the screen **Alarms / Define / Alarm** the alarm **EMS / User define** no longer accept a wild card within a collector name. Previously, specifying $* would match any other collector previously defined but it did not define (i.e. add) a collector (and was never intended to do so). The tool-tip for **Entity Name** had already stated that $* was not permitted but it was not enforced.

- A problem was corrected that milliseconds were not initialized in an internal conversion of a 64-bit timestamp to a 48-bit timestamp. 48-bit timestamps are used in the Spooler Subsystem. While the client does not display spooler job times down to this resolution, setting a limit such as start/stop time could result in being off by a job in situations where the milliseconds would matter when comparing timestamps.

From server 6.11

- The option *Limit to partitioned only (Enscribe files)* of the alarm **DiskFile / Percent full** now functions.

Misc. Items:

- On the screen **Alarms / Define / Alarm** both the client and server have updated the tool-tips or hints for the field Entity Name to remove duplicate information, reflect recent enhancements, and better indicate when multiple entries are allowed.

- The following MOMI Alarms now have a default of **Over**. Previously, the default was none and the user had to make a selection:

  Process / Busy percent

  Process / Ready Time Only Percent

  Process / Ready Time percent

From server 6.11

- The default amount of time the main $MOMI process waits CPU collectors to report has been changed to the larger of 60 seconds or 3 times the INTERVAL. Previously, this value was simply 3 times the INTERVAL. On large systems with a small INTERVAL and processes not responding timely to device inquires (i.e. subtype 30 not responding) the previous default might not be sufficient when the MOMI server was started.

- The default number of TCPIP-THREADS was increased to 250 from 150.

- EMS messages no longer have a leading indent starting at line 2. Previously, this was a system default (which is unknown). This change might impact existing **EMS / User defined alarms** where text spanned multiple lines. It is recommended that the length of text phrases placed within **EMS Set** and **EMS Clear** be kept short to help prevent spacing-between-words mismatches.

- TCP/IP processing may be a bit more efficient with certain client messages.

- The default extent sizes have been changed in the MOMI history files. Below is a table of the old and new values:

file	old pri	old sec	old ext	new pri	new sec	new ext
hst01db	35000	35000	60	70000	70000	60

```
hst02db  25000  25000  50  60000 60000   50
hst03db  25000  25000  40  56000 56000   40
hst04db  25000  25000  30  40000 40000   30
```

- Added the advanced CONFMOMI keyword DEVICE-INFO-SENDMSG-TIMEOUT. This keyword alters the amount of time to wait for DEVICE_INFO system calls to complete when a message is sent.

- If the MOMI master measurement file, DCPUS located by default in the same subvolume where the server is installed, remains open after this measurement is stopped, the file is renamed. The names used (newest to oldest) are DCPUS1, DCPUS2, DCPUS3, DCPUS4. The oldest is deleted if present. This action helps insure the MOMI can be started or restarted should MEASURE not close the file.

Known Issues:

- None

MOMIFTP

- None

ssMOMI

- None

MomiEmail

- None

SendMail

- None

IPCalc

- None

****

```
Release Package                 6.11
Release Date (yyyy/mm/dd)       2021/05/25

item                            Version
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Latest O/S tested               G06.32.01 - H06.29.00
                                J06.23.00 - L20.10.00

Client Version          6.11    Build 888
Server Version (VPROC)  6.11    T0000G06___V6_11____2021_05_21

Buffer Version          Client 21.65   Server 21.65
History database        3.10
CONFMOMI                6.01
OBYMOMI                 6.00
OBYCSQL                 5.02
MomiFTP.exe             2.14
CentralServer.exe       1.5
```

ssMOMI.scr	6.00
MomiEMail.exe	1.10
SendMail.exe	1.01
IPCalc.exe	1.3.3

Oldest client version tested with server 5.80

Clients 5.15 and earlier may fail on connect.

NEW FEATURES / BUGS FIXED

(see MOMI HISTORY.RTF for previous versions)

Common new features (requires current client and server)

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MOMI Software short-cuts, as displayed by the Windows Start menu, now use the format of **BWS MOMI n.nn**. Previously, MOMI software short-cuts were located under **BlackWood Systems**. This change is for compatibility with Windows 10 which does not handle multiple levels within the Start menu.

MOMI Client

New Screens:

- **None**

New Features:

- A screen that is retrieving data per a user request will have the tabs label start with a '*' and have the tab colored light blue.
- When Running as Mini-MOMI the disabled screens now have a tab colored light orange.
- The Client has been changed to display better when the PC is configured to use the 'High-Contrast' setting.
- **SubSystems / Spooler / Jobs**
  - The Clear button now can clear the data without clearing the filters.
    Left-click will clear all data and filters
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Bug Fixes:

- Logic was put in to prevent multiple copies of the MOMI client trying to write to the INI file at the same time. This could cause a crash of one of the clients. Usually at client startup or shutdown. Fixed.
- When a Logon failed the screens allowed by Client Access were not always

correctly set to the user **NOT LOGGED ON** user settings. Fixed.

- **Files / File Explorer**
  - If the screen was busy collecting data and a new request (either 'Update' or clicking on new Volume or SubVolume) the client would duplicate records and occasionally hang. Fixed.
- **SubSystems / Logs / EMS Logs**
  - Under some circumstances it was possible to lock-up the client by setting the "message Count" to 0 while data was being retrieved. Fixed.
  - When jumping from Message detail to the EventBX definition and the record was not found the Owner, SubSystem and Event Nbr were cleared. Fixed.
  - The default Client Filter set in the Configure screen was not used when the clear button was pressed. Fixed.
- **SubSystems / TCP/IP / Process Info**
  SubSystems / TCP/IP / Process Status
  SubSystems / TCP/IP / Process Route
  SubSystems / TCP/IP / Process Subnet
  - Prevented client timeouts during loading, filters, and mini-reports. Fixed.
  - Improved speed when generating a mini-report for a very large number of Sockets.
  - Improved speed when loading (with 6.11 server).

Misc. Items:

- For all grids the speed of Filtering has been sped up.
- Changed AutoUpdate logic to work better with screens with large amounts of data.
- 'Print Screen' button now has a right-click to 'Copy to Clipboard'.
- **Files / Enscribe / View File**
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- **SubSystems / Logs / MOMI Log**
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  - If file is transferred as a Key-Sequenced structured file sometimes SFTP will think the transfer is successful but the host file is left empty. A check is now done and an error shows if this happened. Note: Sometimes making the **REC LEN** even will succeed. Some failures are caused by unknown factors and seem to be a failure in the SFTP Server on the NonStop.
- **SubSystems / Discovery**
  - Feature is still under development and subject to change.

Comments and suggestions are invited and welcome.

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New Features:

- Now provides the *Client Version* on the screen **Configure / Server / Client Connections**.

- Alarm Emails now support multiple lines. Previously, an alarm email was limited to two lines and the subject. Multiple lines, with **EMS / User defined alarms**, are as the original EMS message decoded by the O/S for display.

- The Collector or LogFile field in Config of the screen EMS Msgs now accepts a wild-card for a LogFile. This allows, for example, the specification of all EMS Log files (any except file code 843 are skipped) within a subvolume (example $DATA1.EMSLOG.ZZEV*). The total number of files are limited to 100 (more may be examined but matches are stored only to the limit).

- Supports more efficient processing for screens:

```
Files     / Enscribe / View File
SubSystems / Spooler  / Job
```

Bug Fixes:

- The option *Limit to partitioned only (Enscribe files)* of the alarm **DiskFile / Percent full** now functions.

Misc. Items:

- The default amount of time the main $MOMI process waits CPU collectors to report has been changed to the larger of 60 seconds or 3 times the INTERVAL. Previously, this value was simply 3 times the INTERVAL. On large systems with a small INTERVAL and processes not responding timely to device inquires (i.e. subtype 30 not responding) the previous default might not be sufficient when the MOMI server was started.

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```
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hst04db  25000  25000  30  40000 40000   30
```

- Added the advanced CONFMOMI keyword DEVICE-INFO-SENDMSG-TIMEOUT. This keyword alters the amount of time to wait for DEVICE_INFO system calls to complete when a message is sent.

- If the MOMI master measurement file, DCPUS located by default in the same subvolume where the server is installed, remains open after this measurement is stopped, the file is renamed. The names used (newest to oldest) are DCPUS1, DCPUS2, DCPUS3, DCPUS4. The oldest is deleted if present. This action helps insure the MOMI can be started or restarted should MEASURE not close the file.

Known Issues:

- None

CNF01DB Upgrade Note:

Server version 6.07 and later performs a one-time conversion, transparently to the user, of the Event Number in EventBX records so that negative values access numerically in order.

If you do not have any EventBX records defined, which are found in the client under **SubSystems / Logs / EMS EventBX**, there is no concern nor action needed.

When the server is started and if version 1 EventBX records are present they are converted to the version 2. If no EventBX records are present, no conversion occurs. During conversion the MOMI server operates normally other than EventBX data may not be immediately available, depending on the amount of data (processing should be quick perhaps taking a couple minutes). Two messages are recorded in the MOMI Log, one if a conversion is initiated and another at completion. If the server is stopped prior to conversion completion, at server restart the conversion restarts. EventBX records should not be added or changed during conversion as they may be over-written. Once the conversion is complete, subsequent server restarts or upgrades do not repeat the conversion.

Note that server fallback to version 6.06 or earlier will not see any converted EventBX data. It is recommended to make a copy using FUP DUP of CNF01DB prior to running a new version of the server.

MOMIFTP

- None

ssMOMI

- None

MomiEmail

- None

SendMail

- None

IPCalc

- None

****

Release Package	6.10
Release Date (yyyy/mm/dd)	2020/12/17

item	Version
Latest O/S tested	G06.32.01 - H06.29.00 J06.23.00 - L20.05.00
Client Version	6.10 Build 880
Server Version (VPROC)	6.10 T0000G06___V6_10____2020_12_17
Buffer Version	Client 21.64 Server 21.64
History database	3.10
CONFMOMI	6.01
OBYMOMI	6.00
OBYCSQL	5.02
MomiFTP.exe	2.14
CentralServer.exe	1.5
ssMOMI.scr	6.00
MomiEMail.exe	1.10
SendMail.exe	1.01
IPCalc.exe	1.3.3
Oldest client version tested with server	5.80

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Windows 10 which does not handle multiple levels within the Start menu.

MOMI Client

New Screens:

- **None**

New Features:

- **SubSystems / Spooler / Jobs**
  - The Clear button now has the ability to clear the data without clearing the filters.
    Left-click will clear all data and filters
    Right-click will clear the data but leave the filters active

Bug Fixes:

- A logoff didn't always reset the screens available to the 'NOT LOGGED ON' user. Bug introduced in version 6.08. Fixed.
- When a Logon failed the screens allowed by Client Access were not always correctly set to the user 'NOT LOGGED ON' user settings. Fixed.
- **Processes / All Processes**
  - When searching the process tree for the family tree of a process name the tree returned was the first process name that contained the wanted name not the entire name. Fixed.
- **SubSystems / Logs / EMS Logs**
  - When jumping from Message detail to the EventBX definition and the record was not found the Owner, SubSystem and Event Nbr were cleared. Fixed.
  - The default Client Filter set in the Configure screen was not used when the clear button was pressed. Fixed.
- **SubSystems / Expand**
  - All Expands screens were not correctly cleared and reloaded when the MOMI Server was stopped and restarted. Fixed.
- **SubSystems / Expand / Diagram**
  - Under some circumstances when a user changed the Logged on state of the client the diagram would not re-display. Fixed.
- **Alarms / Active**
  - When the 'Temporarily Turn OFF/ON Alarm' was being displayed it would disappear sometimes before the user had a chance to select it. Fixed.
- **Configure / Define Systems**
  - Under some rare circumstances it was possible to creash the client while adding a new system. Fixed.
- **Configure / Client Access / User Define / SubSystems / Expand**
  - Some of the checkboxes text was not displaying correctly. Fixed.

Misc. Items:

- Number and names of printers now included on System Info file.
- **Configure / Client Access / User Define**
  - If a user is part of a group the settings will be TEAL color to signify the settings are a group-level setting, just like ORANGE signifies a 'Default Security User' setting.

Known issues:

- The FireFox web browser does not display help correctly if HTML4 is selected. Use HTML5 or another browser instead.

- When using Windows 7 and a 4K monitor and the client is resized to full screen, the down-arrow on a drop box is very small. They do not resize like other items. It works fine with Windows 10.
- When converting from Mini-MOMI to full MOMI it may be necessary to restart the client.
- **Systems / File Transfer / SFTP**
  - If file is transferred as a Key-Sequenced structured file sometimes SFTP will think the transfer is successful but the host file is left empty. A check is now done and an error shows if this happened. Note: Sometimes making the **REC LEN** even will succeed. Some failures are caused by unknown factors and seem to be a failure in the SFTP Server on the NonStop.
- **SubSystems / Discovery**
  - Feature is still under development and subject to change. Comments and suggestions are invited and welcome.

MOMI Server

New Features:

- Server now accepts a CPU,PIN for the **History / Chart** element **Process**.

- The BWSSG server is no longer required if MOMI operates under any other User ID except Super.Super. Now, BWSSG is only used if present and an operation requiring Super.group authority is performed, such as PING.

Bug Fixes:

- A problem was corrected that prevented the alarm **Expand / Line quality** from operating correctly.

Misc. Items:

- Failure messages relating to BWSSG now contain the actual MOMI executable file name invoked. Previously, the message always referenced BWSSG which may or may not be present.

Known Issues:

- None

CNF01DB Upgrade Note:

Server version 6.07 and later performs a one-time conversion, transparently to the user, of the Event Number in EventBX records so that negative values access numerically in order.

If you do not have any EventBX records defined, which are found in the client under **SubSystems / Logs / EMS EventBX**, there is no concern nor action needed.

When the server is started and if version 1 EventBX records are present they are converted to the version 2. If no EventBX records are present, no conversion occurs. During conversion the MOMI server operates normally other than EventBX data may not be immediately available, depending on the amount of data (processing should be quick perhaps taking a couple minutes). Two messages are recorded in the MOMI Log, one if a conversion is initiated and another at completion. If the server is stopped prior to conversion completion, at server restart the conversion restarts. EventBX records should not be added or changed

during conversion as they may be over-written. Once the conversion is complete, subsequent server restarts or upgrades do not repeat the conversion.

Note that server fallback to version 6.06 or earlier will not see any converted EventBX data. It is recommended to make a copy using FUP DUP of CNF01DB prior to running a new version of the server.

MOMIFTP

- None

ssMOMI

- None

MomiEmail

- None

SendMail

- None

IPCalc

- None

****

Release Package 6.09
Release Date (yyyy/mm/dd) 2020/11/14

item	Version
Latest O/S tested	G06.32.01 - H06.29.00 J06.23.00 - L20.05.00
Client Version	6.09 Build 878
Server Version (VPROC)	6.09 T0000G06___V6_09____2020_11_14
Buffer Version	Client 21.63 Server 21.63
History database	3.10
CONFMOMI	6.01
OBYMOMI	6.00
OBYCSQL	5.02
MomiFTP.exe	2.14
CentralServer.exe	1.5
ssMOMI.scr	6.00
MomiEMail.exe	1.10
SendMail.exe	1.01
IPCalc.exe	1.3.3
Oldest client version tested with server	5.80

Clients 5.15 and earlier may fail on connect.

NEW FEATURES / BUGS FIXED

(see MOMI HISTORY.RTF for previous versions)

Common new features (requires current client and server)

*If you are using Client Access, newly added screens in a MOMI release update are not available to users by default. This action may be changed on the screen **Configure / Client Access / Global Settings** by checking the option **New screens enabled by default**. The user that started MOMI, known as the "Default Security User" always has new screens enabled by default.*

Impacts in this version

The Free version of the CAIL emulator is no longer provided with the MOMI client. If the user has the full-function purchased version installed it will continue to work. If the user has any 6530 Emulator programs on their PC that they want to start from within the MOMI client, the **Systems / External** screen will allow a button to be created to start their emulator.

MOMI Software short-cuts, as displayed by the Windows Start menu, now use the format of **BWS MOMI n.nn**. Previously, MOMI software short-cuts were located under **BlackWood Systems**. This change is for compatibility with Windows 10 which does not handle multiple levels within the Start menu.

MOMI Client

New Screens:

- **None**

New Features:

- **Configure / Client / Single Screen / SubSystems / Expand**
  - Now allows user to set the size of the Arrow on the end of the Expand Diagram Path/Lines connectors. Default is still a large arrowhead but a small arrowhead and no arrowhead is available. (For Jeff B.)

Bug Fixes:

- Sometimes on Client startup or while doing an EMS filter the program would crash because it was unable to open the clipboard. In these cases the clipboard was being used to temporarily store an image to speed up either the startup or the filtering. The clipboard is no longer used to perform this speedup, another method was used instead. Fixed.
- If a system had a large number of Spooler Collectors (300+) the client would take a longer than necessary to startup. Fixed.
- **Configure / Client / Client Access / User Define**
  - If the server had a 'DEFAULT-SECURITY-USER' set with a wildcard the Client would not always allow making changes when logged on as a user within that group. Fixed.

Misc. Items:

- **None**

Known issues:

- The FireFox web browser does not display help correctly if HTML4 is selected. Use HTML5 or another browser instead.
- When using Windows 7 and a 4K monitor and the client is resized to full screen, the down-arrow on a drop box is very small. They do not resize like other items. It works fine with Windows 10.
- When converting from Mini-MOMI to full MOMI it may be necessary to

restart the client.

- **Systems / File Transfer / SFTP**
  - If file is transferred as a Key-Sequenced structured file sometimes SFTP will think the transfer is successful but the host file is left empty. A check is now done and an error shows if this happened. Note: Sometimes making the **REC LEN** even will succeed. Some failures are caused by unknown factors and seem to be a failure in the SFTP Server on the NonStop.
- **SubSystems / Discovery**
  - Feature is still under development and subject to change. Comments and suggestions are invited and welcome.

MOMI Server

New Features:

- None

Bug Fixes:

- None

Misc. Items:

- Improved performance for screen **Processes / All Processes.**

Known Issues:

- None

CNF01DB Upgrade Note:

Server version 6.07 and later performs a one-time conversion, transparently to the user, of the Event Number in EventBX records so that negative values access numerically in order.

If you do not have any EventBX records defined, which are found in the client under **SubSystems / Logs / EMS EventBX**, there is no concern nor action needed.

When the server is started and if version 1 EventBX records are present they are converted to the version 2. If no EventBX records are present, no conversion occurs. During conversion the MOMI server operates normally other than EventBX data may not be immediately available, depending on the amount of data (processing should be quick perhaps taking a couple minutes). Two messages are recorded in the MOMI Log, one if a conversion is initiated and another at completion. If the server is stopped prior to conversion completion, at server restart the conversion restarts. EventBX records should not be added or changed during conversion as they may be over-written. Once the conversion is complete, subsequent server restarts or upgrades do not repeat the conversion.

Note that server fallback to version 6.06 or earlier will not see any converted EventBX data. It is recommended to make a copy using FUP DUP of CNF01DB prior to running a new version of the server.

MOMIFTP

- None

ssMOMI
- None

MomiEmail
- None

SendMail
- None

IPCalc
- None

****

Release Package 6.08
Release Date (yyyy/mm/dd) 2020/10/27

item	Version
Latest O/S tested	G06.32.01 - H06.29.00 J06.23.00 - L20.05.00
Client Version	6.08 Build 876
Server Version (VPROC)	6.08b T0000G06___V6_08b___2020_07_20
Buffer Version	Client 21.62 Server 21.62
History database	3.10
CONFMOMI	6.01
OBYMOMI	5.02
OBYCSQL	5.02
MomiFTP.exe	2.14
ssMOMI.scr	6.00
MomiEMail.exe	1.10
SendMail.exe	1.01
IPCalc.exe	1.3.3
Oldest client version tested with server	5.80

Clients 5.15 and earlier may fail on connect.

NEW FEATURES / BUGS FIXED

(see MOMI HISTORY.RTF for previous versions)

Common new features (requires current client and server)

*If you are using Client Access, newly added screens in a MOMI release update are not available to users by default. This action may be changed on the screen **Configure / Client Access / Global Settings** by checking the option **New screens enabled by default**. The user that started MOMI, known as the "Default Security User" always has new screens enabled by default.*

Impacts in this version

The Free version of the CAIL emulator is no longer provided with the MOMI client. If the user has the full-function purchased version installed it will continue to work. If the user has any 6530 Emulator programs on their PC that they want to start from within the MOMI client, the **Systems / External** screen will allow a button to be created to start their emulator.

MOMI Software short-cuts, as displayed by the Windows Start menu, now use the format of **BWS MOMI n.nn**. Previously, MOMI software short-cuts were located under **BlackWood Systems**. This change is for compatibility with Windows 10 which does not handle multiple levels within the Start menu.

MOMI Client

New Screens:

- **None**

New Features:

- On screens that have a popup mini-report(Spoolers, Spooler Job, and TCP/IP Status) if the mini-report is displayed and either the "Request" button is pressed or an "Auto-update" occurs the mini-report will now update just like the main screen.
- The "Alter IPU affinity" feature is now enhanced to show the current process name, IPU and affinity before asking the user to make any change.
- **Files / Enscribe / Files**
  - If the user right-clicks on the 'Logical Filename' (by default the last column) of a SMF file the file can be managed as if it was not SMF (i.e. purged etc). (For Tom S.)
- **SubSystems / Logs / EMS Log**
  - Some Mini-Reports can now have items clicked on that will temporarily filter the EMS log grid to show only those items. Then by pressing the 'Mini-Reports' button(now renamed 'Revert-Mini') again will revert to the previous filter and reshow the mini-report. (for Gary B.)
  - Import and Export now allow wildcards for the Owner and the SubSystem. (For Tom S.)
- **SubSystems / Spooler / Jobs**
  - Now if the "Search Jobs" feature is used and then the user clicked the found job number to view the job, the list of jobs available to view will be the list of job found to contain the search text not like previously when it was a list of all jobs that had been searched. If the search has not completed there will not be a list available on the view job screen. Also the list is now positioned on the screen in a location that should not hide much of the job. (for Tom S.)
- **Alarms / List / Import**
  - Import may now be directed to delete all current records first then import the selected records.
- **Configure / Client / General**
  - Added new option to "Retain Connection and Logon state during system change". This option will keep the socket connection up and running for the current system when the user changes to another system. If the user was previously logged On for this system it will still be logged on. This in effect allows "AutoLogon" on a system with a single-use password.
    Note: The "Auto Logon with change System" setting is now only used

when dealing with an older Server version 5.xx.

Bug Fixes:

- Sometime if the user had several MOMI clients running then Logged-off or shut them all down at the same time the client as it shutdown would get errors on updating the MOMI.INI file when it saved the client location and would crash causing a MOMI.LOG crash file. Fixed.
- Under some connection failure circumstances the Client Diagnostics message "Client ReConnected to Server" would not contain the address and port of the socket, Fixed.
- **Systems / Probes**
  - When the client changed systems and the old system was being probed, the probe socket was mistakenly closed only to reopen the next update. Fixed.
- **Systems / Probes / Base and Systems / Probes / Alarm Stats**
  - When no systems were selected for probing the systems details were still displayed. Fixed.
- **Systems / File Transfer**
  - Under some conditions it was impossible to enter a new 'Host Name/Address' or 'Momi Server' that was not already in the dropdown list. Fixed.
  - When changing NSK directories, under some conditions it was possible for the files displayed to be displayed twice. Fixed.
- **Files / Enscribe / Volumes**
  - If scroll wheel was used to scroll the grid the client would crash. Fixed.
- **Processes / All Processes**
  - If a user requested an All Process list then changed systems before the results were returned the List would still be populated from the request on the previous system. Fixed.
- **SubSystems / Logs / EMS Log**
  - When in 'Lightning mode' the right-click of the config button did not display the collector's status. Fixed.
  - When in 'Lightning mode' it was possible the 'Lightning mode' was exited before all collectors had finished looking. Fixed.
  - While in 'Lightning mode' if the user went back into config then hit the 'Request with new options' button the display would not change from 'Lightning' mode into the normal display. Fixed.
  - Filter by Color would not filter new incoming records. Fixed.
  - Filter by Color was inconsistent when clicking on color button and right-clicking on color button. This sometimes cause result that were not expected. Fixed.
  - Under some circumstances and timing if a EMS request was in progress and the 'Clear' button was pressed a single EMS message would display. Fixed.
  - The detail would not always display the EventBX record. Fixed.
  - Under some circumstances a "C/E/R" EventTX record would display from a previous display. Fixed.
  - When 'Reverse scrolling' was enabled and a find was performed, the grid did not scroll the grid so the 'found' record would be on the screen. Fixed.
  - Mini report for severity count was off by 1 (always had one extra Info rec). Fixed.
  - In the EMS Message Detail the EventBX record would not always display. Fixed.

- When loading a lot of EMS messages and the user would "pause" the loading, the time in the top-right corner of the client would drift only to reset to correct time when the loading was resumed. Fixed.
- The Default Scroll Speed value set in 'Configure/Client/Single Screen/Logs/Ems Logs' was not being used first time into the EMS Log screen. Fixed.
- If multiple collecters were being used and the user changed from scroll speed less that fastest to fastest speed the client might timeout. Fixed.

· **SubSystems / Logs / EventBX / List-Import-Export**
- Negative event numbers would cause the search to fail. Fixed.
- After no more records were found using Next if the Prev was used it would skip the last record and give the next to last. The same would occur using the Previous then the Next. Fixed.
- If an EventBX record had been deleted then a search was performed and the deleted record is selected in the 'Skipped because of Errors' list the client would crash. Fixed.

· **SubSystems / Spooler / Jobs**
- Drop down box for Location now displays the same data on the main screen (along the bottom) as on Config. Fixed.
- Errors returned from the Server were not always shown on the screen. Fixed.

· **Alarms / List / Import**
- The import did not automatically import elements required for an imported alarm. Fixed.

· **Configure / Client / Actions**
- If 'Version Checking Actions' were checked and the Readme file was empty or connection to the file was lost the client would crash when the version check was performed. Fixed.

· **Configure / Define Sysems**
- When Client was first started with no MOMI.INI file yet created, once the 1st system was entered the client would not connected until it was restarted. Bug introduced in 6.07. Fixed.

Misc. Items:

· Now when the Client is first started all keyboard and mouse activity is discarded until the client is fully operational.

· The NonStop runtime param 'DEFAULT-SECURITY-USER' now can contain wildcards (i.e. $ and ?).

· If the Monitor size is less than 1024x758, the client will automatically set the configuration setting to allow smaller client size and start the client maximized for the small screen.

· If a user was logged on to the client, then attempted another logon that failed the client would log the user off. Now it will remain logged on as the original user.

· Several more grids now allow scrolling using the mouse wheel.

· **SubSystems / Logs / EMS Log**
- Under some circumstances the socket would timeout if a lot of ems messages were being recieved and the ems display was running at full speed or in lighting mode. Fixed.

· **Alarms / Define / Export and**
Alarms / Define / Import
- have been moved to Alarms / List tab.
- Virtual disks are now colored to show they are virtual.

· **SubSystems / Spooler / Job**

- The display for 'Age of Job' selection has been changed to show the current settings plus a button to convert to All. To change selection, press the **Config** button.

- **Configure / Server / Server Info**
  - Added support for the new NonStop runtime param 'TCPIP-TCP-NODELAY'.
- **Configure / Client / Actions**
  - Added activity display when deleting all EventBX records.
- **Configure / Client Access / User Define / Alarms**
  - Since the Export and Import has been moved from 'Display Alarm' to 'Display List', the old check state on 'Display Define - Create/Update Items' no longer sets Export/Import. To enable Export/Import the 'Export/Import Items' must be checked.

Known issues:

- The FireFox web browser does not display help correctly if HTML4 is selected. Use HTML5 or another browser instead.
- When using Windows 7 and a 4K monitor and the client is resized to full screen, the down-arrow on a drop box is very small. They do not resize like other items. It works fine with Windows 10.
- When converting from Mini-MOMI to full MOMI it may be necessary to restart the client.
- **Systems / File Transfer / SFTP**
  - If file is transferred as a Key-Sequenced structured file sometimes SFTP will think the transfer is successful but the host file is left empty. A check is now done and an error shows if this happened. Note: Sometimes making the **REC LEN** even will succeed. Some failures are caused by unknown factors and seem to be a failure in the SFTP Server on the NonStop.
- **SubSystems / Discovery**
  - Feature is still under development and subject to change. Comments and suggestions are invited and welcome.

MOMI Server

New Features:

- Scanning of spooler jobs across multiple spooler supervisors has been restructured and improves performance. From the 6.07 version of the server.

- A message is now generated in the MOMI Log if the amount of time to process an alarm, where an interval is specified, exceeds the interval. This situation may indicate the probing interval is too frequent. From the 6.07 version of the server.

- The alarm DiskFile / Subvolume file count may now specify if the count should include open / closed or open-closed file. The default is open-closed which is how the alarm previously operated. From the 6.08a version of the server.

Bug Fixes:

- Scanning of spooler jobs across multiple spooler supervisors now always resets the job number. Previously, it was possible some jobs in subsequent supervisor may have been skipped. From the 6.07 version of the server.

- The reading of information from CNF01DB corrects a problem where reading forward could return data from a partial collection of disk records but

reading backward correctly returns the complete record. Several other unlikely situations were also corrected. This problem was introduced in the 6.04 client. From the 6.07 version of the server.

- The server no longer stops an existing logon server when the MOMI client version 6.00 through 6.06 issues a command to release context. This resulted in the inability to logon to a User ID with the requirement from CMON / Safeguard that it may only be accessed by another User ID first. For example, if access to Super.Super first required logon to Tech.* access would never work. From the 6.07b version of the server.

- The alarm DiskFile / Subvolume now functions. From the 6.08a version of the server.

Misc. Items:

- Server adjustments to system time now pass the TUID parameter to SETSYSTEMCLOCK to help prevent an adjustment if another adjustment is made outside of MOMI. From the 6.07 version of the server.

- The error text displayed if a delete is attempted on a purple alarm (i.e. 'really red') now better indicates a configuration error was detected and the alarm cannot be deleted. From the 6.07 version of the server.

- Several performance improvements when reading data from CNF01DB. From the 6.07 version of the server.

- Additional checks were added to help ensure that Spooler job time-open and time-closed are within a specified limit. Note that the spooler uses 48-bit timestamps with a .01 second resolution which may have a fraction of a second value present but not displayed. From the 6.07 version of the server.

- Additional error conditions are now displayed when dealing with the Spooler. Also, a failure to open a Spooler Supervisor now stops processing where previously the Supervisor was skipped. From the 6.07a version of the server.

- The server now performs an update to EventBX data so that the Event Number now considers a negative value and sorts numerically. See the CNF01DB Upgrade Note below. From the 6.07a version of the server.

- The MOMI Log now shows the file system error when a client disconnects. From the 6.08a version of the server.

- At the TCP/IP level the server no longer issues a socket option to delay sending data. A CONFMOMI keyword TCPIP-TCP-NODELAY is now available to specifically control this action. From the 6.08a version of the server.

- Additional information is now logged to the MOMI Log if invalid data is received on the TCP/IP connection. Previously, some error conditions were correctly dropped but did not log the reason.

Known Issues:

- None

CNF01DB Upgrade Note:

Server version 6.07 and later performs a one-time conversion, transparently to the user, of the Event Number in EventBX records so that negative values access numerically in order.

If you do not have any EventBX records defined, which are found in the client under **SubSystems / Logs / EMS EventBX**, there is no concern nor action needed.

When the server is started and if version 1 EventBX records are present they are converted to the version 2. If no EventBX records are present, no conversion occurs. During conversion the MOMI server operates normally other than EventBX data may not be immediately available, depending on the amount of data (processing should be quick perhaps taking a couple minutes). Two messages are recorded in the MOMI Log, one if a conversion is initiated and another at completion. If the server is stopped prior to conversion completion, at server restart the conversion restarts. EventBX records should not be added or changed during conversion as they may be over-written. Once the conversion is complete, subsequent server restarts or upgrades do not repeat the conversion.

Note that server fallback to version 6.06 or earlier will not see any converted EventBX data. It is recommended to make a copy using FUP DUP of CNF01DB prior to running a new version of the server.

MOMIFTP
- None

ssMOMI
- None

MomiEmail
- None

SendMail
- None

IPCalc
- None

****

Release Packege	6.06
Release Date (yyyy/mm/dd)	2020/01/14

item	Version
Latest O/S tested	G06.32.01 - H06.29.00 J06.23.00 - L19.08.00

Client Version	6.06 Build 852
Server Version (VPROC)	6.06 T0000G06___V6_06____2020_01_09
Buffer Version	Client 21.60 Server 21.60
History database	3.10
CONFMOMI	6.01
OBYMOMI	5.02
OBYCSQL	5.02
MomiFTP.exe	2.14
ssMOMI.scr	6.00
MomiEMail.exe	1.10
SendMail.exe	1.01
IPCalc.exe	1.3.3
Oldest client version tested with server	5.80

Clients 5.15 and earlier may fail on connect.

NEW FEATURES / BUGS FIXED

(see MOMI HISTORY.RTF for previous versions)

Common new features (requires current client and server)

*If you are using Client Access, newly added screens in a MOMI release update are not available to users by default. This action may be changed on the screen **Configure / Client Access / Global Settings** by checking the option **New screens enabled by default**. The user that started MOMI, known as the "Default Security User" always has new screens enabled by default.*

Impacts in this version

The Free version of the CAIL emulator is no longer provided with the MOMI client. If the user has the full-function purchased version installed it will continue to work. If the user has any 6530 Emulator programs on their PC that they want to start from within the MOMI client, the **Systems / External** screen will allow a button to be created to start their emulator.

MOMI Software short-cuts, as displayed by the Windows Start menu, now use the format of **BWS MOMI n.nn**. Previously, MOMI software short-cuts were located under **BlackWood Systems**. This change is for compatibility with Windows 10 which does not handle multiple levels within the Start menu.

MOMI Client

New Screens:

- **None**

New Features:

- **SubSystems / Logs / EMS EventBX / List-Import-Export**
  - List Search now contains button to load results of search into clipboard. (For Tom S.)
  - Import and Export now allow wildcards for the Owner and the SubSystem. (For Tom S.)
- **SubSystems / Spooler / Spooler**
  - Added 24 new columns of data and added a mini-report on the Job right-click action menu.

- **SubSystems / Spooler / Jobs**
  - Added Config button to allow setting selection criteria and let user decide what selection criteria are displayed on the screen.
  - Added ability to select jobs based on age (either setting a date/time or setting the number of days and hours since the job was opened or closed) (For Tom S.)
  - Added Column(Collector%) to show what percent of a collector is consumed by the job. (For Gary B.)
  - Added Mini-Report to show what percent of a collector is consumed by all displayed jobs. (For Gary B.)
- **History / Process and**
- **History / CPU Detail**
  - Added Right-click popup if on Process name column to allow copy to clipboard and Jump to Chart.
- **Configure / Client / Single Screen / SubSystems / Spooler / Spooler:Jobs**
  - Added ability to set defaults for the Config items.

Bug Fixes:

- **Systems / File Transfer**
  - 'More...' button would not display and allow file attributes to be set. Fixed.
- **SubSystems / Logs / EMS EventBX / List-Import-Export**
  - Search 'Search EventBX' button did not reset old stats and 'pause' button when a new search was started. Fixed.
- **SubSystems / Logs / LogViewer**
  - When client started with the client resized larger than the default the screen would not resize correctly. Fixed.

Misc. Items:

- On all grids the filtering has been improved. Now 2nd and subsequent column filters will only filter rows that were not previously filtered out causing much faster filtering. Also the filter is now always performed in the order they were set by the user instead of always starting at the 1st column with a filter then moving to next filter column etc.
- On Screens with an 'AutoUpdate' checkbox the AutoUpdate will not start if the Grid is Sorting/Filtering or if the 'Sort/Filter' popup is displayed.
- **Files / File Explorer / NSK**
  - Virtual disks are now colored to show they are virtual.
- **Alarms / Define / Alarm**
  - 'Entity Name' Button to select entities has been replaced with the standard 'Disk File' and '$Process Name' locate buttons.
- **Configure / Client / Single Screen / SubSystems / Logs / EMS**
  - Default value for new Client 'EMS Auto-Request at startup' changed from checked to not checked.

Known issues:

- The FireFox web browser does not display help correctly if HTML4 is selected. Use HTML5 or another browser instead.
- When using Windows 7 and a 4K monitor and the client is resized to full screen, the down-arrow on a drop box is very small. They do not resize like other items. It works fine with Windows 10.
- When converting from Mini-MOMI to full MOMI it may be necessary to

restart the client.

- **Systems / File Transfer / SFTP**
  - If file is transferred as a Key-Sequenced structured file sometimes SFTP will think the transfer is successful but the host file is left empty. A check is now done and an error shows if this happened. Note: Sometimes making the **REC LEN** even will succeed. Some failures are caused by unknown factors and seem to be a failure in the SFTP Server on the NonStop.
- **SubSystems / Discovery**
  - Feature is still under development and subject to change. Comments and suggestions are invited and welcome.

MOMI Server

New Features:

- Server now supports for **Spooler / Job** new job time limits, space available in the job's collector and NetBatch process name.

- Server processing was substantially restructured to reduce processing in most cases relating to **SubSystems / Spooler** screens.

Bug Fixes:

- Corrected bug affecting **Spooler / Job** processing where a buffer of "asd3" would match "*4" if the buffer contained a "4" just past its length.

- Corrected several problems, that could result in erroneous Expand path/line down errors, if a path or line is deleted and responses from SPI queries indicate the same number of entries and contain blanks where the path or line previously resided.

- Corrected a potential problem where the conversion of an old format file name could fail with an error 563 (buffer too small) if during processing more name space was required that what was passed.

- Corrected a problem with User authentication that resulted a MOMI server crash if operated on H06.25 / J06.14 or earlier.

Misc. Items:

- Expand Paths and Lines are now assigned a logical device name of $ldev (where ldev is numeric) if $name is not available. Previously, in this situation the device name field was either blank or a single $.

- The processing of alarms where an interval is specified now uses no-wait access to disk/file names. Previously, this I/O was waited and large numbers of items could prevent external I/O, such as sending an email, from completing until all of the entities specified in the alarm were examined.

- Alarms for Expand / Path & Line now indicate to the client that multiple Entity Names are permitted. This signals to the client that a picker should be available to help in entity selection.

Known Issues:

- None

MOMIFTP

- None

ssMOMI

- None

MomiEmail

- None

SendMail

- None

IPCalc

- None

****

Release Package	6.05
Release Date (yyyy/mm/dd)	2019/10/29

item	Version
Latest O/S tested	G06.32.01 - H06.29.00 J06.23.00 - L19.03.00
Client Version	6.05
Server Version (VPROC)	6.05 T0000G06___V6_05____2019_10_21
Buffer Version	Client 21.59 Server 21.59
History database	3.10
CONFMOMI	6.01
OBYMOMI	5.02
OBYCSQL	5.02
MomiFTP.exe	2.14
ssMOMI.scr	6.00
MomiEMail.exe	1.10
SendMail.exe	1.01
IPCalc.exe	1.3.3
Oldest client version tested with server	5.80

Clients 5.15 and earlier may fail on connect.

NEW FEATURES / BUGS FIXED

(see MOMI HISTORY.RTF for previous versions)

Common new features (requires current client and server)

*If you are using Client Access, newly added screens in a MOMI release update are not available to users by default. This action may be changed on the screen **Configure / Client Access / Global Settings** by checking the option **New screens enabled by default**. The user that started MOMI, known as the "Default Security User" always has new screens enabled by default.*

Impacts in this version

The Free version of the CAIL emulator is no longer provided with the MOMI client. If the user has the full-function purchased version installed it will continue to work. If the user has any 6530 Emulator programs on their PC that they want to start from within the MOMI client, the **Systems / External** screen will allow a button to be created to start their emulator.

MOMI Software short-cuts, as displayed by the Windows Start menu, now use the format of **BWS MOMI n.nn**. Previously, MOMI software short-cuts were located under **BlackWood Systems**. This change is for compatibility with Windows 10 which does not handle multiple levels within the Start menu.

MOMI Client

New Screens:

- **None**

New Features:

- **Files / Enscribe / File**
  - Right-Click on filename added to copy all selected file names into Clipboard. (for Bill B.)
- **Files / File Explorer / OSS**
  - Current path at top of Grid now is editable and can go directly to the entered location. If the location is invalid it will back up the path until it gets a valid path. (for Tom S.)
  - Added **Refresh** button to the current path location so if files are being created or deleted the user can get the new list without starting over at the root. (for Bill B. and Tom S.)
- **SubSystems / logs / EMS logs**
  - Added new feature "Lightning Mode" to perform a much faster load of the EMS messages. If the EMS Msgs screen is busy loading records and the "Lightning Bolt" button is pressed the EMS Msgs screen will be replaced with a "Lightning Mode" screen showing progress. Once the screen is caught up it will switch back into the normal EMS Msgs screen. No messages are lost switching into or out of "Lightning Mode". (For Tom S.)
  - Config now has a "Lightning Mode" button. (For Tom S.)
- **SubSystems / Logs / EventBX / List-Import-Export**
  - Added new feature to List Section allowing the user to search thru all EventBX records and locate the wanted text and then click on found list and jump directly to edit them. (For Tom S.)
- **SubSystems / Spooler / Jobs**
  - On columns that are a String-type filter you may now right-click and set a filter to include/exclude rows where that column data is the data in the selected cell. (for Tom S.)

- A location may now use Regular expression wildcards (*,?,[xyz],[x-x]) to limit the returned jobs. (for Tom S.)

- **History**
  - On any screen that the user can select the history database to use the user can now click on the interval wanted to set the drop box below.
- **Alarms / Define / Action**
  - Added ability to define which EMS Collector is sent the action message (For Diana K.)
- **Alarms / List / Alarm**
  - Added check column to allow enable/disable of multiple alarms at one time. (for Bill B.)
- **Configure / Client / General**
  - Ability to resize client down to 800x600 that was removed in 6.02 has been put back in with the ability now changed to 'Eliminate Minimum Client size'. This allows the client to resize as small as the user wants but making the screen less than 1024x768 can result in screen anomalies that might make the screen unusable. (for Tom S.)

Bug Fixes:

- **SubSystems / logs / EMS logs**
  - EMS Detail screen eliminated duplicate spaces due to HTML encoding. This could result in the copy to clipboard text not always matching actual record data. Fixed.
- **SubSystems / logs / EMS EventBX**
  - Saving a record when client was resized resulting in incorrect EventBX font sizes. Fixed.
- **SubSystems / Spooler / Jobs**
  SubSystems / Spooler / View Job
  - Multiple Job View logic sped up and selected list hidden logic corrected to prevent popup disappearing. Fixed.
- **SubSystems / Spooler / Jobs**
  - When a job was copied from one Collector to another after the copy was complete a false error of **Item Not Found** would appear. Fixed.
- **Alarms / Define / Alarm**
  - Sometimes the Alarm Delay value would not always display correctly even though the value was being correctly utilized. Fixed.
- **Configure / Client Access / User List**
  - When a User was dragged out of the **Group IDS and Members of Groups** section and dropped into the **Individual User IDs** section it would report the change was successful, but the user was not actually removed from the group. Fixed.

Misc. Items:

- Upon startup the INI file now has validity checks and repairs are performed on some items.
- When Help is launched the O/S assigned default browser for .htm files is now used. Previously, Internet Explorer was always launched.
- **Files / File Explorer**
  Files / Enscribe / File
  Files / Enscribe / File Detail
  - Enabled the ability to check multiple SMF files to be Relocated. (for Bill B.)
  - If a SMF File relocation is performed the screen will no longer auto-refresh after the move is complete. Instead a status popup will show

the state of each file. (for Bill B.)

- **SubSystems / logs / EMS logs**
  - EMS Message Detail pop-up window now has a tab with the message and a separate tab ('C/E/R' meaning 'Cause / Effect / Recovery') containing the EventTX record for that message. This data comes from a file on the NonStop System.
  - Increased size of EMS Message detail and EMS filter Define to allow more text. (for Tom S.)
- **Alarms / List / Group List**
  - The emails are now sorted within the group.

Known issues:

- The FireFox web browser does not display help correctly if HTML4 is selected. Use HTML5 or another browser instead.
- When using Windows 7 and a 4K monitor and the client is resized to full screen, the down-arrow on a drop box is very small. They do not resize like other items. It works fine with Windows 10.
- When converting from Mini-MOMI to full MOMI it may be necessary to restart the client.
- **Systems / File Transfer / SFTP**
  - If file is transferred as a Key-Sequenced structured file sometimes SFTP will think the transfer is successful but the host file is left empty. A check is now done and an error shows if this happened. Note: Sometimes making the **REC LEN** even will succeed. Some failures are caused by unknown factors and seem to be a failure in the SFTP Server on the NonStop.
- **SubSystems / Discovery**
  - Feature is still under development and subject to change. Comments and suggestions are invited and welcome.

MOMI Server

New Features:

- The server returns the new location of an SMF file in the response to a relocate request.
- Retrieval speed of EventBX records was greatly increased.
- Spooler related processing, where a location may be specified, may now use * or ? wild card characters within the field. Internally, MOMI requests all locations and performs pattern matching prior to returning responses to the client.
- Internal processing related to searching through spoolers was revised and optimized in several situations reducing CPU overhead.
- Positioning by time within an EMS collector now returns the name of an expected but missing file. This could occur if the maximum number of files an EMS collector may create is insufficient and deletion was required.
- EMS log file access failures (1031) now include the file name (if available).

Bug Fixes:

- Several problems were corrected so that history consolidation now

correctly functions. Issues were addressed with the Process, Msystem and OSSNS entities and an issue when the dump interval for HST01DB was 10 seconds or less.

- The SPI resources used in converting EMS events to readable tokens now always invokes a SPI finish routine. This prevents a possible situation, although none was reported, where a MOMI server could encounter error to the resource leak.

- Several potential bugs where corrected related to the occurrence spooler request in progress errors (%14016). The spooler returns this error after 32 internal *searches*. MOMI code now maintains the correct internal context related to reissuing commands after the request in progress errors.

- Error 590 (bad parameter) should no longer be returned when displaying records from the EventCX file using Read or Read next requests. A coding error was corrected so the variable specifying the type of file access now is always initialized (some platforms or O/S versions may not encounter the error).

- The Enscribe operation to duplicate a file, via FUP DUP, no longer returns an error 13 (improper format) when the destination file contains an asterisk. Problem introduced in server 5.51.

Misc. Items:

- History consolidation into HST02DB, HST03DB and HST04DB now deletes any data present in the period about to be written. This insure that in the event a partial period is present the new data is written in its entirety (existing data of a partial period remained).

- Defaults for the CONFMOMI keyword TCPIP-WRITE-BYTES-SEC were changed to 5,000,000 (old 4,000,000) for the TNS/X system and unknown processors are set to 4,000,000.

- MOMI no longer contacts all spooler supervisors when a specific collector is specified in a request. Internally, when this situation is detected MOMI modifies the request so that it only contacts the parent process of the collector.

- EMS End of File errors (1032) are now indicated to the client an information error instead of nonfatal error. The change result in many situations the client will no longer shows this error in red.

Known Issues:

- None

MOMIFTP

- Help now uses default browser

ssMOMI

- None

MomiEmail

- None

SendMail

- None

IPCalc

- None

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Release Package	6.04
Release Date (yyyy/mm/dd)	2019/07/12

item	Version
Latest O/S tested	G06.32.01 - H06.29.00 J06.23.00 – L19.03.01
Client Version	6.04
Server Version (VPROC)	6.04 T0000G06___V6_04____2019_07_10
Buffer Version	Client 21.58 Server 21.58
History database	3.10
CONFMOMI	6.01
OBYMOMI	5.02
OBYCSQL	5.02
MomiFTP.exe	2.13
ssMOMI.scr	6.00
MomiEMail.exe	1.10
SendMail.exe	1.01
IPCalc.exe	1.3.3
Oldest client version tested with server	5.80

NEW FEATURES / BUGS FIXED

(see MOMI HISTORY.RTF for previous versions)

Common new features (requires current client and server)

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Impacts in this version

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MOMI Software short-cuts, as displayed by the Windows Start menu, now use the format of **BWS MOMI n.nn**. Previously, MOMI software short-cuts were located under **BlackWood Systems**. This change is for compatibility with Windows 10 which does not handle multiple levels within the Start menu.

MOMI Client

New Screens:

- **None**

New Features:

- **SubSystems / Spooler / Jobs**
  SubSystems / Spooler / View Job
  - When multiple jobs are selected on the Jobs screen then the user right-clicks and selects 'Display' then the View Job screen will have a list of the selected jobs. The jobs can be selected manually or by hitting a next or previous button. This will clear the screen of the current job and display the new job. (For Gary B.)
- **Alarms / Define / Alarm**
  - **EMS Set** and **EMS Clear**
    - Added selections for enhancing choices for processing methods.
      Exclude Method
      - **Exclude OR**
        - Either **Exclude** match causes exclusion (default and same as previous versions).

      Exclude AND
        - Both **Exclude** matches must be found to cause exclusion.
        - when selected both **Exclude** tabs will be blue.

      Include Method
      - **Include OR**
        - Either **Include** match causes inclusion (default and same as previous versions).

      Include AND
        - Both **Include** matches must be found to cause inclusion.
        - when selected both **Include** tabs are green.

      Excludes are processed first then **Includes** second.
- **Alarms / List / Alarm**
  Alarms / Define / Export

Alarms / Define / Import
- Added new flags for **Exclude Method** and **Include Method.**

Bug Fixes:

- on Grids if a filter was active on a row then a sort was performed, sometime the display would appear to have lost some of the rows of items until the scrollbar was used. Fixed.
- **SubSystems / EMS EventBX / Define**
  - The font size of displayed Text was sometime 1/2 what it should be. Fixed.
  - Saving or Changing a record would fail with 'Bad records in group' error. Fixed.
- **Alarms**
  - When initially loading alarm definitions the client could 'hang' for an excessive amount of time if there were a lot of email and email group records defined. Fixed.

Misc. Items:

- **SubSystems / EMS EventBX / Define**
  - Made improvements for resizing toolbar.
- **Configure / Server / Server Info**
  - Added display of Alarm SMTP server UserName and Password.

Known issues:

- When using Windows 7 and a 4K monitor and the client is resized to full screen, the down-arrow on a dropbox is very small. They do not resize like other items. It works fine with Windows 10.
- When converting from Mini-MOMI to full MOMI it may be necessary to restart the client.
- **Systems / File Transfer / SFTP**
  - If file is transferred as a Key-Sequenced structured file sometimes SFTP will think the transfer is successful but the host file is left empty. A check is now done and an error shows if this happened. Note: Sometimes making the **REC LEN** even will succeed. Some failures are caused by unknown factors and seem to be a failure in the SFTP Server on the NonStop.
- **SubSystems / Discovery**
  - Feature is still under development and subject to change. Comments and suggestions are invited and welcome.

MOMI Server

New Features:

- **Alarm EMS / User defined** now supports AND logic. Default and existing alarms remain with the implied logic of OR.

- The server may now request PLAIN authentication from the SMTP server for alarm emails. See MOMI help for the following CONFMOMI keywords:

```
alarm-smtp-server-password
alarm-smtp-server-username
```

Bug Fixes:

- **SubSystems / Logs / EMS** no longer returns only a \system name or a double \system name in the **Process Name** field. Several other formatting 'oddities' such as a blank **Process Name** field were also addressed.

- On the screen **SubSystems / Logs / EMS EventB**X stepping backwards (i.e. **Prev**) no longer stops prematurely in the situation when a incomplete record is encountered in the file.

- Under certain situations an internal request from the client to release context instead allocated it. Now, a context release request unconditionally releases if present.

Misc. Items:

- **Subsystem / Logs / EMS** for unnamed processes in the **Process Name** field now returns [\sys].cc,ppppp instead of $:cc:ppppp:sssss which was introduced in version 6. This is consistent with EMSDIST.

- Additional messages are logged to the MOMI log in the event the CNF01DB file sequence number is incorrect or fails to update.

Known Issues:

- **None**

MOMIFTP

- Put in check to make sure user default location is not in OSS location and added some resizing improvements.

ssMOMI

- None

MomiEmail

- None

SendMail

- None

IPCalc

- None

****

Release Package	6.03
Release Date (yyyy/mm/dd)	2019/05/01

item	Version
Latest O/S tested	G06.32.01 - H06.29.00 J06.22.00 – L18.08.01
Client Version	6.03
Server Version (VPROC)	6.03 T0000G06___V6_03____2019_04_22
Buffer Version	Client 21.57 Server 21.57
History database	3.10
CONFMOMI	6.01
OBYMOMI	5.02
OBYCSQL	5.02
MomiFTP.exe	2.13
ssMOMI.scr	6.00
MomiEMail.exe	1.10
SendMail.exe	1.01
IPCalc.exe	1.3.3
Oldest client version tested with server	5.80

NEW FEATURES / BUGS FIXED

(see MOMI HISTORY.RTF for previous versions)

Common new features (requires current client and server)

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Impacts in this version

The Free version of the CAIL emulator is no longer provided with the MOMI client. If the user has the full-function purchased version installed it will continue to work. If the user has any 6530 Emulator programs on their PC that they want to start from within the MOMI client, the **Systems / External** screen will allow a button to be created to start their emulator.

MOMI Software short-cuts, as displayed by the Windows Start menu, now use the format of **BWS MOMI n.nn**. Previously, MOMI software short-cuts were located under **BlackWood Systems**. This change is for compatibility with Windows 10 which does not handle multiple levels within the Start menu.

MOMI Client

New Screens:

- **None**

New Features:

- **None**

Bug Fixes:

- When changing screens if the screen being displayed was not finished building and the user changed to another screen, the **Back** and **Forward** screen history and the screen specific help page may have been incorrect. Fixed.
- **Systems / File Transfer / SFTP**
  - If the default user location defined on the Nonstop for the user was a OSS location not a NSK location the client would change to the OSS location until the user manually changed it to a valid NSK Vol/SubVol. Now a error is displayed and the user must set location. Fixed.
- **Overview**
  - EMS Msgs grid would not always resize the columns and rows to fit a changed font size. Fixed.
- **Alarms / Define / Alarm**
  - Sometime after a **Limit by Type** was inserted the cursor would not position correctly. Fixed.
- **Alarms / Define / EMail Group**
  - **Save New** and **Change** did not update users into group. Bug introduced in version 6.00. Fixed.

Misc. Items:

- More Improvements on resizing.
- **SubSystems / Expand / Path**
  - Added following fields:

- Info - L4 CwndClamp
- Status - SuperPath
- Stats - Current Recv Queue Messages
  - Max Recv Queue Messages
  - Level 4 Message size Histogram
    - <= 32K
    - <= 60K
    - <= 256K
    - <= 1M
    - > 1M

- **Configure / Client Access / User Define / Configure**
  - Added ability to hide/show Server 'Client Connections' and Server 'TraceLog'

Known issues:

- When using Windows 7 and a 4K monitor and the client is resized to full screen, the down-arrow on a dropbox is very small. They do not resize like other items. It works fine with Windows 10.
- When converting from Mini-MOMI to full MOMI it may be necessary to restart the client.
- **Systems / File Transfer / SFTP**
  - If file is transferred as a Key-Sequenced structured file sometimes SFTP will think the transfer is successful but the host file is left empty. A check is now done and an error shows if this happened. Note: Sometimes making the **REC LEN** even will succeed. Some failures are caused by unknown factors and seem to be a failure in the SFTP Server on the NonStop.
- **SubSystems / Discovery**
  - Feature is still under development and subject to change. Comments and suggestions are invited and welcome.

MOMI Server

New Features:

- Storage will now report Optical and SSD. Previously, both types were reported as magnetic, which is the default for unknown types (Ken K.).

- The protocols IP, ICMP, IPv6 and RAW can now be reported from CLIMs. The server also now provides a larger field when reporting the protocol (the old field was limited to three characters).

Bug Fixes:

- The display of an EMS event now reports the CPU and PIN of the originating process when it writes directly to $0 (versus a formatted EMS event). Previously, $0 was reported as the originator.

Misc. Items:

- Display of a spooler job will now indicate if a job was abnormally closed instead of a generic error. Any spool job data available is still displayed.

Known Issues:

- None

MOMIFTP

- Put in check to make sure user default location is not in OSS location and added some resizing improvements.

ssMOMI

- None

MomiEmail

- None

SendMail

- None

IPCalc

- None

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Release Package	6.02
Release Date (yyyy/mm/dd)	2019/03/12

item	Version
Latest O/S tested	G06.32.01 - H06.29.00 J06.22.00 – L18.08.00
Client Version	6.02
Server Version (VPROC)	6.02 T0000G06___V6_02____2019_03_08
Buffer Version	Client 21.56 Server 21.56
History database	3.10
CONFMOMI	6.01
OBYMOMI	5.02
OBYCSQL	5.02
MomiFTP.exe	2.12
ssMOMI.scr	6.00
MomiEMail.exe	1.10
SendMail.exe	1.01
IPCalc.exe	1.3.3
Oldest client version tested with server	5.80

NEW FEATURES / BUGS FIXED

(see MOMI HISTORY.RTF for previous versions)

Common new features (requires current client and server)

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Impacts in this version

The Free version of the CAIL emulator is no longer provided with the MOMI client. If the user has the full-function purchased version installed it will continue to work. If the user has any 6530 Emulator programs on their PC that they want to start from within the MOMI client, the **Systems / External** screen will allow a button to be created to start their emulator.

MOMI Software short-cuts, as displayed by the Windows Start menu, now use the format of **BWS MOMI n.nn**. Previously, MOMI software short-cuts were located under **BlackWood Systems**. This change is for compatibility with Windows 10 which does not handle multiple levels within the Start menu.

MOMI Client

New Screens:

- **None**

New Features:

- Extensive changes to all screens to allow better resizing of the client.
- Grids now can *AutoSize* the fonts. The Grid Font size options are:
  - Default (always font size 10)
  - Auto Size (Font size adjusts for monitor pixel size)
  - Set Size (Font size is set to user defined size)
- **Files / Enscribe / Cache** and **SubSystems / TCP/IP / Status**
  - Added right-click sorting on Mini-reports.
- **SubSystems / Discovery**
  - Discovery diagram now has resize ability.

Bug Fixes:

- When AutoLogoff is set and the AutoLogoff occurs only the System currently being monitored would logoff, Any system setup to AutoLogon would still be able to autologon.
- **Systems / File Transfer / FTP** and **Systems / File Transfer / SFTP**
  - When the host is 'Windows' and the grid is refreshed the resulting list was not cleared before the list was displayed. This caused duplicates.
- **Files / Enscribe / Files**
  - if volume name not found error not kept on screen. Flash then disappear. Bug introduced in version 5.80.
- **SubSystems / Logs / EMS Logs**
  - When a new **Distributer Filter** or **Template File** was added to their dropdown box they were not added at the top of the list but at the

bottom. This caused the new item to be lost once the **DropDown Items Count** limit was reached.
- Config settings were inconsistent to what was retained or reset. Now if the user wants the setting to be retained they must click the **Save** button.
- When a single Collector was moved to the collector list the $0 collector would also be added.

· **SubSystems / Logs / MOMI Logs and VHS Log**
- If the screen was configured to use reverse scrolling (last at top) the last record or 2 would not display

· **SubSystems / Spooler / Jobs**
- AutoUpdate would not detect if 'All Users' was checked so if a user was logged on any AutoUpdate would only get the jobs for that user.

· **Alarms / Define / Alarm**
- 'Use as Template' did not work or display correctly.
- The alarms defined for following alarms would incorrectly save the number of seconds on any Client version 5.87 up to 6.01.
  Type **TMF** SubType **Long running transaction,**
  Type **Process** SubType **Running to long (CPU cycles)** and
  Type **Process** SubType **Running to long (wall clock)**

Misc. Items:

· Screens converted to resize better with 4k monitor.

· **Systems / Ping**
- Removed maximum limit **Delay between Pings.**

· **Configure / Client / General**
- Removed ability to reduce Client to 800x600 size. This was incompatible with the new resizing logic required for 4K monitors.

Known issues:

· When converting from Mini-MOMI to full MOMI it may be necessary to restart the client.

· **Systems / File Transfer / SFTP**
- If file is transferred as a Key-Sequenced structured file sometimes SFTP will think the transfer is successful but the host file is left empty. A check is now done and an error shows if this happened. Note: Sometimes making the **REC LEN** even will succeed. Some failures are caused by unknown factors and seem to be a failure in the SFTP Server on the NonStop.

· **SubSystems / Discovery**
- Feature is still under development and subject to change. Comments and suggestions are invited and welcome.

MOMI Server

New Features:

· The internal processing of TMF can now report on up to 63 audit trails. The previous limit was 15.

· Added to the alarm **TMF / Long running Transaction** the option to only process partitioned files.

· The screen **Files / Disk Entity L/H** in Live mode now updates every Interval (default of 10 seconds) as a moving average until the user specified screen update interval is reached. Previously, nothing was

reported until the user interval was reached.

Bug Fixes:

- A lock is no longer left outstanding on the CNF01DB file.
- Several internal issues were addressed to correct Live data for the screen **Files / Disk Entity L/H.**
- Several changes were made to correct a problem where an Expand path name may have reported as a Blank or junk when a path or line was deleted. (GB Ken K.)
- The TNS/X System will no longer show blanks or junk on the screen **TCP/IP / Process Status** for the TCP/IP process name.
- An internal issue was address that caused needless processing on the screen **Processes / ProcessH Entity** over time.

Misc. Items:

- The listing of locks now reports GENERIC-LOCK.
- The copy of a Spooler Job will now also retain the selection priority. Previously, the value was zero.

Known Issues:

- **None**

MOMIFTP

- None

ssMOMI

- None

MomiEmail

- None

SendMail

- None

IPCalc

- None

****

Release Package	6.01
Release Date (yyyy/mm/dd)	2018/12/17

item	Version
Latest O/S tested	G06.32.01 - H06.29.00 J06.22.00 - L18.02.00
Client Version	6.01
Server Version (VPROC)	6.01 T0000G06___V6_01____2018_12_06
Buffer Version	Client 21.55 Server 21.55
History database	3.00
CONFMOMI	6.01
OBYMOMI	5.02
OBYCSQL	5.02
MomiFTP.exe	2.11
ssMOMI.scr	6.00
MomiEMail.exe	1.10
SendMail.exe	1.01
IPCalc.exe	1.3.3
Oldest client version tested with server	5.80

NEW FEATURES / BUGS FIXED

(see MOMI HISTORY.RTF for previous versions)

Common new features (requires current client and server)

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Impacts in this version

The Free version of the CAIL emulator is no longer provided with the MOMI client. If the user has the full-function purchased version installed it will continue to work. If the user has any 6530 Emulator programs on their PC that they want to start from within the MOMI client the **Systems / External** screen will allow a button to be created that will start the emulator.

MOMI Software short-cuts, as displayed by the Windows Start menu, now use the format of **BWS MOMI n.nn**. Previously, MOMI software short-cuts were located under BlackWood Systems. This change is for compatibility with Windows 10 which does not handle multiple levels within the Start menu.

MOMI Client

New Screens:

- **None**

New Features:

- **SubSystems / User Defined / Diagram**
  - Objects on the Diagram will now display in **Red** if there is any error getting that data or if it has been too long since the data updated.
  - Added new data elements for both CPU and SYSTEM type objects:
    - ***Top Processes $Recv QLen(RcvQL)** to show top 6 $Receive Queue Length processes
    - ***Top Processes Ready Time Only(RdyTO)** to show top 6 Ready Time Only processes (for Diana K.)
- **History / Export**
  - Added ability for Process exports to limit the export to the <n> number of processes based on CPU busy. The <n> value can be any number between 10 and 1 million. (For Yakoob T.)
  - Added ability to export records with a start and stop time based on the last records in the chosen database by selecting a date of Previous Database Period. (For Yakoob T.)

Bug Fixes:

- **Security Logon screen**
  - Section of logon screen that is used for displaying responses from the host during logon was allowing user input. This was a display only issue and did not affect the Logon process. Fixed.
- **Systems / Probe**
  - Systems to be probed were not always the selected system. Bug introduced in version 6.00. Fixed.
- **SubSystems / Logs / EMS Log**
  - If the Config Add to list arrow was pressed with no Collector or LogFile entered it would add an empty Collector to the list(which was

treated as $0). Fixed.
- If an Error number was selected and the right-click popup menu was selected to lookup the error number, the lookup would not find the number. Fixed.

· **SubSystems / Logs/ Log Viewer**
- If No Log was displayed then the user pressed the **Find** button then **Clear** on the **Find** popup the client would crash. Fixed.

Misc. Items:

· **None**

Known issues:

· When converting from Mini-Momi to full MOMI it may be necessary to restart the client.

· **Systems / File Transfer / SFTP**
- If file is transferred as a Key-Sequenced structured file sometimes SFTP will think the transfer is successful but the host file is left empty. A check is now done and an error shows if this happened. Note: Sometimes making the 'REC LEN' even will succeed. Some failures are caused by unknown factors and seem to be a failure in the SFTP Server on the NonStop.

· **SubSystems / Discovery**
- Feature is still under development and subject to change. Comments and suggestions are invited and welcome.

MOMI Server

New Features:

· A message is now sent to the MOMI log when a MOMI PC Client is disconnected due to an idle timeout.

· Mini-MOMI is now valid for 2-years from the version date of the server.

Bug Fixes:

· The Guardian procedure FILENAME_SCAN_ was not protecting against certain process name formats and could result in a MOMI crash when the invalid format was used in an alarm definition and passed to FILENAME_TO_PROCESSHANDLE_. Additional checks have been added to supplement the usage of FILENAME_SCAN_.

· The following field now output the correct value on the screen **Files / Disk Entity L/H:**

starting_free_space
ending_free_space
starting_free_blocks
ending_free_blocks

· Under certain conditions history consolidation into the HST02DB, HST03DB and HST04DB might not have functioned fully. It was unlikely a customer would encounter this situation as the MOMI environment had to be down for several months for this to occur.

Misc. Items:

· Additional text messages are provided for MEASURE error 3289 and USER_AUTHENTICATE_ 160, 563, 1554 & 2016.

- The default extent sizes and maximum number of extents have been changed in the MOMI history files. Below is a table of the old and new values:

file	old pri	old sec	old ext	new pri	new sec	new ext
hst01db	35000	35000	50	35000	35000	60
hst02db	25000	25000	32	30000	30000	50
hst03db	25000	25000	16	28000	28000	40
hst04db	25000	25000	16	27000	27000	30
log01db	2000	2000	16	5000	5000	16

- A history file specification that is invalid, such as a disk drive name that is not present on the system, now generates an EMS message of "Device does not exist (check file name)".

Known Issues:

- **None**

MOMIFTP

- **None**

ssMOMI

- **None**

MomiEmail

- **None**

SendMail

- **None**

IPCalc

- **None**

****

Release Package	6.00
Release Date (yyyy/mm/dd)	2018/09/27

item	Version
Latest O/S tested	G06.32.01 - H06.29.00 J06.22.00 - L17.08.00
Client Version	6.00
Server Version (VPROC)	6.00 T0000G06___V6_00____2018_08_17
Buffer Version	Client 21.55 Server 21.55
History database	3.00
CONFMOMI	6.00
OBYMOMI	5.02
OBYCSQL	5.02
MomiFTP.exe	2.11
ssMOMI.scr	6.00
MomiEMail.exe	1.10
SendMail.exe	1.01
IPCalc.exe	1.3.3
Minimum server version to provide main line client functions	5.50
Oldest client version tested with server	5.37

NEW FEATURES / BUGS FIXED

(see MOMI HISTORY.RTF for previous versions)

Common new features (requires current client and server)

*If you are using Client Access, newly added screens in a MOMI release update are not available to users by default. This action may be changed on the screen **Configure / Client Access / Global Settings** by checking the option **New screens enabled by default**. The user that started MOMI, known as the "Default Security User" always has new screens enabled by default.*

Impacts in this version

The Free version of the CAIL emulator is no longer provided with the MOMI client. If the user has the full-function purchased version installed it will continue to work. If the user has any 6530 Emulator programs on their PC that they want to start from within the MOMI client the **Systems / External** screen will allow a button to be created that will start the emulator.

MOMI Client

New Screens:

- **Logon** and **Systems / File Transfer / Connect**
  - The Logon popup has been redesigned and had its color changed from Red to Blue. The redesign is to allow multi-factor authentication and the color change is the start of making Red only display when a problem is happening.
- **Files / Disk Entity L/H**
  - New screen for Disk Entity that allows either Live data or History data. This screen will only work on newer versions of the OS (i.e. not on S-Series G-version OS). The old 'Files / Disk Entity' screen will work on any system and is now available on the **Configure / Client / Single Screen / Optional Screens.**
- **Configure / Server / Client Connections**
  - Added new screen to display the PC Clients Connected to this NonStop server.

New Features:

- Enabled new Server CONFMOMI parameter **CLIENT-LOCKDOWN-MODE.** This new mode will not allow any data except the absolute minimum to flow between the client and NonStop until the user has logged on and if Client Access is turned on and Client Access has authenticated them.
- If server version allows it, changed the Logon procedure to new multi-factor authentication requiring multiple requests be sent to the NonStop to provide all the needed logon info. The new Logon procedure is also used for the connection Logon for File Transfer (FTP, SFTP and MFTP) and if the Server requires a multi-factor authentication the MFTP logon will handle it.
- Process Locator for Lists of Processes (small button with $) now includes a filter ability to limit displayed processes.
- **Overview / EMS messages**
  - Added right-click menu item to allow user to set EMS grid font and font sizes. (for Rod D.)
- **CPUs / CPU Info**
  - Added new columns for:
    POSIX mapping, OSS Shared Memory, OSS Semaphore stats, affinity

balancing, IEEE version, pending time adjustment, pending time adjustment duration, clock rate correction, time when rate last adjusted, time when time last set, time when time last set or adjusted.

- **SubSystems / Logs / EMS Log**
  - Configure process locator (button with $) now allows the name to be added to the current list as well as used to replace the current list. (For Gary B.)
  - EMS detail now has a right-click popup menu item that allows the display of the underlying HTML text. This allows the user to copy the HTML text and paste it into another application.
- **SubSystems / Spooler / View Job**
  - **Search** is now available even if the JOB fails with an **Invalid data file or Job Open on EOF.**
- **SubSystems / TCP/IP / Status**
  - CLIMs are now reported.
  - Added columns for 'Opener Process Name' and 'CLIM name'.
- **History / Process** and
  History / CPU Detail and
  History / Export
  - Added new Process History record items:
    sent_bytes, sent_cbytes, returned_bytes, returned_cbytes, received_bytes, received_cbytes, reply_bytes, reply_cbytes, launch_wait_time, open_close_wait_time
- **History / Export**
  - Added new Disk Entity history export.
- **Configure / Client Access / Global Settings**
  - Added section to set IP Addresses and DNS names for Clients that should ignore the 'CLIENT-LOCKDOWN-MODE' setting. Useful for Monitor only (OPs) clients.
- **Configure / Client Access / User List**
  - Now has a display of all IDs along with their Type and Descriptions. (For Vikas K.)

Bug Fixes:

- If the PC had Windows set to user 125% or 150% font sizes some items on the screen became too large to fit their space on the screen. Fixed.
- **Systems / File Transfer**
  - The Local PC grid would sort alphabetically on the file size column not numerically. Fixed.
- **Systems / Probe / All Systems**
  - The charts would sometimes display CPU that did not exist as red with random CPU busy% until the client had probed the system for several times. Fixed.
- **Files / Enscribe / View File** and
  SubSystems / Logs / EMS Log and
  SubSystems / Logs / VHS Log and
  SubSystems / Logs / MOMI Log and
  SubSystems / Spooler / View Job
  - If a user tried to changed the grid font, the new font was not used. Fixed.
- **SubSystems / Logs / EMS Log**
  - if the Collector list was selected by clicking the mouse outside of the cells then the mouse scroll wheel was used the client would crash. Fixed.

- If multiple Collectors were added all at once sometimes they would double up on list. Fixed.
- When a filter was in use then the user filtered on a color then stopped the color filter the filter in use was not restored to the original filter before the color filter. Fixed.

· **SubSystems / Spooler / View Job**
- if a user started a view job download and then changed screens, the job download would stop, and the screen would clear. Fixed.

· **SubSystems / TCP/IP / Process Status**
- When multiple systems were being viewed the screen could *lockup* for short periods of time when the remote systems were being collected. Fixed.

· **History / Export**
- The 'Export Header as first line' was not always being validated so sometime when a header was wanted it was not exported and sometimes when no header was wanted it was being included. Fixed.
- The **This Week** and **Last Week** date settings were starting the week on Monday and ending on Sunday. This has been changed to start on Sunday and end on Saturday. Fixed.

· **Alarm / Define**
- For all the define record types if the user tried to save a record that already existed as **Save New** instead of **Change** the **Last Update** field was left as <Changing>. Fixed.
- For all the define record types if the user deleted a record the name and last update would appear on the define screen of all client connected to that system even if the client was not the one that deleted it. Fixed.

· **Alarm / Define / Alarm**
- The 'Use as Template' did not display correctly. Fixed.

· **Configure / Client Access / User Define**
- The **Check All** button would mistakenly check the **Disable Auto Logoff** checkbox. Fixed.

· **Configure / Reference / Error/Codes**
- Any line that had to be broken into multiple lines would not display correctly. Fixed.

Misc. Items:

· Grid have been sped up when loading lots of records especially when there are lots of columns and the columns contains a multiple line heading.

· On pages with Data Logging displays (FTP log, FTP error log, Config Client Diagnostics Server and Client) added ability to stop the scrolling when a new item appears for a short time. To start the delay, click on the logging display and data will stop scrolling. The amount of time the scrolling stops is set on the screen **Configure / Client / General** setting **Data Logging Freeze secs.**

· **Systems / File Transfer / MFTP**
- Changed MFTP to use its own Socket to the server and quit sharing the Probe Socket.

· **Systems / Emulators**
- Renamed to **Systems / External.**

· **Files / File Explorer**
- Grids for both NSK and OSS now show counts and **No Filter** button.

· **SubSystems / Logs / EMS EventBX / Define**
- Added progress display for large new or updated records to show

records being uploaded.

- **SubSystems / Spooler / View Job** and **SubSystems / Spooler / Job / Search Jobs**
  - The process of reading the jobs has been greatly sped up for large jobs.
- **SubSystems / Expand / System Entity**
  - Tab changed from **System Entity** to **System Entity L/H** to show both Live and History data is available.
- **Configure / Server / Server Info**
  - Added file information (Sizes, Ext, etc.) about CNF01DB and LOG01DB.
- **Configure / Client / Single Screen / Optional Screens**
  - SubSystem OSS Screens are no longer an optional screen. Client Access can be used to hide them if needed.
  - **Files / Disk Entity** is now an optional screen. It has been replaced by the screen **Files / Disk Entity L/H** and provides both Live and Historical data. The old **Files / Disk Entity** screen is optional and available for older NonStop O/S (G-Series). The Client Access setting for **Files / Disk Entity** enables/disables both the new and old screen.

Known issues:

- When converting from Mini-Momi to full MOMI it may be necessary to restart the client.
- **Systems / File Transfer / SFTP**
  - If file is transferred as a Key-Sequenced structured file sometimes SFTP will think the transfer is successful but the host file is left empty. A check is now done and an error shows if this happened. Note: Sometimes making the 'REC LEN' even will succeed. Some failures are caused by unknown factors and seem to be a failure in the SFTP Server on the NonStop.
- **SubSystems / Discovery**
  - Feature is still under development and subject to change. Comments and suggestions are invited and welcome.

MOMI Server

New Features:

- Support for a logon dialog.

- The size of I/Os between the client and server is now larger and better packed in many situations. Overall, I/O performance is generally improved resulting in lower CPU utilization in $MOMI.

- Added support for a new message providing the content of a spooler job.

- Several new CONFMOMI keywords were added:
  CLIENT-MINIMUM-V6
  CLIENT-SCREEN-SAVER

- Attempts by non-MOMI clients to connect now result in a message to the MOMI Log with the IP address of the sender and the first 80 bytes sent.

- The following CPU related fields are now available on H06.24/J06.13 or later systems:

  IEEE

pending_time_adjustment
pending_time_adjustment_dur
clock_rate_correction
time_when_rate_adjusted
time_when_time_set
time_when_time_set_or_adjusted

- The following fields are added to Process history:

  sent_bytes
  sent_cbytes
  returned_bytes
  returned_cbytes
  received_bytes
  received_cbytes
  reply_bytes
  reply_cbytes
  launch_wait_time
  open_close_wait_time

- On H06.29/J06.18/L17.08 or later systems MOMI will now create the CNF01DB and HSTnnDB files with larger record sizes. This may result, sometimes, in rather substantial increases in performance for I/O's to/from these files. Existing files continue to operate without issues.

- The performance of reading history files has been improved with the use of two read buffers in many situations.

- Added support for disk live & history. This is a new implementation intended to replace the previous **Disk Entity** screen.

- Active CLIM sockets is now returned on the screen **SubSystems / TCP/IP / Process Status.**

Bug Fixes:

- A bug was corrected that could have caused the client to report **invalid header length-Numin Failed.** This issued had not been reported by customers and was only encountered during development.

- A memory leak in $MOMI was corrected when a client connection timed out. The lead was small and not a common situation.

- Several error situations were changed and now $MOMI closes the TCP/IP socket sooner.

- The following fields on the screen Processes / All Processes now have the 32-bit values in the 32-bit fields and the 64-bit values in the 64-bit fields:

  main_stack_origin64
  main_stack_size_current64
  main_stack_size_maximum64
  privileged_stack_origin64
  privileged_stack_size_current64

```
privileged_stack_size_maximum64
global_data_origin64
global_data_size64
native_heap_origin64
native_heap_size_current64
native_heap_size_maximum64
```

- In the event MOMI was unable to lock the CNF01DB file prior to reading a small memory leak was corrected and the error indication to the invoking routine is now correctly notified. The situation highly unlikely.

- History data for the **System Entity L/H** is now deletes based on CONFMOMI keyword **HSTnnDB-DELETE-TIME** (if enabled).

Misc. Items:

- The default extent sizes and maximum number of extents have been changed in the MOMI history files. Below is a table of the old and new values:

file	old pri	old sec	old ext	new pri	new sec	new ext
hst01db	20000	20000	50	35000	35000	50
hst02db	10000	10000	32	25000	25000	32
hst03db	9000	9000	25	25000	25000	16
hst04db	9000	9000	16	25000	25000	16

- Any keyword not recognized in the CONFMOMI file is logged to $0 and processing of the remainder of the file continues.

- The message **Started -** … logged by $MOMI at startup is generated sooner and should appear before any error messages that may be logged.

- The default for the CONFMOMI keyword TCPIP-THREADS was changed from 100 to 150. The internal limit was raised from 250 to 350.

- The file security string is now reported as **** in more places when the Safeguard security bit is enabled for a file.

- Messages are now logged in more situations where a CPU collector is unable to obtain information via PROCESSOR_GETINFOLIST_.

- The actual times when a CPU collector gathers data now occurs on a multiple of the collection interval. For example, if the interval is 10 seconds the collector obtains data on the minute, 10 seconds after the minute, 20 seconds after the minute and so on… Previously, while this was attempted, there were timing situations where it would not occur. History dumping intervals are also modified in the same manner.

- Internal processing changes now prevent in more situations data from being made available until two intervals have elapsed. This should help prevent situations where extremely large values are initially displayed then replaced on the next update with a more reasonable value.

- Internal processing was changes to no longer collect the number of CPUs

physically in the system (ZSYS^VAL^CINF^CPU^PHYSCOUNT (82)). The collection resulted in excessive wall clock time usage. The value was collected but not provided to the client.

- An ***** is now allowed along with **$*** on the screen **History / Chart** when selecting a process. Note that the chart has a limit of 100 concurrent entities.

- History deletion, due to a full file, now removes history from all types of history. Previously, history was deleted only for the data that encountered the full file condition.

- The performance of updating existing data stored in the CNF01DB file has been improved. Locks to the file are also reduced.

- The performance of history consolidation, moving data from one history file to another, has been improved.

- The percent full and other information is now returned to the client for CNF01DB and LOG01DB.

- Memory allocation for many internal routines was optimized to help prevent fragmentation, frequent small allocations and overall try to improve performance.

- Data written to the history files now uses by default DISK-COMPRESSION-TYPE 3. This compression type has been available since MOMI 5.00 and usually results in smaller disk history records.

Known issues:

- History files HST02DB, HST03DB and HST04DB have a limit of approximately 600,000 processes per history period. If this limit reached the history consolidator server will log a message and discontinue the consolidation for the affected file (others preceding are not affected). Typically, this limit would only affect the HST04DB which has a default period of 1 day and only on a large system with a great deal of transient processes throughout the day.

MOMIFTP

- Pressing enter after Password now moves cursor to Vol/Subvol instead of Connecting.

ssMOMI

- Added ability of server to disable the Screensaver functionality.

MomiEmail

- None

SendMail

- None

IPCalc

- None

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Release Package	5.93
Release Date (yyyy/mm/dd)	2019/02/20

item	Version
Latest O/S tested	G06.32.01 - H06.29.00 J06.22.00 - L18.02.00
Client Version	5.93
Server Version (VPROC)	5.61 T0000G06___V5_61____2019_02_20
Buffer Version	Client 21.54 Server 21.54
History database	3.00
CONFMOMI	3.09
OBYMOMI	5.02
OBYCSQL	5.02
MomiFTP.exe	2.12
ssMOMI.scr	6.00
MomiEMail.exe	1.10
SendMail.exe	1.01
IPCalc.exe	1.3.3
Oldest client version tested with server	5.80

NEW FEATURES / BUGS FIXED

(see MOMI HISTORY.RTF for previous versions)

Common new features (requires current client and server)

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Impacts in this version

The Free version of the CAIL emulator is no longer provided with the MOMI client. If the user has the full-function purchased version installed it will continue to work. If the user has any 6530 Emulator programs on their PC that they want to start from within the MOMI client, the **Systems / External** screen will allow a button to be created to start their emulator.

MOMI Software short-cuts, as displayed by the Windows Start menu, now use the format of **BWS MOMI n.nn**. Previously, MOMI software short-cuts were located under **BlackWood Systems**. This change is for compatibility with Windows 10 which does not handle multiple levels within the Start menu.

MOMI Client

New Screens:

- **None**

New Features:

- **None**

Bug Fixes:

- **Alarms / Define / Alarm**
  - The alarms defined for following alarms would incorrectly save the number of seconds on any Client version 5.87 up. Fixed.
    Type 'TMF' SubType 'Long running transaction' ,
    Type 'Process' SubType 'Running to long (CPU cycles)' and
    Type 'Process' SubType 'Running to long (wall clock)'

Misc. Items:

- **None**

Known issues:

- When converting from Mini-Momi to full MOMI it may be necessary to restart the client.
- **Systems / File Transfer / SFTP**
  - If file is transferred as a Key-Sequenced structured file sometimes SFTP will think the transfer is successful but the host file is left empty. A check is now done and an error shows if this happened. Note: Sometimes making the 'REC LEN' even will succeed. Some failures are caused by unknown factors and seem to be a failure in the SFTP Server on the NonStop.
- **SubSystems / Discovery**
  - Feature is still under development and subject to change. Comments and suggestions are invited and welcome.

MOMI Server

New Features:

- None

Bug Fixes:

- When an Expand line is deleted, and a MOMI alarm is defined for Expand Path or Line it may result in an alarm with a blank or junk Path/Line name. While we have not been able to produce this problem two situations where this may have occurred have been corrected. (Ken K.)

- A condition in the server could occur where the Client would receive the message "Invalid header length-Numin Failed" was discovered in MOMI 6 internal testing and has been corrected.

- Two situations relating to access of the CNF01DB file could result in an incorrect completion indicator and/or a small memory leak. Both situations were extremely rare and discovered in MOMI 6 testing.

- Addition ASCII text messages are added for the EMS distributor for errors ZEMS_EVT_BAD_LOG (1017) and ZEMS_EVT_COL_DISCONNECT (1019).

- History data for the MEASURE entity SYSTEM is now deleted by age (CONFMOMI keyword HSTnnDB-DELETE-TIME). This type of data was still automatically deleted if the history file was full.

- An Expand Path/Line now reports as $ldev (i.e. logical device number) instead of blank if a bonafide $name is not available. (Mark C.)

Misc. Items:

- None

Known Issues:

- None

MOMIFTP

- None

ssMOMI

- None

MomiEmail

- None

SendMail

- None

IPCalc

- None

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Release Package 5.91
Release Date (yyyy/mm/dd) 2018/02/07

Item	Version
Latest O/S tested	G06.32.01 - H06.29.00 J06.20.00 - L17.08.00
Client Version	5.91
Server Version (VPROC)	5.60 T0000G06___V5_60____2018_01_30
Buffer Version	Client 21.54 Server 21.54
History database	3.00
CONFMOMI	3.09
OBYMOMI	5.02
OBYCSQL	5.02
MomiFTP.exe	2.10
ssMOMI.scr	4.14
MomiEMail.exe	1.10
SendMail.exe	1.01
IPCalc.exe	1.3.3
Minimum server version to provide main line client functions	5.50
Oldest client version tested with server	5.37

NEW FEATURES / BUGS FIXED

(see MOMI HISTORY.RTF for previous versions)

Common new features (requires current client and server)

*If you are using Client Access, newly added screens in a MOMI release update are not available to users by default. This action may be changed on the screen **Configure / Client Access / Global Settings** by checking the option **New screens enabled by default**. The user that started MOMI, known as the "Default Security User" always has new screens enabled by default.*

Impacts in this version

None

MOMI Client

New Screens:

- **None**

New Features:

- **None**

Bug Fixes:

- When AutoLogoff is set and the AutoLogoff occurs only the System currently being monitored would logoff, Any system setup to AutoLogon would still be able to autologon. Fixed.
- **Systems / File Transfer / FTP and Systems / File Transfer / SFTP**
  - When the host is 'Windows' and the grid is refreshed the resulting list was not cleared before the list was displayed. This caused duplicates. Fixed.
- **SubSystems / Spooler / Jobs**
  - AutoUpdate would not detect if 'All Users' was checked so if a user was logged on any AutoUpdate would only get the jobs for that user. Fixed.

Misc. Items:

- **None**

Known issues:

- **Systems / File Transfer / SFTP**
  - If file is transferred as a Key-Sequenced structured file sometimes SFTP will think the transfer is successful but the host file is left empty. A check is now done and an error shows if this happened. Note: Sometimes making the 'REC LEN' even will succeed. Some failures are caused by unknown factors and seem to be a failure in the SFTP Server on the NonStop.
- **SubSystems / Logs / Log Viewer**
  - Feature is still under development and subject to change. Comments and suggestions are invited and welcome.
- **SubSystems / Discovery**
  - Feature is still under development and subject to change. Comments and suggestions are invited and welcome.

MOMI Server

New Features:

- None

Bug Fixes:

- None

Misc. Items:

- The server no longer stops returning EMS messages when encountering a record missing the token ZEMS_TKN_NODENAME. This could be seen in the MOMI PC Client on the screens **Overview / EMS Msgs** or **SubSystems / Logs / EMS Msgs**. Additionally, trailing nulls or spaces are removed, if present, from the token ZEMS_TKN_PROC_DESC. It is not presently known how this situation occurred.

- The server now returns whatever information is available, if any, after encountering a missing token error on the screen **SubSystems / Logs / EMS Msgs** after clicking on a message to display detail then selecting the tab Tokens. Previously, any error encountered prevented the display of information.

Known issues:

- History files HST02DB, HST03DB and HST04DB have a limit of approximately 600,000 processes per history period. If this limit reached the history consolidator server will log a message and discontinue the consolidation for the affected file (others preceding are not affected). Typically, this limit would only affect the HST04DB which has a default period of 1 day and only on a large system with a great deal of transient processes throughout the day.

MOMIFTP

- None

ssMOMI

- None

MomiEmail

- None

SendMail

- None

IPCalc

- None

****

Release Package 5.90
Release Date (yyyy/mm/dd) 2018/01/24

Item	Version
Latest O/S tested	G06.32.01 - H06.29.00 J06.20.00 - L17.08.00
Client Version	5.90
Server Version (VPROC)	5.59 T0000G06___V5_59____2018_01_23

Buffer Version	Client 21.54	Server 21.54
History database	3.00	
CONFMOMI	3.09	
OBYMOMI	5.02	
OBYCSQL	5.02	
MomiFTP.exe	2.10	
ssMOMI.scr	4.14	
MomiEMail.exe	1.10	
SendMail.exe	1.01	
IPCalc.exe	1.3.3	
Minimum server version to provide main line client functions	5.50	
Oldest client version tested with server	5.37	

NEW FEATURES / BUGS FIXED

(see MOMI HISTORY.RTF for previous versions)

Common new features (requires current client and server)

*If you are using Client Access, newly added screens in a MOMI release update are not available to users by default. This action may be changed on the screen **Configure / Client Access / Global Settings** by checking the option **New screens enabled by default**. The user that started MOMI, known as the "Default Security User" always has new screens enabled by default.*

Impacts in this version

None

MOMI Client

New Screens:

- **None**

New Features:

- Process Locator(small button with $) now includes a filter ability to limit displayed processes.
- **SubSystems / Logs / EMS EventBX / List-Import-Export**
  - When exporting records in 'Export for non-MOMI use' the user now has the option of the records either being in plain text or RichText format. Plain text is the default.

Bug Fixes:

- The Mouse Wheel Scrolling while viewing Memos and RichText documents was awkward. What felt like scrolling up would scroll down. Fixed.
- **Overview / EMS Msgs** and **SubSystems / Logs / EMS Log**
  - The default number of minutes in the past to start reading records (set in the appropriate 'Configure / Client / Single Screen') was not being honored. Fixed.
  - If the number of minutes in the past to start reading records put the date into the previous day the date was not set correctly. Fixed.
- **Process / Process Entity**
  - The Process name dropbox was not retaining the most recently used names. Fixed.
- **SubSystems / Logs / EMS Log**
  - Sometime after exporting then importing EventBX records the EMS Message Detail tab for EventBX would display the RichText formatting info along with the text. Fixed.
- **Files / Enscribe / File**
  - If the FileName box contained a Tab separating the list of files the tab was removed leaving the filenames crammed together causing an invalid filename format. Fixed.

Misc. Items:

- **None**

Known issues:

- **Systems / File Transfer / SFTP**
  - If file is transferred as a Key-Sequenced structured file sometimes SFTP will think the transfer is successful but the host file is left empty. A check is now done and an error shows if this happened. Note:

Sometimes making the 'REC LEN' even will succeed. Some failures are caused by unknown factors and seem to be a failure in the SFTP Server on the NonStop.

- **SubSystems / Logs / Log Viewer**
  - Feature is still under development and subject to change. Comments and suggestions are invited and welcome.
- **SubSystems / Discovery**
  - Feature is still under development and subject to change. Comments and suggestions are invited and welcome.

MOMI Server

New Features:

- None

Bug Fixes:

- The screen **Processes / Process Entity** was effectively limited to the first 47 characters of user entry in the Process field. The limit is now 400 characters as seen in the pop-up window when the **$** button is pressed.

Misc. Items:

- The listing of EMS collector names, such as found on the screen **SubSystems / Logs / EMS Msgs** under **Config** the push the **$** button, will no longer hang if the items are returned from the local system and an alternate EMS collector is suspended or otherwise unable to respond to a device inquiry request. Additionally, $Z0 ($Z Zero) is now filtered out of the results.

Known issues:

- History files HST02DB, HST03DB and HST04DB have a limit of approximately 600,000 processes per history period. If this limit reached the history consolidator server will log a message and discontinue the consolidation for the affected file (others preceding are not affected). Typically, this limit would only affect the HST04DB which has a default period of 1 day and only on a large system with a great deal of transient processes throughout the day.

MOMIFTP

- The screen is now more consistent in updating while an SFTP file transfer is taking place. Previously, the screen would seem to hang during the first file transfer.

- The SFTP transfer of the new CONFMOMI and OBYMOMI when not overwriting the current files (CONFMOMI0 and OBYMOMI0) would incorrectly send them as binary files.

ssMOMI

- None

MomiEmail

- None

SendMail

- None

IPCalc

- None

****

Release Package 5.89
Release Date (yyyy/mm/dd) 2017/12/18

Item	Version
Latest O/S tested	G06.32.01 - H06.29.00 J06.20.00 - L17.08.00
Client Version	5.89
Server Version (VPROC)	5.58 T0000G06___V5_58____2017_10_31
Buffer Version	Client 21.54 Server 21.54
History database	3.00
CONFMOMI	3.09
OBYMOMI	5.02
OBYCSQL	5.02
MomiFTP.exe	2.10
ssMOMI.scr	4.14
MomiEMail.exe	1.10
SendMail.exe	1.01
IPCalc.exe	1.3.3
Minimum server version to provide main line client functions	5.50
Oldest client version tested with server	5.37

NEW FEATURES / BUGS FIXED

(see MOMI HISTORY.RTF for previous versions)

Common new features (requires current client and server)

*If you are using Client Access, newly added screens in a MOMI release update are not available to users by default. This action may be changed on the screen **Configure / Client Access / Global Settings** by checking the option **New screens enabled by default**. The user that started MOMI, known as the "Default Security User" always has new screens enabled by default.*

Impacts in this version

None

MOMI Client

New Screens:

- **None**

New Features:

- **SubSystems / Logs / EMS Logs and**
  Configure / Client / Single Screen / SubSystems / Logs / EMS
  - Added config item ('Default Start Time') to set the default number of minutes prior to the current time to start reading EMS messages. The previous value and the current default is 30 minutes. Now can be 1 minute up to 720 minutes(12 hours). (For Gary W.)
- **Configure / Client / File Locations** and
  Configure / Client Access / User Define / Configure
  - Added Client Access Item to allow/prevent user from changing the Type of Help.
- **History / Chart** and
  Configure / Client / Single Screen / History
  - Added config items to set maximum number of chart time periods to put on screen at one time.

Bug Fixes:

- If the PC's clipboard was having difficulties then creating screenprints for the printer or to be attached to emails would cause the client to crash. Fixed.
- **Overview**
  - Top Processes would sometime be sorted in wrong order if the 'QTime' or 'RTO%' column were displayed and sorted and the sort was switched between that column and 'Busy%'. Fixed.
  - If 'EMS Msgs' were paused or stopped and the user switched to 'CPU Busy' then back the status would revert to actively receiving msgs. Fixed.
- **Files / File Explorer / OSS**
  - Double-clicking on a directory in the grid could cause the display to not show the files/dirs correctly on the treeview on the right.Fixed.
- **SubSystems / Logs / EMS Log**
  - Color coding was inconsistant and did not always set the color. Fixed.
- **SubSystems / Logs / EMS EventBX / List-Import-Export**
  - Importing formatted records could sometime stop prematurely. Fixed.
- **History / Chart**
  - When scrolling forward but not yet at the current time sometime the status would indicate it was in the 'Live Update ...' mode when it

sould still be 'Searching ...'. Fixed.

- **Configure / Client / Actions / MOMI.INI Actions**
  - 'Import entire MOMI.INI file' would not utilize the newly imported ini once the client was restarted. Fixed.

Misc. Items:

- **Overview** and **Processes / Top Processes**
  - Changed 'QTime' label to '$RQlen' to better reflect that value is average $Receive Queue Length. (for Barry P.)
- **Systems / File Transfer**
  - Right-click now available on all File Transfer grids to refresh just that grid.
  - Status line under all File Transfer grids to show errors.
- **Files / File Explorer**
  - Grid Tool button now visible to allow changing of font sizes.

Known issues:

- **Systems / File Transfer / SFTP**
  - If file is transferred as a Key-Sequenced structured file sometimes SFTP will think the transfer is successful but the host file is left empty. A check is now done and an error shows if this happened. Note: Sometimes making the 'REC LEN' even will succeed. Some failures are caused by unknown factors and seem to be a failure in the SFTP Server on the NonStop.
- **SubSystems / Logs / Log Viewer**
  - Feature is still under development and subject to change. Comments and suggestions are invited and welcome.
- **SubSystems / Discovery**
  - Feature is still under development and subject to change. Comments and suggestions are invited and welcome.

MOMI Server

New Features:

- None

Bug Fixes:

- None

Misc. Items:

- Added CONFMOMI keyword DISABLE-MEAS-RM-DISC. Usage of this keyword prevents the MOMI CPU collectors from using the procedure MEAS_READACTIVE_MANY_ for the DISC entity. Usage:

```
DISABLE-MEAS-RM-DISC  true | false

  True  = collector does not collect the DISC entity via
          MEAS_READACTIVE_MANY_.

  False = collector performs normal processing (the default).

  Example -
                              == do not collect DISC entity via
    DISABLE-MEAS-RM-DISC true  ==  MEAS_READACTIVE_MANY_
```

Known issues:

- History files HST02DB, HST03DB and HST04DB have a limit of approximately 600,000 processes per history period. If this limit reached the history consolidator server will log a message and discontinue the consolidation for the affected file (others preceding are not affected). Typically, this limit would only affect the HST04DB which has a default period of 1 day and only on a large system with a great deal of transient processes throughout the day.

MOMIFTP

- The screen is now more consistent in updating while an SFTP file transfer is taking place. Previously, the screen would seem to hang during the first file transfer.
- The SFTP transfer of the new CONFMOMI and OBYMOMI when not overwriting the current files (CONFMOMI0 and OBYMOMI0) would incorrectly send them as binary files.

ssMOMI

- None

MomiEmail

- None

SendMail

- None

IPCalc

- None

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Release Package 5.88
Release Date (yyyy/mm/dd) 2017/11/03

Item	Version
Latest O/S tested	G06.32.01 - H06.29.00 J06.20.00 - L17.08.00
Client Version	5.88
Server Version (VPROC)	5.58 T0000G06___V5_58____2017_10_31
Buffer Version	Client 21.54 Server 21.54
History database	3.00
CONFMOMI	3.09
OBYMOMI	5.02
OBYCSQL	5.02
MomiFTP.exe	2.09
ssMOMI.scr	4.14
MomiEMail.exe	1.10
SendMail.exe	1.01
IPCalc.exe	1.3.3
Minimum server version	

to provide main line client functions	5.50
Oldest client version tested with server	5.37

NEW FEATURES / BUGS FIXED

(see MOMI HISTORY.RTF for previous versions)

Common new features (requires current client and server)

*If you are using Client Access, newly added screens in a MOMI release update are not available to users by default. This action may be changed on the screen **Configure / Client Access / Global Settings** by checking the option **New screens enabled by default**. The user that started MOMI, known as the "Default Security User" always has new screens enabled by default.*

Impacts in this version

None

MOMI Client

New Screens:

- **None**

New Features:

- **Configure / Client / Single Screen / Files / SubVolume**

- Added default setting for 'No Detail'. (For Ken K.)
- If 'No Detail' is checked the detail columns are now not displayed.

Bug Fixes:

- **SubSystems / User Defined / Diagram**

- When a 'Data Object' was set to get its info from the current system it would not update the data. This was broken in version 5.83. Fixed.

- **Configure / Client Access / User Define**

- When a group was deleted any old members of that group were not converted into individuals but were left as members of a group that no longer existed. Now the users are converted into individual users with the security setting of the old group. Fixed.

Misc. Items:

- **Configure / Client Access / User Define**

- Layout changed to better represent hierarchy of items only allowed if Logged on.

Known issues:

- **Systems / File Transfer / SFTP**

- If file is transferred as a Key-Sequenced structured file sometimes SFTP will think the transfer is successful but the host file is left empty. A check is now done and an error shows if this happened. Note: Sometimes making the 'REC LEN' even will succeed. Some failures are caused by unknown factors and seem to be a failure in the SFTP Server on the NonStop.

- **SubSystems / Logs / Log Viewer**

- Feature is still under development and subject to change. Comments and suggestions are invited and welcome.

- **SubSystems / Discovery**

- Feature is still under development and subject to change. Comments and suggestions are invited and welcome.

MOMI Server

New Features:

- None

Bug Fixes:

- None

Misc. Items:

- Added CONFMOMI keyword DISABLE-MEAS-RM-DISC. Usage of this keyword prevents the MOMI CPU collectors from using the procedure MEAS_READACTIVE_MANY_ for the DISC entity. Usage:

```
DISABLE-MEAS-RM-DISC  true | false

  True  = collector does not collect the DISC entity via
          MEAS_READACTIVE_MANY_.

  False = collector performs normal processing (the default).

  Example -
                              == do not collect DISC entity via
    DISABLE-MEAS-RM-DISC true  ==  MEAS_READACTIVE_MANY_
```

Known issues:

- History files HST02DB, HST03DB and HST04DB have a limit of approximately 600,000 processes per history period. If this limit reached the history consolidator server will log a message and discontinue the consolidation for the affected file (others preceding are not affected). Typically, this limit would only affect the HST04DB which has a default period of 1 day and only on a large system with a great deal of transient processes throughout the day.

MOMIFTP

- The screen is now more consistent in updating while an SFTP file transfer is taking place. Previously, the screen would seem to hang during the first file transfer.

ssMOMI

- None

MomiEmail

- None

SendMail

- None

IPCalc

- None

****

Release Package 5.87
Release Date (yyyy/mm/dd) 2017/10/27

Item	Version

Latest O/S tested	G06.32.01 - H06.29.00 J06.20.00 – L17.08.00
Client Version	5.87
Server Version (VPROC)	5.57 T0000G06___V5_57____2017_10_19
Buffer Version	Client 21.53 Server 21.53
History database	3.00
CONFMOMI	3.09
OBYMOMI	5.02
OBYCSQL	5.02
MomiFTP.exe	2.08
ssMOMI.scr	4.14
MomiEMail.exe	1.10
SendMail.exe	1.01
IPCalc.exe	1.3.3
Minimum server version to provide main line client functions	5.50
Oldest client version tested with server	5.37

NEW FEATURES / BUGS FIXED

(see MOMI HISTORY.RTF for previous versions)

Common new features (requires current client and server)

*If you are using Client Access, newly added screens in a MOMI release update are not available to users by default. This action may be changed on the screen **Configure / Client Access / Global Settings** by checking the option **New screens enabled by default**. The user that started MOMI, known as the "Default Security User" always has new screens enabled by default.*

Impacts in this version

None

MOMI Client

New Screens:

- **None**

New Features:

- **Overview and 'Configure / Client / Client Access'**
  - Client Access can now enable and disable the Overview screen. The Overview tab will still be visible but the underlying Overview screen is not.
- **Overview**
  - 'CPU Info' button now shows Yellow or Red based on Percent of CIDs used and/or number of disk I/Os per second.
- **CPUs / CPU Info**
  - Added Column for 'Config CIDs' to show number of Measure CIDs configured.
- **Files / Enscribe**
  - Added AutoUpdate ability to all screens except View File. (For Gary B.)
- **Alarms / Define / Alarm**
  - Check Intervals now can be set to more than 23:59:59, new max is multiple days. The Display and entry files is now 'days hrs:mins:secs'.
- **Configure / Client / General**
  - Added Color Trigger setting for Measure CIDs.

Bug Fixes:

- AutoLogon no longer worked after version 5.85. Fixed.
- Logon on and off repeatedly on the same system would cause a 'Maximum Client Context Reached' error to show up in the EMS log. Fixed.
- **SubSystems / Logs / EMS Logs**
  - If an EMS message with a empty text field was received the Client might hang or crash. Fixed.
- **SubSystems / Logs / EMS EventBX / List-Import-Export**
  - If an Export of 'Non-formatted' records contained a very large record the Export would lock up the MOMI Client and cause a timeout with the Server. Fixed.
- **SubSystems / Logs / VHS Log**
- **SubSystems / Logs / MOMI Log**
  - The scroll back thru time did not longer work and the Scrollbar for horizontal scrolling does not work. Fixed.

- **SubSystems / Spooler / View Job**
  - If an Export to a text file failed the text file would be left open and the only way to close it was to stop the MOMI Client. Fixed.
- **Alarms/ Define / EMail Group**
  - Under certain situations when all EMail groups were deleted the client would crash. Fixed.
- **Configure / Client Access/ User Define**
  - Under certain situations when a user Group ID with members is deleted the client would crash. Fixed.

Misc. Items:

- Several small fixed/measures were added to improve data security.
- AutoUpdate processing was changed to prevent the next update request occurring while the records are still being received. Now the update timer starts when the last request record was received.
- Grids now 'Clear' very much faster with very large number of rows.
- Screens that have option Autoupdate checkboxes now the checkbox can only be changed when the screen is not actively updating its data.
- **Alarms / Define / Settings**
  - changed the Interval-type setting to allow entry of days as well as hrs:mins:secs.
- **Alarms / Define / Import**
  - For user created email import files the default setting for Extra Detail has been changed to true.

Known issues:

- **SubSystems / Logs / VHS Log' and**
- **SubSystems / Logs / MOMI Log**
  - The scroll back thru time no longer works.
- **Systems / File Transfer / SFTP**
  - If file is transferred as a Key-Sequenced structured file sometimes SFTP will think the transfer is successful but the host file is left empty. A check is now done and an error shows if this happened. Note: Sometimes making the 'REC LEN' even will succeed. Some failures are caused by unknown factors and seem to be a failure in the SFTP Server on the NonStop.
- **SubSystems / Logs / Log Viewer**
  - Feature is still under development and subject to change. Comments and suggestions are invited and welcome.
- **SubSystems / Discovery**
  - Feature is still under development and subject to change. Comments and suggestions are invited and welcome.

MOMI Server

New Features:

- None

Bug Fixes:

- A CPU up message no longer performs a check against an uninitialized process name. This could have caused a failure of the $MOMI process (however, no problem of this type had been reported).

Misc. Items:

- The default amount of time MOMI would wait before reporting information on screens such as **Files / DiskFile Entity** was reduced to 15 seconds from 30 seconds. The associated CONFMOMI keyword is IIT-NORMAL-STARTING.

- The default maximum number of TCP/IP bytes that may be written per second from the MOMI server to all PC Clients was adjusted based on processor type. The associated CONFMOMI keyword is TCPIP-WRITE-BYTES-SEC.

- The default encryption algorithm is now AES. The associated CONFMOMI keyword is ENCRYPTION-ALGORITHM.

- The number of partitions that could be returned on the screen **Files / Enscribe / File Detail** was increased to reflect the increased capabilities in H06.28/J06.17.

Known issues:

- History files HST02DB, HST03DB and HST04DB have a limit of approximately 600,000 processes per history period. If this limit reached the history consolidator server will log a message and discontinue the consolidation for the affected file (others preceding are not affected). Typically, this limit would only affect the HST04DB which has a default period of 1 day and only on a large system with a great deal of transient processes throughout the day.

MOMIFTP

- Several small fixed/measures were added to improve data security.

ssMOMI

- None

MomiEmail

- None

SendMail

- None

IPCalc

- None

****

Release Package 5.86
Release Date (yyyy/mm/dd) 2017/08/29

Item	Version
Latest O/S tested	G06.32.01 - H06.29.00 J06.20.00 - L17.02.00
Client Version	5.86
Server Version (VPROC)	5.56 T0000G06___V5_56____2017_08_22
Buffer Version	Client 21.51 Server 21.51
History database	3.00

CONFMOMI	3.09
OBYMOMI	5.02
OBYCSQL	5.02
MomiFTP.exe	2.07
ssMOMI.scr	4.14
MomiEMail.exe	1.10
SendMail.exe	1.01
IPCalc.exe	1.3.3
Minimum server version to provide main line client functions	5.33
Oldest client version tested with server	5.33

NEW FEATURES / BUGS FIXED

(see MOMI HISTORY.RTF for previous versions)

Common new features (requires current client and server)

*If you are using Client Access, newly added screens in a MOMI release update are not available to users by default. This action may be changed on the screen **Configure / Client Access / Global Settings** by checking the option **New screens enabled by default**. The user that started MOMI, known as the "Default Security User" always has new screens enabled by default.*

Impacts in this version

None

MOMI Client

New Screens:

- **None**

New Features:

- **Systems/ File Transfer**
  - added right-click menu items for NSK and OSS files to View only.
- **Overview**
  - 'CPU Hist' - Added right-click popup menu to allow autosize of CPU history maximum value.
  - 'EMS Msgs' - Added right-click popup menu to allow selecting a Client filter. Also added ability to set default Client filter in 'Configure/Client/Single Screen/SubSystems/Logs/Logs:EMS'. (for Vikas K.)
- **Configure / Client / General**
  - Added setting for ScreenSaver to enable the screensaver again after a period of inactivity. This time may be different from the time the PC's screensaver timer has set. (For Vikas K.)

Bug Fixes:

- Client version 5.85 introduced a bug that prevented Users defined under Client Access as 'Security Users' from updating Client Access records. Fixed.
- If the client was ran in a script/function mode (runtime param of 'script-????' or 'function-????' the client would crash. Fixed
- **SubSystems / Logs / EMS EventBX / Define**
  - If the Event number entered was below the minimum (-32767) or greater than the maximum (32767) the record would save anyway with the value changed to the Min or max value. Now the error is detected and the user is warned before the record is saved. Fixed.
- **SubSystems / Logs / EMS EventBX / List-Import-Export**
  - If a EventBX record was saved then and Export was immediately attempted the client would crash. Fixed.

Misc. Items:

- Changed default grid font size from 8 to 10 to make grids easier to see.
- **Files / Enscribe / File and**
- **Configure / Client / Single Screen / Files / File**
  - New config setting 'Prevent Duplicate Records' to prevent files from being listed multiple times if the file is listed multiple times in the File Name selector (i.e. +$DISK.SUB.* +$DISK.SUB.A*). If

Checked the file will only display in the Grid a single time. (For Gary B.)

- **SubSystems / Logs / EMS Log**
  - Changed Export text from 'Export to PC Text File' to 'Create PC Text File Report'.
  - Added Export 'Export to PC Text File' to export data only with tabs between fields.
  - Added Export 'Export to Delimited File' to export header and data with delimiter between fields.
  - The **EMS Filters** criteria display order changed to:
    Exclude if ANY
    Exclude if ALL
    Include if ALL
    Include if ANY

    This change represents the order of evaluation. As soon as a sections criterion matches, no further evaluation is performed.
- **SubSystems / Logs / LogViewer**
  - Improved speed on displaying records using delimiter characters.
- **Alarms / Define / Alarms**
  - The **EMS Set** and **EMS Clear** criteria display order changed to:
    Exclude if ANY
    Exclude if ALL
    Include if ALL
    Include if ANY

    This change represents the order of evaluation. As soon as a sections criterion matches, no further evaluation is performed.

Known issues:

- **Systems / File Transfer / SFTP**
  - If file is transferred as a Key-Sequenced structured file sometimes SFTP will think the transfer is successful but the host file is left empty. A check is now done and an error shows if this happened. Note: Sometimes making the 'REC LEN' even will succeed. Some failures are caused by unknown factors and seem to be a failure in the SFTP Server on the NonStop.
- **SubSystems / Logs / Log Viewer**
  - Feature is still under development and subject to change. Comments and suggestions are welcome.
- **SubSystems / Discovery**
  - Feature is still under development and subject to change. Comments and suggestions are welcome.

MOMI Server

New Features:

- Added support for Guardian unstructured file for **Logs / LogViewer**.

Bug Fixes:

- The client will no longer report "Resources were released..." errors for the screen **Logs / LogViewer** if a) the underlying file was viewed anywhere except in live mode and b) no forward/backward button was pushed for over 3 minutes.

Misc. Items:

- Revised the logic used in the alarm **EMS / User defined**. The code now supports specifying only the Severity for Exclude if ALL and Include if ALL. Previously, text was also required to be present to trigger checking.

Known issues:

- History files HST02DB, HST03DB and HST04DB have a limit of approximately 600,000 processes per history period. If this limit reached the history consolidator server will log a message and discontinue the consolidation for the affected file (others preceding are not affected). Typically, this limit would only affect the HST04DB which has a default period of 1 day and only on a large system with a great deal of transient processes throughout the day.

MOMIFTP

- None

ssMOMI

- None

MomiEmail

- None

SendMail

- None

IPCalc

- None

****

Release Package 5.85
Release Date (yyyy/mm/dd) 2017/07/14

Item	Version
Latest O/S tested	G06.32.01 - H06.29.00 J06.20.00 - L17.02.00
Client Version	5.85
Server Version (VPROC)	5.55 T0000G06___V5_55____2017_07_10
Buffer Version	Client 21.51 Server 21.51
History database	3.00
CONFMOMI	3.09
OBYMOMI	5.02
OBYCSQL	5.02
MomiFTP.exe	2.07
ssMOMI.scr	4.14
MomiEMail.exe	1.10
SendMail.exe	1.01
IPCalc.exe	1.3.3
Minimum server version to provide main line client functions	5.33

```
tedest client version
tested with server      5.33
```

NEW FEATURES / BUGS FIXED

(see MOMI HISTORY.RTF for previous versions)

Common new features (requires current client and server)

*If you are using Client Access, newly added screens in a MOMI release update are not available to users by default. This action may be changed on the screen **Configure / Client Access / Global Settings** by checking the option **New screens enabled by default**. The user that started MOMI, known as the "Default Security User" always has new screens enabled by default.*

Impacts in this version

None

MOMI Client

New Screens:

- **SubSystems / Logs / Log Viewer**
  - Screen to allow viewing of OSS log files. This screen is still in Development and comments are welcome.
- **Alarms / List / Group List**
  - Screen allows users to view Alarm EMails, Groups and members of groups and if authorized it allows them to drag-and-drop EMails into and out of groups.

New Features:

- **CPUs / CPU Info**
  - Added column for IPU busy %. click [+]<Busy> to expand list and [-]<Busy> to contract list.
  - Added column for AS (IPU Affinity Balancing Soft).
  - Added column for AD (IPU Affinity Balancing DP2).
- **Processes / Process Entity**
  - Added 14 new fields:

    serverclass name Total interrupts mainstack size
    mainstack limit privstack size privstack limit
    heap32 size heap32 limit heap64 size
    heap64 limit globals size swapspace
    TLEs ipu affinity class
- **Processes / Process Detail**
  - Added 13 new fields:

    serverclass name TLEs Total interrupts
    mainstack size mainstack limit privstack size
    privstack limit heap32 size heap32 limit
    heap64 size heap64 limit globals size
    swapspace
- **SubSystems / Logs / EMS Log**
  - Added ability to choose how non-printable characters are displayed

    1) Delete = remove the character
    2) Replace ~ = replace the character with a ~
    3) Replace [###] = replace the character with the value of the character

    The settings are also available on the 'Configure / Client / Single Screen / Logs / EMS Logs' and on the 'Configure / Client / Single Screen / Overview / EMS Display' (For Gary B.)
- **SubSystems / Spooler / Jobs**
  - Made changes to improve usability for Job Search. (For Gary B.)

- **Configure / Client Access / User List**
  - Added drag-and-drop, if authorized, to allow Users to be dragged from Indicidual User IDs to Group IDs to make them a member of that group.
  - Added drag-and-drop, if authorized, to allow Users to be dragged from Members of Groups to Individual User IDs to remove them from a group and make them an Individual.
- **Configure / Reference / Errors / Codes**
  - Added ability to search thru descriptions for text.

Bug Fixes:

- Grid filters once they displayed any error would not clear the error until the client was restarted. Fixed.
- **Overview**
  - EMS message text with embedded nulls would stop at the null and not display any data following. Fixed.
- **Processes / Process Entity**
  - Some newer systems that allow a process to be larger than 2.1 GB would cause the client to crash. Fixed.
- **SubSystems / Logs / EMS Log**
  - EMS message text with embedded nulls would stop at the null and not display the following any data following. Fixed.
- **SubSystems / Logs / EventBX / List-Import-Export**
  - Export would fail if any individual record was too large (over 30K). Fixed.
- **SubSystems / TCP/IP / Route**
  - Sometimes when a Route is dynamically created the Route name is longer than SCF will allow. SCF only allows 8 character name but dynamic name can be upto 16 character. MOMI was only displaying the first 8 characters. Fixed.
- **SubSystems / Expand**
  - Sometime with fast switching between Expand pages the client would crash. Fixed.
- **SubSystems / User Defined**
  - EMS message text with embedded nulls would stop at the null and not display any data following. Fixed.

Misc. Items:

- Made some improvements in the OSS path/file picker to improve usability.

Known issues:

- **Systems / File Transfer / SFTP**
  - If file is transferred as a Key-Sequenced structured file sometimes SFTP will think the transfer is successful but the host file is left empty. A check is now done and an errorshows if this happened. Note: Sometimes making the 'REC LEN' even will succeed. Some failures are caused by unknown factors and seem to be a failure in the SFTP Server on the NonStop.
- **SubSystems / Logs / Log Viewer**
  - Feature is still under development and subject to change. Comments and suggestions are welcome.
- **SubSystems / Discovery**
  - Feature is still under development and subject to change. Comments and suggestions are welcome.

MOMI Server

New Features:

- CPU level affinity balancing info provided for screen **CPUS / CPU Info.**
- Support for screen **SubSystems / Logs / LogViewer.**
- Additional fields added for screen **Processes / Process Detail & Process Entity** (newer versions of MEASURE required).

Bug Fixes:

- The computation for TLEs is now correct when it comes from the MEASURE process entity. Previously the value usually reported zero.
- The MOMI server handling alarms for EMS / User defined no longer crashes after a CPU failure. This problem was introduced in version 5.54 of the server.

Misc. Items:

- Longer Route names provided for screen **SubSystems / TCP/IP / Route.**
- During a CPU failure MOMI no longer generates messages in the MOMI Log every 30 seconds trying to restart the collector. Now MOMI checks for the CPU being up prior to restarting the collector. Some time back MOMI was changed to not rely on a CPU up message to restart its CPU collect as this message was not always delivered.
- The advanced CONFMOMI keyword **HIGHEST-RUNNING-CPU** now prevents a collector from being started in a higher number CPU. Previously, MOMI still started collectors in all CPUs if they were present. This keyword is normally used for testing and not by the customer.

Known issues:

- History files HST02DB, HST03DB and HST04DB have a limit of approximately 600,000 processes per time period. If this limit reached the history consolidator server will log a message and discontinue the consolidation for the affected file (others preceding are not affected). Typically this limit would only affect the HST04DB which has a default time period of 1 day and only on a large system with a great deal of transient processes throughout the day.

MOMIFTP

- None

ssMOMI

- None

MomiEmail

- None

SendMail

- None

IPCalc

- None

****

Release Package	5.83
Release Date (yyyy/mm/dd)	2017/03/27

Item	Version
Latest O/S tested	G06.32.01 - H06.29.00 J06.20.00 - L06.05.00 (L16.05.00)
Client Version	5.83
Server Version (VPROC)	5.54 T0000G06___V5_54____2017_03_27
Buffer Version	Client 21.50 Server 21.50
History database	3.00
CONFMOMI	3.09
OBYMOMI	5.02
OBYCSQL	5.02
MomiFTP.exe	2.07
ssMOMI.scr	4.14
MomiEMail.exe	1.10
SendMail.exe	1.01
IPCalc.exe	1.3.3
Minimum server version to provide main line client functions	5.33
Oldest client version tested with server	5.33

NEW FEATURES / BUGS FIXED

(see MOMI HISTORY.RTF for previous versions)

Common new features (requires current client and server)

*If you are using Client Access, newly added screens in a MOMI release update are not available to users by default. This action may be changed on the screen **Configure / Client Access / Global Settings** by checking the option **New screens enabled by default**. The user that started MOMI, known as the "Default Security User" always has new screens enabled by default.*

Impacts in this version

None

MOMI Client

New Screens:

- **None**

New Features:

- Grids now have a tab on the Tools popup to search thru column labels and the hint for those columns for text. This will allow the user to locate a column that deals with a certain item when there are many columns and the label text might not be enough to identify it.
- **Processes / Last Start/Stop**

- Added 2 new screen display toggle states. To existing Split Vertically and Split Horizontally added Started only and Stopped only.

- **SubSystems / Logs / EMS Logs**
  - Config popup for locating collector names('$' button) now allows for selection of remote systems if the server is version 5.54 or later. (For Don L.)
- **SubSystems / Logs / VHS Log** and **SubSystems / Logs / MOMI Log**
  - when Pause was pressed then resume only the next few records would display. Fixed.
- **SubSystems / Spooler / Jobs**
  - Added right-click action to allow search thru all selected jobs for text within that job. The user may then click on the list of jobs that contain that text and jump to view that job. The User must be logged on and have authority to view the job. (For Gary B.)
- **SubSystems / Spooler / View Job** and **Files / Enscribe / View File**
  - Added ability to do searches that are either use wildcard (default) or not.
  - Added ability to do searches that are either case sensitive or not(default).
  - Added ability to do searches that either contained within the line(default) or matches the whole line.
  - Added ability to set search defaults in 'Configure/Client/Single Screen/Files' and 'Configure/Client/Single Screen/SubSystems/Spooler/View jobs'

Bug Fixes:

- **Systems / File Transfer**
  - If Client Access blocked a transfer type (FTP, SFTP, or MFTP) and the 'Quit' button was pressed the blocked type would become available. Fixed.
- **Systems / File Transfer / FTP**
  - If file was transferred as a structured file the 'Auto Size' calculation for extents was not taking into account that the Record Size and Block Size could undersize the file because of the amount of 'slack' (i.e. a 4095 block can only hold a single 2048 record with the extra 2047 bytes being wasted). Calculation now takes into account the 'slack'. Fixed.
- **Systems / File Transfer / SFTP**
  - If file was transferred as a structured file sometimes SFTP would think the transfer was successful but the host file was left empty. A check is now done and an error shows if this happened. Note: Sometimes making the 'REC LEN' an even number will succeed. Some failures are caused by unknown factors and seem to be a failure in the SFTP Server on the NonStop. Fixed.
  - Uploaded edit file (code 101) would have extra CR at end of every line. Fixed.
- **Files / SQL/MP / Statement**
  - Once the Config button was pressed the config popup could not be closed. Fixed.
- **SubSystems / Logs / EMS Logs**
  - If 'Reverse scrolling' was set and 'Single Line Limit text width

display' was not set the last record (bottom) could be partially cut off. Fixed.

- **SubSystems / Expand / Diagram**
  - Sometime when the cursor was moved off the MOMI client after scrolling the mouse around the Diagram the client would crash. Fixed.
- **Alarms / Define / Alarm**
  - On Alarms with no Alarm settings except Sound the Sound tab would not display. Fixed.
- **Alarms / Define / Email**
  - If an Email record was deleted, any group that contained that email would still have that record in its database. No Emails would be sent but the extra record in the database was not needed. Fixed.
- **Configure / Server / Trace Log**
  - Scrolling the trace log all the way to the right would cause the client to crash. The bug was introduced in the 5.81 version of the client. Fixed.

Misc. Items:

- Made internal changes to allow the client settings INI fil(MOMI.INI) used to store client settings so it could be larger than 64K.
- Display if History and/or Alarms are enabled in the server on the Server Info screen and in the System Info diagnostics text file.

Known issues:

- 'Systems / File Transfer / SFTP'
  - If file is transferred as a Key-Sequenced structured file sometimes SFTP will think the transfer is successful but the host file is left empty. A check is now done and an error shows if this happened. Note: Sometimes making the 'REC LEN' even will succeed. Some failures are caused by unknown factors and seem to be a failure in the SFTP Server on the NonStop.
- The 'SubSystems / Discovery' screen is still under development and subject to change. Comments and suggestions are welcome.

MOMI Server

New Features:

- Added function to list Expand node names.

- Additional guardian file attribute settings now available when writing to Guardian files. Used in MOMI file transfers.

- On TNS/X Systems the O/S version now reports the SUT version.

- EMS and MOMI log messages are now generated if the SMTP server for alarm emails is processing slowly. Log messages are now generated once a minute if MOMI's internal SMTP queue reaches or exceeds 50%, a single message once the queue drops below 50% and a final single message when the queue reaches zero.

Bug Fixes:

- Corrected a security issue with MFTP file transfers.

- Corrected an issue that the alarm **EMS / User defined** with auto delete

enabled could a) omit some processing, or b) react to another alarm definition when a heavy stream of EMS messages resulted in continuous processing and/or the SMTP server was backed up.

Misc. Items:

- Processes started by MOMI servers, such as EMSDIST, are now tracked and explicitly stopped prior to a server self-stopping. The intent is to close a potential window where and EMSDIST server could remain running if the starting MOMI server stops after the write of the startup message and before the actual open for I/O's. Additionally, an explicate stop on an EMSDIST process is issued if an error occurs during the process of starting it up.

- Additional tool-tip information for alarm **CPU / Busy percent with priority threshold**.

- Eliminated unneeded updates to client when **EMS / User defined alarms** are processed and automatic deletes are enabled.

- Messages written to the LOG01DB file (i.e. MOMI log) are now displayed more quickly on the client. Previously, updates were not displayed while new messages were written to the file (4 second idle time required before display).

Known issues:

- History files HST02DB, HST03DB and HST04DB have a limit of approximately 600,000 processes per time period. If this limit reached the history consolidator server will log a message and discontinue the consolidation for the affected file (others preceding are not affected). Typically this limit would only affect the HST04DB which has a default time period of 1 day and only on a large system with a great deal of transient processes throughout the day.

MOMIFTP

- Text wording changes from "update" to "replace" when performing a New Install.

ssMOMI

- None

MomiEmail

- None

SendMail

- None

IPCalc

- None

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Release Package 5.82
Release Date (yyyy/mm/dd) 2016/11/09

Item	Version
Latest O/S tested	G06.32.01 - H06.29.00 J06.20.00 - L06.05.00 (L16.05.00)
Client Version	5.82
Server Version (VPROC)	5.51 T0000G06___V5_51____2016_11_08
Buffer Version	Client 21.48 Server 21.48
History database	3.00
CONFMOMI	3.09
OBYMOMI	5.02
OBYCSQL	5.02
MomiFTP.exe	2.06
ssMOMI.scr	4.14
MomiEMail.exe	1.10
SendMail.exe	1.01
IPCalc.exe	1.3.3
Minimum server version to provide main line client functions	5.33
Oldest client version tested with server	5.33

NEW FEATURES / BUGS FIXED

(see MOMI HISTORY.RTF for previous versions)

Common new features (requires current client and server)

*If you are using Client Access, newly added screens in a MOMI release update are not available to users by default. This action may be changed on the screen **Configure / Client Access / Global Settings** by checking the option **New screens enabled by default**. The user that started MOMI, known as the "Default Security User" always has new screens enabled by default.*

Impacts in this version

None

MOMI Client

New Screens:

- **None**

New Features:

- **Configure / Diagnostics / Client**
  - If a client communication error occurs, the full error text is now displayed.

Bug Fixes:

- The informational message showing that ALL alarms were turned off (temporarily or permanently) was not displayed. Now, on CPU chart at the top of the screen is replaced with a notice. Additionally, a notice is shown on the screen **Alarms / Active Alarms**. Fixed.
- Alarm Popups would sometimes cause the client to crash and not always correctly display after one had been acknowledged. Fixed.
- A File 'FUP DUP' command would dup the file to the default $Vol.SubVol

of the MOMI object if the $Vol.SubVol of the destination was not set. Fixed in the Server and Client.

- **Systems / File Transfer / FTP**
  - Using FTP to transfer a file from the PC to the NonStop as a structured file would insert extra records for source lines over 239 characters long. Fixed.

Misc. Items:

- **None**

Known issues:

- The 'Systems / File Transfer' MFTP cannot transfer PC->NSK to a structured files format.
- The 'SubSystems / Discovery' screen is still under development and subject to change. Comments and suggestions are welcome.

MOMI Server

New Features:

- None

Bug Fixes:

- The alarm **Process / Memory leak** now correctly computes the percent of memory increase. Previously, a process with unchanged memory usage would internally compute as 100%. Also, the displayed alarm message now shows the base and current memory usage of the computation.

Misc. Items:

- Support for FUP DUP now applies the logged in user's default volume/subvolume to the source file, and then applies a default volume/subvolume from the source to the destination. Previously, if the destination file lacked volume/subvolume qualification the file would copy to the MOMI subvolume.

Known issues:

- History files HST02DB, HST03DB and HST04DB have a limit of approximately 600,000 processes per time period. If this limit reached the history consolidator server will log a message and discontinue the consolidation for the affected file (others preceding are not affected). Typically this limit would only affect the HST04DB which has a default time period of 1 day and only on a large system with a great deal of transient processes throughout the day.

MOMIFTP

- None

ssMOMI

- None

MomiEmail

- None

SendMail

- None

IPCalc

- None

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Release Package	5.81
Release Date (yyyy/mm/dd)	2016/10/21

Item	Version
Latest O/S tested	G06.32.01 - H06.29.00 J06.20.00 - L06.05.00 (L16.05.00)
Client Version	5.81
Server Version (VPROC)	5.50 T0000G06___V5_50____2016_09_13
Buffer Version	Client 21.48 Server 21.48
History database	3.00
CONFMOMI	3.09
OBYMOMI	5.02
OBYCSQL	5.02
MomiFTP.exe	2.06
ssMOMI.scr	4.14
MomiEMail.exe	1.10
SendMail.exe	1.01
IPCalc.exe	1.3.3
Minimum server version to provide main line client functions	5.33
Oldest client version tested with server	5.33

NEW FEATURES / BUGS FIXED

(see MOMI HISTORY.RTF for previous versions)

Common new features (requires current client and server)

*If you are using Client Access, newly added screens in a MOMI release update are not available to users by default. This action may be changed on the screen **Configure / Client Access / Global Settings** by checking the option **New screens enabled by default.** The user that started MOMI, known as the "Default Security User" always has new screens enabled by default.*

Impacts in this version

None

MOMI Client

New Screens:

- **None**

New Features:

- If 'Disable all Action Confirmations' is not checked, before any file is saved on the PC it is now checked to see if that filename already exists. If it does the user is allowed to overwrite, change name or not save the file. (for Gary B.)
- **CPUs / CPU Info**

- Added right-click menu on columns for 'Elapsed Time since Load' and 'Time CPU last loaded' to jump to EMS logs with time set at Load Time. User can then watch what happened at coldload or back up as long as needed to check what happened before Cold load.

· **Alarms / Define / Alarm**
- For type 'EMS', subtype 'User defined' added to 'Limit by Type' the ability to make a line a comment so it will not be used in setting the alarm. Also added display of selected line and if selecting a limit already set the limit will be removed. (for Vikas K.)

Bug Fixes:

· **Systems / File Transfer**
- Under some rare circumstances the Drag and drop would pick the wrong file to transfer. Fixed.
- If a non-ascii file was PC->NSK transfered as a ascii file and the non-ascii file contained tab characters the client would crash. Fixed.

· **Systems / Probe**
- Current system was not being checked for alarms unless it was checked in the 'Select Systems'. Now if current system is being displayed it will also be checked for alarms. Fixed.

· **SubSystems / Logs / EMS Log**
- Process locator ('$'-button) 'Add Name' was mistakenly enabled. Fixed.

· **Alarms / Active**
- The right-click actions to temporarily turn on/off and alarm and to delete an EMS alarm were not working and returned an 'Item not found' error. This bug was introduced in the 5.80 version of the client. Fixed.

· **Configure / Client Access / Global Settings'** and

· **Configure / Client Access / User Define / Systems**
- Enabling/disabling the FTP/SFTP/MFTP checkboxes when the overall File Transfer was checked/unchecked was inconsistant and confusing. Fixed.

Misc. Items:

· Diagnostic and Config info file now contains file versions of MOMI installed programs.

· Made some changes to Autoupdate for the screens that allow setting and clearing autoupdate.
- if the screen normally is in autoupdate mode the checkbox was moved to its config popup.
- if the screen is not normally in autoupdate mode it is displaying on the screen.
- if autoupdate is unchecked during a collection no more records will display so the screen will not update with new records and replace any on screen
- Checking the autoupdate will no longer cause the request to be sent, you must then press the request button.

· **Files / DiskFile**
- Prevented Physical Reads and Writes from displaying a negative number if the Measure returned values are incorrect.

· **Configure / Diagnostics / Client**
- Now displays when connection to a system occurs and when a communication error occurs.

· **Configure / Reference / BlackWood Systems**
- Removed button to jump to BlackWood Forum.

Known issues:

- The **Systems / File Transfer** MFTP cannot transfer PC->NSK to a structured files format.
- The **SubSystems / Discovery screen** is still under development and subject to change. Comments are welcome!

MOMI Server

New Features:

- Data retrieval from MEASURE is now more efficient by using MEAS_READACTIVE_MANY_ where possible.

- The default volume/subvolume and initial OSS directory are now made available to the client.

- Expand line "not ready" error code is now displayed on an active alarm.

- New alarms:
  Expand / Line quality
  DiskFile / Broken or Corrupt

- Server now provides a 'bulk access' capability for the MEASURE entity File and is accessible on the screen **Subsystems / Discovery**. This capability prevents the internal need to start and stop measurements for MEASURE data. Note that at this time MEASURE does not report an entity accessed in this manner as residing on a remote node (in other words the node name is not returned).

- Support added binary reading/writing of Guardian files. Used in MOMI file transfers.

- $RECEIVE queue length now reported as a decimal value, instead of a whole number, on newer platforms where available in MOMI.

- Support for the new screen **Expand / System Entity** (newer platforms only).

- MOMI history Process now reports the fields (some fields not reported except on latest O/S releases):
  Ready-time
  Launches
  Recv-Qtime
  TLEs
  Begin-Trans
  Abort-Trans

- The MEASURE entity Disk Open now reports a 32-bit OCB number on the latest O/S releases.

Bug Fixes:

- The server no longer returns the message "Expected initial message from client" when the CONFMOMI keyword CLIENT-INITIAL-MSG was set to true.

- The alarm **DiskFile / File existence** (and others) with an OSS path name would not function correctly with a length greater than 47 characters. The

internal limit was raised to 200 characters.

- The default file extents for CNF01DB and LOG01DB were increased.

- A small memory leak was corrected in the reading of MOMI history.

- Expand alarms are now removed when a line is removed.

- The computation and display of $RECEIVE Queue Time is now correct on the Overview screen and changed to 2 decimal positions from 3.

- The listing of locks now displays the logical filename instead of the internal "funny" name if the file is on a virtual disk.

- Corrected the computation of Ready Time Only as seen on the screen **Processes / Process Detail**.

- Server no longer reports "MEASURE is DOWN" under J06.20. Same issue would also be corrected under L16.05 (system with this release is not yet available).

- Changes were made to PING processing to support prevent premature terminations of Trace Route in the client (client also needed changes as well).

- TCP/IP screens no longer cause a high CPU utilization if another status request is in progress. Internally, SPI was returning an error ZCOM^ERR^CMD^IN^PRGRSS (-40) which was considered retry-able by MOMI. Effectively, the NonStop TCP/IP subsystem will only handle one command at a time so now the 'duplicate' command will terminate.

- Certain server generated error messages displayed by the client will now properly display a # sign in the file name instead of a number.

- The screen **SQL/MP / Catalog** no longer returns an error -8421 on TNS/X Systems.

Misc. Items:

- The initial memory allocation of certain MOMI processes was increased to help prevent additional memory allocations and fragmentation.

- The MEASURE entity FILE is now added to the initial and persistent measurement started by MOMI. The MOMI screen Overview / CPU Info / Free CIDs should be checked to insure sufficient MEASURE resources are available.

- All MEASURE counter access now uses the ZMS format.

- The internal format for the date in an SMTP message (i.e. email) was altered to prevent it from displaying as 12/31/1969 on devices running Android 6.

- Processes with DDL's of a zero length no longer cause an error 13 with ProcessH measurements.

- Legacy code from K series was removed. MOMI executable will now only operate on S-Series or later systems.

- Changes in computations in the MOMI CPU collectors should result in more values displaying as whole numbers, such as 2.00 instead of 1.99.

- The TCP/IP address is now displayed, if available, with the error message "Error on listen socket". The idea is to display the address that caused the error.

- The screens Subsystems / TCP/IP now display additional error information if the open to $ZNET fails.

- Additional messages are logged with MEASURE error codes in the event measurements cannot be started.

- System types in Expand now report NS-X for type 11 CPUs.

- TNS/X systems could temporarily report very high CPU utilization in MOMI. This was due to code executing so quickly that a MOMI 'time period' could complete before the start of the next period. Logic was revised to help prevent this except in the case of a change of the system time.

Known issues:

- History files HST02DB, HST03DB and HST04DB have a limit of approximately 600,000 processes per time period. If this limit reached the history consolidator server will log a message and discontinue the consolidation for the affected file (others preceding are not affected). Typically this limit would only affect the HST04DB which has a default time period of 1 day and only on a large system with a great deal of transient processes throughout the day.

MOMIFTP

- None

ssMOMI

- None

MomiEmail

- None

SendMail

- None

IPCalc

- None

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Release Package 5.80
Release Date (yyyy/mm/dd) 2016/09/14

Item	Version

| ---- | ------- |
Latest O/S tested	G06.32.01 - H06.29.00 J06.20.00 - L06.05.00 (L16.05.00)
Client Version	5.80
Server Version (VPROC)	5.50 T0000G06___V5_50____2016_09_13
Buffer Version	Client 21.48 Server 21.48
History database	3.00
CONFMOMI	3.09
OBYMOMI	5.02
OBYCSQL	5.02
MomiFTP.exe	2.06
ssMOMI.scr	4.14
MomiEMail.exe	1.10
SendMail.exe	1.01
IPCalc.exe	1.3.3
Minimum server version to provide main line client functions	5.33
Oldest client version tested with server	5.33

NEW FEATURES / BUGS FIXED

(see MOMI HISTORY.RTF for previous versions)

Common new features (requires current client and server)

*If you are using Client Access, newly added screens in a MOMI release update are not available to users by default. This action may be changed on the screen **Configure / Client Access / Global Settings** by checking the option **New screens enabled by default**. The user that started MOMI, known as the "Default Security User" always has new screens enabled by default.*

Impacts in this version

None

MOMI Client

New Screens:

- **SubSystems / Expand / System Entity**
  - Added screen and grid showing the Expand System data retrieved (like Link-Time) from the Measure System Entity. This screen shows info from current system to other systems in the Expand network. Screen also has the ability to display History records for the Expand System Entity. (For Diana K.)

New Features:

- Changed Logon to MOMI password length from 25 characters to 64 characters. (For Gary B.) Note that a password change from within the MOMI client still has a limit. The "<old password>,<new password>,<confirm password>" must be less than 100 characters. This limit will be addressed in an upcoming version of MOMI.
- **Systems / Probe**
  - Added display to show what CPUs are down, meas down, cpu hung, or collector down on 'Base', 'All Sys', '1-4 Sys', and Sys Line' charts.

- **Systems / File Transfer**
  - Added new type of File Transfer called MFTP (Momi File Transfer Protocol). This new feature transfers files to other systems that have the MOMI Server running on them. Even though it looks like the transfer is FTP/SFTP the data is sent between the PC and the Host using MOMI messages so all data is encrypted using the Data encryption method set on the MOMI Server. It allows secure transfers to systems that do not have SFTP setup and also shows all info about the files on the NonStop that are not included on a SFTP transfer (i.e. File Code and File Open state). NOTE: currently MFTP cannot transfer to a structured files format. At this time only Edit and unstructured files are supported.
- **SubSystems / Expand / Diagram**
  - Added new Label type selection of 'Link-Times'. If additional systems are selected to be probed for Expand info the Link-Times from that systems point of view are included on the diagram. (For Diana K.)
- **History / Export**
  - Added Data Type of 'Expand' to export Expand System entity records.
  - Process Export now includes: ready_time, launches, recv_qtime, tles ,begin_trans, and abort_trans.
- **Alarms / Define / EMail Group**
  - Alarm EMail groups now can be created that contained no emails and added the ability to delete all EMails within a group. This will allow creating a group before the emails are created.
- **Configure / Client / Single Screen / SysSystems / Logs / EMS**
  - Added ability to set default EMS log scroll speed. (For Gary B.)
- **Configure / Client / Single Screen / Alarms**
  - Added ability display to an alarm popup when MOMI detects a new alarm. (For Chi-Ming C.)

Bug Fixes:

- Some monitor setups with a portrait layout and a maximized client could hide some of the screen tabs behind the Backward/Forward buttons. Fixed.
- If the TCP/IP connection dropped (for example the MOMI server was stopped and restarted) on reconnect the maximum number of known CPUs was not cleared. This could result in areas of the screen not clearing if the number of CPUs was reduced. It showed up on almost all CPU screens. Fixed.
- All grids had a bug if a column was filtered by a number column then sorted by that column then another column was filtered the sort/filter popup would remain on the screen. Fixed.
- All grids had a bug in the logic that calculated the column width. This caused excessive processing when the font was changed from the default to another font or font size. It became noticeable when grids contained 10,000 or more rows. This fix also dramatically sped up changing the font within a grid that already contained data and clearing data. Fixed.
- **Systems / File Transfer**
  - If the PC file had an extension of a number other than 101 it would not be sent Binary as it should have. Fixed.
  - When the user typed in the Host Name/Address, after the 1st character the cursor moved to the User Id filed. Fixed.
  - If transferring a file from PC to OSS or Windows the file name had a length limit of 8 characters. Now only a NSK transfer limits file name length to 8. Fixed.
- **Files / Explorer / NSK**
  - After Editing a NSK file on the PC, the confirm message displayed the

Vol.SubVol name twice in the filename. Fixed.

- **SubSystems / TCP/IP / Status**
  - If the client was unable to get responses from one or more of the selected systems the Screen would keep requesting even if 'AutoUpdate' was off. Also every failure would create a new failure message row on the grid. Fixed.
- **SubSystems / Expand / Diagram**
  - Found Bug causing Windows GDI leak when detecting mouse over a connector. After running for a long time with Diagram displayed and moving the mouse over and away from the connector lines the client could crash with an 'out of resources' failure. Fixed.
- **Alarms / List / Alarm**
  - Search items color was not reset when new search was started and Search Clear did not always clear all old search items. Fixed.
- **Configure / Client / Single Screen / Files**
  - If the user had saved the 'Configuration' without changing the 'SMF Indicator Color' from its default then upgraded to a newer client 5.75 or later the SMF color would be set to a white. Now it is set to the new default Fuschia. Fixed.
- **Configure / Client / Single Screen / Alarm**
  - Remote Alarms would not always show if alarms were occurring on the remote system even if they were set or the color of the remote alarm might display incorrectly. Fixed.

Misc. Items:

- The client now fully loads to the local PC if run from a network or removable drive. This prevents client crashes if connectivity to the network drive is lost.
- Rearranged 'Configure / Client' settings to move all color selections to the 'General' tab. Now only very specific color selections like 'Single Screen / Alarms' are on the individual tab.
- Changed Red Color Threshold display for boxes from Red background to a Red border and a Pink background so the value can be read easier. Yellow Threshold remains the same showing a Yellow background.
- Grid Tool exports and reports now show sort column and filter info.
- **Systems / File Transfer**
  - Changed PC directory Folder selector (2nd button after current directory).
- **Systems / TraceRoute**
  - Improved error handling and error display.
- **Overview**
  - CPU Busy chart with type 2D-stacked now has ability to do Smoothing.
- **SubSystems / Logs / EMS Msgs**
  - Fixed bug preventing mouse scroll wheel from always working in reverse scrolling and improved display to prevent some of the 'flickering'.
- **SubSystems / Expand / Diagram**
  - Changed label type selections from buttons to dropbox. Default selection can be set in 'Configure / Client / Single Screen / SubSystems / Expand'.
- **Alarms / Active** and
  Files / Enscribe / View File and
  SubSystems / Spooler / View Job
  - Converted to use new Grid memory database to improve speed for large number of record displays.

Known issues:

- The **Systems / File Transfer** MFTP cannot transfer PC->NSK to a structured files format.
- The **SubSystems / Discovery screen** is still under development and subject to change. Comments are welcome!

MOMI Server

New Features:

- Data retrieval from MEASURE is now more efficient by using MEAS_READACTIVE_MANY_ where possible.

- The default volume/subvolume and initial OSS directory are now made available to the client.

- Expand line "not ready" error code is now displayed on an active alarm.

- New alarms:
  Expand / Line quality
  DiskFile / Broken or Corrupt

- Server now provides a 'bulk access' capability for the MEASURE entity File and is accessible on the screen **Subsystems / Discovery**. This capability prevents the internal need to start and stop measurements for MEASURE data. Note that at this time MEASURE does not report an entity accessed in this manner as residing on a remote node (in other words the node name is not returned).

- Support added binary reading/writing of Guardian files. Used in MOMI file transfers.

- $RECEIVE queue length now reported as a decimal value, instead of a whole number, on newer platforms where available in MOMI.

- Support for the new screen **Expand / System Entity** (newer platforms only).

- MOMI history Process now reports the fields (some fields not reported except on latest O/S releases):

  Ready-time
  Launches
  Recv-Qtime
  TLEs
  Begin-Trans
  Abort-Trans

- The MEASURE entity Disk Open now reports a 32-bit OCB number on the latest O/S releases.

Bug Fixes:

- The server no longer returns the message "Expected initial message from client" when the CONFMOMI keyword CLIENT-INITIAL-MSG was set to true.

- The alarm **DiskFile / File existence** (and others) with an OSS path name

would not function correctly with a length greater than 47 characters. The internal limit was raised to 200 characters.

- The default file extents for CNF01DB and LOG01DB were increased.

- A small memory leak was corrected in the reading of MOMI history.

- Expand alarms are now removed when a line is removed.

- The computation and display of $RECEIVE Queue Time is now correct on the Overview screen and changed to 2 decimal positions from 3.

- The listing of locks now displays the logical filename instead of the internal "funny" name if the file is on a virtual disk.

- Corrected the computation of Ready Time Only as seen on the screen **Processes / Process Detail.**

- Server no longer reports "MEASURE is DOWN" under J06.20. Same issue would also be corrected under L16.05 (system with this release is not yet available).

- Changes were made to PING processing to support prevent premature terminations of Trace Route in the client (client also needed changes as well).

- TCP/IP screens no longer cause a high CPU utilization if another status request is in progress. Internally, SPI was returning an error ZCOM^ERR^CMD^IN^PRGRSS (-40) which was considered retry-able by MOMI. Effectively, the NonStop TCP/IP subsystem will only handle one command at a time so now the 'duplicate' command will terminate.

- Certain server generated error messages displayed by the client will now properly display a # sign in the file name instead of a number.

- The screen **SQL/MP / Catalog** no longer returns an error -8421 on TNS/X Systems.

Misc. Items:

- The initial memory allocation of certain MOMI processes was increased to help prevent additional memory allocations and fragmentation.

- The MEASURE entity FILE is now added to the initial and persistent measurement started by MOMI. The MOMI screen Overview / CPU Info / Free CIDs should be checked to insure sufficient MEASURE resources are available.

- All MEASURE counter access now uses the ZMS format.

- The internal format for the date in an SMTP message (i.e. email) was altered to prevent it from displaying as 12/31/1969 on devices running Android 6.

- Processes with DDL's of a zero length no longer cause an error 13 with ProcessH measurements.

- Legacy code from K series was removed. MOMI executable will now only operate on S-Series or later systems.

- Changes in computations in the MOMI CPU collectors should result in more values displaying as whole numbers, such as 2.00 instead of 1.99.

- The TCP/IP address is now displayed, if available, with the error message "Error on listen socket". The idea is to display the address that caused the error.

- The screens Subsystems / TCP/IP now display additional error information if the open to $ZNET fails.

- Additional messages are logged with MEASURE error codes in the event measurements cannot be started.

- System types in Expand now report NS-X for type 11 CPUs.

- TNS/X systems could temporarily report very high CPU utilization in MOMI. This was due to code executing so quickly that a MOMI 'time period' could complete before the start of the next period. Logic was revised to help prevent this except in the case of a change of the system time.

Known issues:

- History files HST02DB, HST03DB and HST04DB have a limit of approximately 600,000 processes per time period. If this limit reached the history consolidator server will log a message and discontinue the consolidation for the affected file (others preceding are not affected). Typically this limit would only affect the HST04DB which has a default time period of 1 day and only on a large system with a great deal of transient processes throughout the day.

MOMIFTP

- Changed default transfer mode to SFTP.

- Added an error message for any missing source file.

ssMOMI

- None

MomiEmail

- None

SendMail

- None

IPCalc

- None

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Release Package	5.78
Release Date (yyyy/mm/dd)	2016/01/13

Item	Version
Latest O/S tested	G06.32.01 - H06.29.00 J06.19.00 - L06.04.00 (L15.08.00)
Client Version	5.78
Server Version (VPROC)	5.42 T0000G06___V5_42____2015_11_09
Buffer Version	Client 21.47 Server 21.46
History database	3.00
CONFMOMI	3.09
OBYMOMI	5.02
OBYCSQL	5.02
MomiFTP.exe	2.05
ssMOMI.scr	4.14
MomiEMail.exe	1.10
SendMail.exe	1.01
IPCalc.exe	1.3.3
Minimum server version to provide main line client functions	5.33
Oldest client version tested with server	5.33

NEW FEATURES / BUGS FIXED

(see MOMI HISTORY.RTF for previous versions)

Common new features (requires current client and server)

*If you are using Client Access, newly added screens in a MOMI release update are not available to users by default. This action may be changed on the screen **Configure / Client Access / Global Settings** by checking the option **New screens enabled by default.** The user that started MOMI, known as the "Default Security User" always has new screens enabled by default.*

Impacts in this version

None

MOMI Client

New Screens:

- None

New Features:

- On all Grids the Number filter has been changed from a minimum and maximum number to a comma separated list of numbers and number ranges. i.e. '100,54,6-37,>200' will filter to show only numbers that equal 100 or 54 or between 6 and 37 inclusive or greater than 200. (For Vikas K.)
- **Overview**
  - Added new Misc. column to Top Processes. The default value for this column is 'QTime' or the $Receive Queue Time average for the process.
  - A Right-click on the 'QTime' button will allow the column to be change

to 'RTO%', the Ready Time Only percent for that process or left blank.
- Left-click on 'Busy%' or 'QTime / RTO%' will sort the Top Processes by that value.

- **Files / Enscribe / Files** and **Files / Explorer / NSK**
  - added 'Duplicate' file(Fup Dup) to right-click action menu.
- **Configure / Client / Single Screen / Overview**
  - Added section 'Overview Top Process Misc. Column' to allow setting the default values for the new Top Processes Column and if it should sort by this column.
- **Configure / Reference / Error Codes**
  - Changed so User-level ErrorCodes are now stored on the NonStop.
  - If Client Access is not turned on then User-Level ErrorCodes can only be Add/Change/Delete and Imported if the logged on user is the user that started MOMI.
  - Previous versions of the client stored User-level ErrorCodes in "C:\Users\<user>\AppData\Roaming\BlackWood Systems\MOMI\CustErrors.mom". Old records from this file can be imported by Importing this file.
- **Configure / Reference / BlackWood**
  - Added buttons to display MOMI ReadMe and MOMI History for current version.
- **Configure / Tools / Time**
  - Added NonStop JulianTimestamp, Unix/Linux timestamp and Delphi TDateTime conversions.

Bug Fixes:

- On all Grids the popup to show progress during sorting and filtering would not display correctly if the Client was resized. Fixed.
- Sometimes when the user tried to attach clipboard pictures to the MOMI email the program would crash with a 'Unsupported Format' failure. Fixed.
- With some Mice(usually high resolution) it would be possible to scroll some items using the MouseWheel so fast the client would crash. Fixed.
- If the user was upgrading from an old (pre 5.50) client the default background color of the charts would become a dark gray instead of the correct light gray. Fixed.
- **Overview**
  - if the user wanted to set the IPU affinity the popup did not display. Fixed.
  - 'CPU Hist' chart did not always correctly set the max on the TMF Rate scale. Fixed.
- **SubSystems / Logs / EMS Logs**
  - Some vendor EMS messages could contain non-printable text or what looked like HTML tags <tag> in the message text. This would cause display issues when displayed in the EMS Detail screen. Fixed.
  - Grid font size was limited to 14 or less. Fixed.
- **SubSystems / Spooler / View Job**
  - If a user didn't have the security to view the job no error was displayed to show why the view job failed to display. Fixed.
- **SubSystems / Discovery**
  - Screen did not resize correctly. Fixed.
- **Configure / Chat**
  - If a CHAT record was present and the client version was 5.77, the client would crash on startup. Fixed.

Misc. Items:

- **SubSystems / Expand / Diagram**
  - Increased the connection line width and the sensitivity to popup the detail.
- **SubSystems / OSS / CPU** and **SubSystems / OSS / CPU Chart**
  - added popup display to notify user if CONFMOMI has DISABLE-MEAS-OSSCPU set to TRUE
- **SubSystems / OSS / Name Server** and **SubSystems / OSS / Name Server Chart**
  - added popup display to notify user if CONFMOMI has DISABLE-MEAS-OSSNS set to TRUE

Known issues:

- The **SubSystems / Discovery screen** is still under development and subject to change. Comments are welcome!

MOMI Server

New Features:

- None

Bug Fixes:

- None

Misc. Items:

- None

Known issues:

- History files HST02DB, HST03DB and HST04DB have a limit of approximately 600,000 processes per time period. If this limit reached the history consolidator server will log a message and discontinue the consolidation for the affected file (others preceding are not affected). Typically this limit would only affect the HST04DB which has a default time period of 1 day and only on a large system with a great deal of transient processes throughout the day.

MOMIFTP

- Changed to reduce number of file transfer failures based on file size difference.

ssMOMI

- None

MomiEmail

- None

SendMail

- None

IPCalc

- None

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Release Date (yyyy/mm/dd) 2015/11/10

Item	Version
Latest O/S tested	G06.32.01 - H06.29.00 J06.19.00 - L06.04.00 (L15.08.00)
Client Version	5.77
Server Version (VPROC)	5.42 T0000G06___V5_42____2015_11_09
Buffer Version	Client 21.45 Server 21.46
History database	3.00
CONFMOMI	3.09
OBYMOMI	5.02
OBYCSQL	5.02
MomiFTP.exe	2.03
ssMOMI.scr	4.14
MomiEMail.exe	1.10
SendMail.exe	1.01
IPCalc.exe	1.3.3
Minimum server version to provide main line client functions	5.33
Oldest client version tested with server	5.33

NEW FEATURES / BUGS FIXED

(see MOMI HISTORY.RTF for previous versions)

Common new features (requires current client and server)

*If you are using Client Access, newly added screens in a MOMI release update are not available to users by default. This action may be changed on the screen **Configure / Client Access / Global Settings** by checking the option **New screens enabled by default.** The user that started MOMI, known as the "Default Security User" always has new screens enabled by default.*

Impacts in this version

None

MOMI Client

New Screens:

- None

New Features:

- **Configure / Client / Client Access / User Define**
  - When the record for the "Default Security User" (User that started MOMI) is displayed the screen will indicate they are the "Default Security User" and a popup will show that the security setting for this user are not used since the "Default Security User" always has access to all screens and actions.
  - Added 'Configure' setting to display/show Diagnostics screen.

Bug Fixes:

- **SubSystems / Logs / EMS Log**
  - When user imported multiple filters the imported filters would not show up until the client was restarted. Fixed.
- Grid progress popups were not displayed correctly when the client was resized. Fixed.

Misc. Items:

- None

Known issues:

- The **SubSystems / Discovery screen** is still under development and subject to change. Comments are welcome!

MOMI Server

New Features:

- The following alarms are added (not available on S-Series):

  Process / Queue length $RECEIVE (n.nn)
  Process / Process creation requests (per second)

Bug Fixes:

- The alarm **DiskFile / File existence** (and others) will now function correctly with a path name longer than 47 characters. A previous correction did not fully address the issue. Now, both the template used for matching files and the resulting file may both be longer than 47 characters. Internally, the new limit is 200 characters.
- A small memory leak no longer occurs in servers processing demand or batch type of requests, for example **Enscribe / Files**.

Misc. Items:

- The server process that handles history consolidation now uses less CPU when It completes processing of a time period. This is particularly evident on a system that has a large number of transient processes (i.e. system with over 350,000 processes running per day).

- Overall improvements have been made to how memory is allocated and maintained.

Known issues:

- History files HST02DB, HST03DB and HST04DB have a limit of approximately 600,000 processes per time period. If this limit reached the history consolidator server will log a message and discontinue the consolidation for the affected file (others preceding are not affected). Typically this limit would only affect the HST04DB which has a default time period of 1 day and only on a large system with a great deal of transient processes throughout the day.

MOMIFTP

- Change FTP SEND and RECV buffer size from 32767 to 30000 bytes.

ssMOMI

- None

MomiEmail

- None

SendMail

- None

IPCalc

- None

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Release Package	5.76
Release Date (yyyy/mm/dd)	2015/10/13

Item Version	
Latest O/S tested	G06.32.01 - H06.29.00 J06.18.01 - L06.04.00 (L15.08.00)
Client Version	5.76
Server Version (VPROC)	5.40 T0000G06___V5_40____2015_10_01
Buffer Version	Client 21.45 Server 21.45
History database	3.00
CONFMOMI	3.09
OBYMOMI	5.02
OBYCSQL	5.02
MomiFTP.exe	2.02
ssMOMI.scr	4.14
MomiEMail.exe	1.10
SendMail.exe	1.01
IPCalc.exe	1.3.3
Minimum server version to provide main line client functions	5.33
Oldest client version tested with server	5.33

NEW FEATURES / BUGS FIXED

(see MOMI HISTORY.RTF for previous versions)

Common new features (requires current client and server)

*If you are using Client Access, newly added screens in a MOMI release update are not available to users by default. This action may be changed on the screen **Configure / Client Access / Global Settings** by checking the option **New screens enabled by default**. The user that started MOMI, known as the "Default Security User" always has new screens enabled by default.*

Impacts in this version

None

MOMI Client

New Screens:

- None

New Features:

- **Processes / Process Detail**
  - Added Process X-fabric and Y-fabric interrupts to the 'PE3' detail tab.

- **Processes / Process Entity**
  - Added Columns 'System Process Type' and 'System Process ASCII'
  - Added Columns 'X-Interrupts' and 'Y-Interrupts'

- **Files / DiskFile Entity and**
  Files / DiskOpen Entity
  - Added Columns 'Physical Reads' and 'Physical Writes'

- **SubSystems / Logs / EMS Log**
  - Added ability to export and import multiple EMS Filters. This can be done by clicking on the 'Define' button on the Client Filter section of the EMS Log screen, then selecting the 'Export and Import Multiple filters' tab. (for Gary B.)

- **SubSystems / Spooler / Job**
  - Added new selection criteria 'Location' to help filter a large job list before the jobs are downloaded into the client. (For Gary B.)

- **Configure / Client / Single Screen / Files**
  - Added 'ANSI Name Indicator color' to set font color of ANSI Name files (like in File/Enscribe/ File, File Detail, File Explorer File Entity, FileOpen Entity, DiskOpen Entity, etc)

Bug Fixes:

- **'MOMI System Info.txt' diagnostics file**
  - PC memory was reporting invalid memory sizes if the PC had more than 3GB. Fixed.

- **Systems / FTP**
  - When using SFTP and editing files on the PC, sometime when you edited a file more than once you would get a 'Unable to Delete' sharing violation. This error message was incorrect and the user could OK past it and continue. Fixed.
  - The PC file grid displayed the file size as an integer so files with very large files had incorrect file sizes being reported. Fixed.

- **SubSystems / TCP/IP / Process Status**
  - Sometime when multiple systems were being looked at the update would 'hang' and freeze the Client. Fixed.

- **SubSystems / Discovery**
  - If the Discovery screen had been displayed then the Green 'LED' in the lower left corner (MOMI Internal Stats and Debug Info) was clicked the client would crash. Fixed.

- **Processes / Process Detail**

- If Configured 'File Entity has Open' Auto-Request was set to false, the request was not made even if the box was checked. Fixed.

· **Alarms / Define / Export and**
Alarms / Define / Import
- When a item was selected to be import/exported the 'checkbox' did not show that the item was selected(no check in box) even though it was checked. Problem was introduced in version 5.50. Fixed.

Misc. Items:

· If PC has enough memory the client will now use 3GB for 32-bit windows and 4GB for 64-bit.

· **'MOMI System Info.txt' diagnostics file**
- Added CNF01DB counts for Alarms, Client Access Users, Client Access Groups, and User Hints.

· **Systems / FTP**
- Changed SFTP screen to allow 'AUTO' and 'ASCII' transfers. Before they were allowed but following the SFTP protocol the screen showed them as Binary transfers and the File Cod was set to 101 for ascii-type (edit) transfers.

Known issues:

· The **SubSystems / Discovery screen** is still under development and subject to change. Comments are welcome!

MOMI Server

New Features:

· The following MEASURE entity PROCESS counters are now provided to the client:

x_interrupts
y_interrupts
interrupts

· Spooler jobs may be filtered by location.

· The subject of an alarm email may now be up to 300 characters in length. Previously, the limit was 132. In both cases the total length actually available is reduced slightly to account for SMTP (i.e. email) protocol overhead. Note that some email servers or email clients may also impose a reduced limit.

Bug Fixes:

· The alarm **DiskFile / File existence** (plus others) now function with an OSS path name greater than 47 bytes. Previously, the path name over 47 bytes would not function and no error was reported. Separately, enhancements made with this correction enables additional OSS path patterns such as open bracket, letter, dash, close bracket. For example, [A-C] is a pattern meaning the letters A,B,C. Note that the pattern open bracket, digit, period, digit, close bracket are currently reserved and used by MOMI. For example, [0..9].

Misc. Items:

- The server will configure in its master measurement the entity SYSTEM. The data is read but not yet reported and is in preparation for future releases.

- Specifying a CPU,PIN for the MEASURE entity FILE now generates an error 2 (operation not allowed) instead of error 13 (filename was not specified in proper form). MEASURE does not support unnamed processes in the FILE entity (note than an opener process can be specified by CPU,PIN). Error 13 would show up on the screen **Processes / Process Detail** under the subtab **File Entity Opened by** if an unnamed process was specified.

- In the event the BWSSG object file, if used, cannot be started or does not match the current BWMOMI (i or x), two different messages could be logged better explaining the problem. Previously, both of these conditions resulted in a single generic error message.

Known issues:

- History files HST02DB, HST03DB and HST04DB have a limit of approximately 600,000 processes per time period. If this limit reached the history consolidator server will log a message and discontinue the consolidation for the affected file (others preceding are not affected). Typically this limit would only affect the HST04DB which has a default time period of 1 day and only on a large system with a great deal of transient processes throughout the day.

MOMIFTP

- None

ssMOMI

- None

MomiEmail

- None

SendMail

- None

IPCalc

- None

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Release Package	5.75
Release Date (yyyy/mm/dd)	2015/08/28

Item	Version
Latest O/S tested	G06.32.01 - H06.29.00 J06.18.01 - L06.03.00

Client Version	5.75
Server Version (VPROC)	5.38 T0000G06___V5_38____2015_08_19
Buffer Version	Client 21.44 Server 21.44
History database	3.00
CONFMOMI	3.09
OBYMOMI	5.02
OBYCSQL	5.02
MomiFTP.exe	2.02
ssMOMI.scr	4.14
MomiEMail.exe	1.10
SendMail.exe	1.01
IPCalc.exe	1.3.3
Minimum server version to provide main line client functions	5.33
Oldest client version tested with server	5.30

NEW FEATURES / BUGS FIXED

(see MOMI HISTORY.RTF for previous versions)

Common new features (requires current client and server)

If you are using Client Access, newly added screens in a MOMI release update are not available to users by default. This action may be changed on the screen ***Configure / Client Access / Global Settings*** *by checking the option* ***New screens enabled by default.*** *The user that started MOMI, known as the "Default Security User" always has new screens enabled by default.*

Impacts in this version

None

MOMI Client

New Screens:

- **Systems / Probe / Alarms Stats**
  - Added page 'Alarms Stats' to show the stats on remote alarms. The 'Select Systems' button allows the user to select which systems are probed for remote alarm info. This selector was moved from the 'Configure / Client / Single Screen / Alarms' screen.

New Features:

- Increased default Client Minimum screen size from 800x600 to 1024x768. The screen may be resized smaller by enabling an option on the screen 'Configure / Client / General'.

- On all Grids, For all columns that have a 'string'-type filter there is now a dropdown box listing the last few used filter string. (For Gary B.)

- Added new run-time param "RunTime-History". It uses a parameter string created on the 'History / Export' page. It allows a history export to be created by simply running the client with this param string. After the export is finished the client will stop itself.

- **Configure / Client / Single Screen / SubSystems / Spooler**
  - Added checkbox for 'Display All Users Jobs' to default to display all users jobs even when logged on. (For Gary B.)

Bug Fixes:

- On all Grids, if you had a filter for a column defined then cleared that filter all columns filters were cleared. Now only filter for selected column is cleared. Fixed

- When a ScreenPrint(or Print to Clipboard) was performed on a PC that had Aero enabled and the Client had been resized, the TitleBar will not always print correctly. Fixed.

- **Systems / Probe**
  - All selected/displayed systems were being probed for Remote Alarms, even if the 'Configure / Client / Single Screen / Alarms' was configured to not get Remote Alarms for the system. Fixed.

- **Files / File Explorer**
  - When Editing an NSK edit file on the PC, if the file contained a line longer than 255 characters the Transfer would fail leaving the original file on the NonStop empty. Now when this happens the user is prompted if they want to re-edit the file (either the original or modified) to fix the problem then resend it to the NonStop. Fixed.

- **Files / SQL/MP / Table Detail**
  - Some right-click menus would cause the client to crash when they were selected. Fixed.

- **SubSystems / Expand / Diagram**
  - Under some rare circumstances the Diagram would not display on some systems the first time a connection was made to the system. Fixed.

- **SubSystems / Logs / EMS Msgs**
  - When reverse scrolling and multiple logs were being loaded sometimes the screen would flash excessively if the new record was not currently displaying on the screen. Fixed.

  - If the 'Message Count' on the 'Config / Display' screen was manually changed to a value with 11 or more digits the client would crash. Fixed.

- **Alarms / Define / EMail Group**
  - It was possible to add a Alarm EMail group that contained no emails or to delete all EMails within a group. Fixed.

Misc. Items:

- Changed Multiple or Single item 'Confirm' dialog from multiple buttons to selector and OK button.

- **Configure / Client / General**
  - Removed 'Tab Style' setting. Button-style is no longer available.

  - Added 'Allow 800x600 minimum screen size' setting. When checked this allows the minimum screen size to be reduced to the old 800x600. Also added button '1024x768'that will return the 800x600 screen to the new

default 1024x768.

- **History / Export**
  - Changed page format to work better with various types of History Export available.

Known issues:

- The **SubSystems / Discovery screen** is still under development and subject to change. Comments are welcome!

MOMI Server

New Features:

- All changes in the 5.38 server posted to our website as a product update is included in this release package.

- A server for the TNS/X system is included.

Bug Fixes:

- Certain CPU percent busy values now report correctly under the screens **CPUs / Priority Charts**. Previously, the number of IPUs was not taken into account. Note that this was a limited problem.

- Under the rare situation a server process started by $MOMI does not receive an open it will now automatically stop after 90 seconds. Previously, the server process would continue to run after $MOMI was stopped. Note that the correct way to shutdown MOMI on the NonStop System continues to be **STOP $MOMI** from a TACL prompt.

- The transfer of a text file from the PC to the NonStop would result in the file being left open on the NonStop if the last character of the file was not a LF. The server now detects this protocol violation and will close the file and return an error to the MOMI PC Client. Additionally, several limit checks were introduced.

- The transfer of an edit file from the NonStop to the PC would not return a complete line of data if the resulting line was greater than 255 characters. This would occur if the line contained enough spaces that the uncompressed data exceeded 255 characters.

- The main MOMI server will no longer hang during an attempt to notify a client that it violated protocol and filled internal queues. Additionally, should this situation occur a message is logged to $0 listing the IP address of the offending client. Criteria used to determine if a client was violating protocol was tightened.

Misc. Items:

- The field read-time-only is now loaded for S-Series systems. Previously, it was only load for H/J platforms.

- MOMI will now ‘tend’ (but not absolute) to not start additional servers in the same CPU as the $MOMI process.

Known issues:

- The history files HST02DB, HST03DB and HST04DB have a limit of approximately 800,000 processes per time period. If this limit reached the history consolidate server will abend due to lack of memory. The workaround is to not enable an HST04DB file which has a default period of 1 day.

MOMIFTP

- None

ssMOMI

- None

MomiEmail

- None

SendMail

- None

IPCalc

- None

****

Release Package	5.51
Release Date (yyyy/mm/dd)	2015/06/25

Item	Version
Latest O/S tested	G06.32.01 & H06.29.00 & J06.18.01
Client Version	5.51
Server Version (VPROC)	5.37 T0000G06___V5_37____2015_04_23
Buffer Version	Client 21.44 Server 21.44
History database	3.00
CONFMOMI	3.09
OBYMOMI	5.01
OBYCSQL	5.00
MomiFTP.exe	2.02
ssMOMI.scr	4.14
MomiEMail.exe	1.10
SendMail.exe	1.01
IPCalc.exe	1.3.3
Minimum server version to provide main line client functions	5.33
Oldest client version tested with server	5.30

NEW FEATURES / BUGS FIXED

(see MOMI HISTORY.RTF for previous versions)

Common new features (requires current client and server)

*If you are using Client Access, newly added screens in a MOMI release update are not available to users by default. This action may be changed on the screen **Configure / Client Access / Global Settings** by checking the option **New screens enabled by default**. The user that started MOMI, known as the "Default Security User" always has new screens enabled by default.*

Impacts in this version

None

MOMI Client

New Screens:

- None

New Features:

- None

Bug Fixes:

- When displaying screen for first time and only single subtab was allowed (example: because of Client Access settings, Only 'Cpu Summary' screen was available under the 'CPUs' tab) the client would crash when the 'CPUs tab was selected. This bug was introduced in the 5.50 version of the client. Fixed.
- **Overview / EMS Messages**
  - When a User changed systems the EMS meesages would start at the start of the Log and not use the setting in the configurations for when to start. Fixed.
- **SubSystems / Logs / EMS Logs**
  - If EMS messages were being received and the Client 'Pause' button was pressed after 30 seconds(default) the client would timeout and disconnect. Fixed.

Misc. Items:

- **Configure / Reference / Unit Conversion / Bandwidth**
  - changed tab name to 'Data'
  - Added Kibi, Mebi, Gibi, Tebi, Pebi type conversions.
    Kilo/Mega/etc are base 1000 and Kibi/Mebi/etc are base 1024.
    I know! but look it up they are real things.
    (for Tom S. and Gary B.)

Known issues:

- The **SubSystems / Discovery screen** is still under development and subject to change. Comments are welcome!

MOMI Server

New Features:

- If the field **Alarm Active label** for the alarm **EMS / User defined** is blank the alarm text is now placed in the subject line of an email action. Previously, a blank **Active Alarm label** resulted in the text "EMS Based event" being loaded by default.

- The alarm date in an email now has the format of yyyy/mm/dd hh:mm instead of mm/dd/yyyy hh:mm. The CONFMOMI keyword ALARM-EMAIL-DATEFORMAT-OLD restores the previous format if required. This is the alarm date inserted at the beginning of the alarm email and not the content of the email (which

could come from variety of sources.

- The server supports the fields QueueTime and ReadyTimeOnly for the screen **Processes / Top Processes**. QueueTime is the $RECEIVE queue time and ReadyTimeOnly is a process ReadyTime – BusyTime. This change insures that processes sorted by ReadyTimeOnly reflect only the amount of time a process was "ready only" by removing the busy time. A very busy process always has a large value for ready time as it includes busy time. The server also provides ReadyTimeOnly for the screen **Processes / Process Detail**.

- Added alarms:
  Process / Ready Time Only percent
  Process / Ready Time percent

Bug Fixes:

- Systems running 3,000 or more processes per processor now report correctly in the MOMI PC Client after initial MOMI startup or the restart of a MOMI CPU collector process. Previously, CPUs with 3,000 or more processes might be delayed in displaying their individual data or in some cases not display.

Misc. Items:

- An additional message is now logged if SNTP processing requires additional retries to obtain the current time from the NTP server.

- Several memory block management routines have been optimized to decrease memory pool fragmentation, which may result in slightly improved overall performance.

- Performance was improved in History consolidation, which loads data into the HST02DB, HST03DB and HST04DB files. File data is also packed tighter in each disk record in this files.

Known issues:

- The history files HST02DB, HST03DB and HST04DB have a limit of approximately 800,000 processes per time period. If this limit reached the history consolidate server will abend due to lack of memory. The workaround is to not enable an HST04DB file which has a default period of 1 day.

MOMIFTP

- version 2.02 - added NOOPs to prevent FTP timeout.

ssMOMI

- None

MomiEmail

- None

SendMail

- None

IPCalc

- None

****

Release Package	5.50
Release Date (yyyy/mm/dd)	2015/04/30

Item	Version
Latest O/S tested	G06.32.01 & H06.28.01 & J06.18.01
Client Version	5.50
Server Version (VPROC)	5.37 T0000G06___V5_37____2015_04_23
Buffer Version	Client 21.44 Server 21.44
History database	3.00
CONFMOMI	3.09
OBYMOMI	5.01
OBYCSQL	5.00
MomiFTP.exe	2.01
ssMOMI.scr	4.14
MomiEMail.exe	1.10
SendMail.exe	1.01
IPCalc.exe	1.3.3
Minimum server version to provide main line client functions	5.33
Oldest client version tested with server	5.30

NEW FEATURES / BUGS FIXED

(see MOMI HISTORY.RTF for previous versions)

Common new features (requires current client and server)

*If you are using Client Access, newly added screens in a MOMI release update are not available to users by default. This action may be changed on the screen **Configure / Client Access / Global Settings** by checking the option **New screens enabled by default**. The user that started MOMI, known as the "Default Security User" always has new screens enabled by default.*

Impacts in this version

None

MOMI Client

New Screens:

- None

New Features:

- Active navigation tabs (i.e. where you are within the client) are now highlighted instead of showing a white background. This was changed as the newer Delphi version makes it hard to tell the difference between active and non-active tabs.
- **Systems / Probe**

- Probe CPU charts popup for top process names now shows IPU number if available. (for Miguel P.)
- '1-4 Systems' charts may now be displayed in 3D to show IPU usage. (for Miguel P.)
- 2D/3D view set by right click on '1-4 Sys' button or 'Configure/Client/Single Screen/Probes'.

· **Systems / FTP**

- When using SFTP to transfer from the PC to NSK the PC file type will be used to either set the default NSK FileCode to 101 (for ASCII) or 0. if the PC file extension is a number (i.e. file.100) the number will be used to set the default NSK FileCode (for Vikas K.)

· **Overview**

- Added new items to Overview Process Popup labeled QTime to show Average $Receive Queue Time and Ready Time percent. (For Diana K.)
- 'CPU History' chart popup for top process names now shows IPU number if available. (for Miguel P.)

· **Processes / Top Processes**

- Added new sortable Column labeled QTime to show Average $Receive Queue Time. (For Diana K.)
- Added new Column labeled RTime% to show AverageReady Time percent. (For Diana K.)

· **Processes / Process Detail**

- Added new field on 'PE1' tab to display 'Ready time only' to show ready time waiting to execute only - no busy time.

· **Processes / Process Entity**

- Added new column 'Ready time only' to show ready time waiting to execute only - no busy time.

· **Alarms / List / Alarm**

- Added ability to search for alarms containing specified text in Alarm Name, Description or Entity the alarm is based on. (For Tom S.)

· **Configure / Client / General**

- Added Clock display format to allow clock at top of screen to display as 24hr format(default) or 12hr AM/PM format. (For Vikas K.)

Bug Fixes:

· All Grids

- Using the mouse wheel to scroll a grid up/down now moves the same direction as other windows programs such as Excel. Fixed.

· On the screen **Configure / Client / General**, if the user had changed the 'Export Character' 'String Define Char.' from a hardspace(the default) to a underscore(needed for multibyte character sets such as Chinese), the underscore was displayed on the screen as well as in the exported data. Now the screen will not display the 'String Define Char.' and it will only be seen in the exported data. Fixed.

· **Systems / FTP**

- If user selected SFTP and tried to transfer an extremely large file the client would crash. Fixed.
- If user selected SFTP and tried to connect to a system that did not allow SFTP it could be difficult to then switch to FTP. Fixed.
- If user selected SFTP and downloaded a text file(101) the

resulting file on the PC would not contain the correct line breaks. Fixed.
- if a SFTP copy failed the progress popup would still be displayed. Fixed.

· **SubSystems / Files / Enscribe / View File**
- If 'Allow Multi-Byte character Sets' was checked the program would still replace any character over <255> with a tilde (~). Fixed.

· **SubSystems / Logs / EMS EventBX / List-Import-Export**
- In rare cases an invalid record could be created on Export that would cause the client to hang when that record was imported. Fixed.

· **SubSystems / OSS / VT100**
- It was possible to try to connect even if a Host was not defined. Fixed.

Misc. Items:

· **Processes / Top Processes**
- changed Column order to make sure all sortable columns are visible reguardless of screen size.

· **SubSystems / Spooler / Jobs**
- Added a 'Log' button to toggle the display of the activity log.
- The jobs activity log now shows the collector of the job a well as the Spooler and job number. (i.e. $SPLS.$S2.#1234)
- When a file is copied the jobs activity log now shows both the new file and the original file.

· **Configure / Client Access / Global Settings and '.../ User Define'**
- Changed FTP settings. Now the FTP and SFTP protocols can be independently allowed/disabled from the FTP screen being displayed/hidden.

· Added 'Display Language' to System Info file.

· Restructured how 'CPU' states (up/down/not avail/etc.) are determined.

· Converted to Delphi7.

Known issues:

· The **SubSystems / Discovery screen** is still under development and subject to change. Comments are welcome!

MOMI Server

New Features:

· If the field **Alarm Active label** for the alarm **EMS / User defined** is blank the alarm text is now placed in the subject line of an email action. Previously, a blank **Active Alarm label** resulted in the text "EMS Based event" being loaded by default.

· The alarm date in an email now has the format of yyyy/mm/dd hh:mm instead of mm/dd/yyyy hh:mm. The CONFMOMI keyword ALARM-EMAIL-DATEFORMAT-OLD restores the previous format if required. This is the alarm date inserted at the beginning of the alarm email and not the content of the email (which could come from variety of sources.

· The server supports the fields QueueTime and ReadyTimeOnly for the screen **Processes / Top Processes**. QueueTime is the $RECEIVE queue time and

ReadyTimeOnly is a process ReadyTime – BusyTime. This change insures that processes sorted by ReadyTimeOnly reflect only the amount of time a process was "ready only" by removing the busy time. A very busy process always has a large value for ready time as it includes busy time. The server also provides ReadyTimeOnly for the screen **Processes / Process Detail**.

- Added alarms:
  Process / Ready Time Only percent
  Process / Ready Time percent

Bug Fixes:

- Systems running 3,000 or more processes per processor now report correctly in the MOMI PC Client after initial MOMI startup or the restart of a MOMI CPU collector process. Previously, CPUs with 3,000 or more processes might be delayed in displaying their individual data or in some cases not display.

Misc. Items:

- An additional message is now logged if SNTP processing requires additional retries to obtain the current time from the NTP server.

- Several memory block management routines have been optimized to decrease memory pool fragmentation, which may result in slightly improved overall performance.

- Performance was improved in History consolidation, which loads data into the HST02DB, HST03DB and HST04DB files. File data is also packed tighter in each disk record in this files.

Known issues:

- The history files HST02DB, HST03DB and HST04DB have a limit of approximately 800,000 processes per time period. If this limit reached the history consolidate server will abend due to lack of memory. The workaround is to not enable an HST04DB file which has a default period of 1 day.

MOMIFTP

- Converted to Delphi7

ssMOMI

- Converted to Delphi7

MomiEmail

- Converted to Delphi7

SendMail

- Converted to Delphi7

IPCalc

- None

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Release Package 5.37
Release Date (yyyy/mm/dd) 2014/11/26

Item	Version
Latest O/S tested	G06.32.01 & H06.28.01 & J06.18.01
Client Version	5.36
Server Version (VPROC)	5.36 T0000G06___V5_36____2014_11_06
Buffer Version	Client 21.43 Server 21.43
History database	3.00
CONFMOMI	3.09
OBYMOMI	5.01
OBYCSQL	5.00
MomiFTP.exe	2.00
ssMOMI.scr	4.13
MomiEMail.exe	1.09
SendMail.exe	1.00
IPCalc.exe	1.3.3
Minimum server version to provide main line client functions	5.33
Oldest client version tested with server	5.30

NEW FEATURES / BUGS FIXED

(see MOMI HISTORY.RTF for previous versions)

Impacts in this version

None

MOMI Client

New Screens:

- None

New Features:

- None

Bug Fixes:

- **Processes / All Processes**
  - Config screen radio buttons did not always clear when corresponding buttons were selected. Fixed.
- **Processes / Process Entity**
  - Unchecking 'AutoUpdate' would stop the current request. Fixed.

Misc. Items:

- None

Known issues:

- The **SubSystems / Discovery screen** is still under development and subject to change. Comments are welcome!

MOMI Server (includes 5.35 & 5.36 releases)

New Features:

- None

Misc. Items:

- None

Known issues:

- None

MOMIFTP

- None

ssMOMI

- None

MomiEmail

- None

SendMail

- None

IPCalc

- None

****

Release Package 5.36
Release Date (yyyy/mm/dd) 2014/11/11

Item	Version
Latest O/S tested	G06.32.01 & H06.28.00 & J06.18.01
Client Version	5.36
Server Version (VPROC)	5.36 T0000G06___V5_36____2014_11_06
Buffer Version	Client 21.43 Server 21.43
History database	3.00
CONFMOMI	3.09
OBYMOMI	5.01
OBYCSQL	5.00
MomiFTP.exe	2.00
ssMOMI.scr	4.13
MomiEMail.exe	1.09
SendMail.exe	1.00
IPCalc.exe	1.3.3
Minimum server version to provide main line client functions	5.33
Oldest client version tested with server	5.30

NEW FEATURES / BUGS FIXED

(see MOMI HISTORY.RTF for previous versions)

Common new features (requires current client and server)

*If you are using Client Access, newly added screens in a MOMI release update are not available to users by default. This action may be changed on the screen **Configure / Client Access / Global Settings** by checking the option **New screens enabled by default**. The user that started MOMI, known as the "Default Security User" always has new screens enabled by default.*

Impacts in this version

None

MOMI Client

New Screens:

- None

New Features:

- **Systems / FTP**
  - Added selection to do SFTP(FTP over SSH) to systems that support SFTP. Note that SFTP does not have all information available that FTP had so the list for a NSK Vol/SubVol will not display the Open flag indicator, the File Code number, or the RWEP security value.
  - Added right-click popup menu on grids to allow user to create new directory, remove a directory and rename a directory.
- **Systems / Emulators**
  - CAIL emulator has new version (1,7,3,126) that allows SSH connection. User can now select either 'Clear Text' or 'SSH' connections. SSH connections require User Name and password. User Name can either be entered when the button is defined or the user will be prompted for it. The user will always be prompted for the Password. Requires old OCX to be un-registered then the new one registered on the 'Configure / Client / Actions' screen.
- **Overview**
  - 'CPU Info' chart now allows the user to set the chart scale. (for Ian H.)
  - Now has a right-click menu to pause/resume and stop EMS messages. If the overview screen is Chart/Processes the right-click menu is on the 'EMS Msgs' button. If the overview screen is Chart/Processes/EMS the right-click menu is on the 'EMS Messages' caption.
- **Processes / Last Start/Stop**
  - Added ability to sort and filter the results
  - Added ability to use the Grid Tool to export the results
  - Added copy process name to clipboard on right-click action menu
- **Files / Enscribe / Files**
  - Now allows the user to request a list of files not just a single entry. The list is only allowed if the server version is 5.35 or later \ (for James L.)
- **Files / Enscribe / View File**
  - Moved Ruler On/Off selector into 'Config' popup.
  - Removed +/- font size and activated 'Tool' button in bottom/left to allow changes to font and size.
  - Ruler now moves along with the text when scrolling.
  - Ruler now shows mouse position line and column number.

- **SubSystems / Logs / EMS Logs**
  - § Added ability for the user to choose the color of the EMS Action and Emphasis colors. Right-click on one of the Color legend boxes, then select 'Display/Change Color Selections ...' then right-click on the type you want to change and select 'Set Color'.
  - § Define Filter now has ability to export and import a filter definition. (For Vikas K.)
- **SubSystems / Spooler / View Job**
  - Moved Ruler On/Off selector into 'Config' popup.
  - Removed +/- font size and activated 'Tool' button in bottom/left to allow changes to font and size.
  - Ruler now moves along with the text when scrolling.
  - Ruler now shows mouse position line and column number.
- **SubSystems / TCP/IP / Process Status**
  - Added ability to monitor multiple systems at once by adding a 'Select System' button to pick what systems are checked. If multiple systems are checked the first column on the grid will contain the system name. (for Vikas K.)
  - Added ability to export MiniReports to the clipboard as either a report or a tab delimited file. (for Vikas K.)
- **History / Process**
  - Added ability to export MiniReports to the clipboard as either a report or a tab delimited file. (for Vikas K.)
- **History / Process Last Start/Stop**
  - Added ability to sort and filter the results
  - Added ability to use the Grid Tool to export the results
  - Added copy process name to clipboard on right-click action menu
- **Alarms / Define / Actions**
  - Changed 'Send to LOG' dropbox selection labels from colors to descriptions and show in color.
  - Changed 'Send to EMAIL' dropbox selections to show in color.
- **Configure / Client / General**
  - Added 'IPU Display' to allow user to select how IPUs are displayed (if they are available).
    No IPU Display: IPU number is never displayed
    Affinity only: only if process has affinity(not soft) shows blue
    All IPU display: hard affinity shows as red
    soft affinity shows as blue
    group affinity shows as teal
    dynamic affinity shows as maroon
    softbind affinity shows as purple
- **Configure / Client / Single Screen / Overview**
  - Added 'EMS Start time' to allow user to set number of minutes before current time to start reading EMS messages when starting to read log. (for Vikas K.)
- **Remote Alarm monitoring**
  - 'Configure / Client / Single Screen / Alarms' added selector to allow user to select remote systems that are probed for Alarms.
  - Added right-click popup menu item 'Select systems for Remote Alarms' to 'BlackWood picture/Alarms display' in the upper left corner of the MOMI screen.
- Added runtime params 'CailRegisterVersion_1' and 'CailRegisterVersion_2' to allow user logged on as administrator to run MOMI.exe and have the client register the selected CAIL emulator then stop itself.

- Added selection on final screen of MOMI installer that allow user to select and register the CAIL emulator.
- Most Grids now will allow scrolling up/down using the mouse scrollwheel when the mouse is over the grid.

Bug Fixes:

- Sometimes the Client would crash if a process displayed by the discovery stopped and live updates were being requested. Fixed.

- **SubSystems / Discovery**
  - The Client would crash if the user specified a process name that did not exist. Fixed.
- **SubSystems / Logs / EMS Msgs**
  - After filtering was complete a second pass of filtering was being performed. Fixed.
- **SubSystems / Spooler / Jobs**
  - The Job duration column did not sort correctly. Fixed.
- **History / Chart**
  - If a user right-clicked on the User defined area of the 'Config / Preconfigured charts' section the chart would attempt to prepare even if nothing was selected. Fixed.
- **History / Export**
  - When exporting CPU data with Rated values the following fields: (page_faults, disc_ios, cache_hits, dispatches, processes_created, processes_deleted) were 100 times too big (i.e. the decimal was 2 places too far to the right). Fixed.
- **History / Process Start/Stop**
  - When navigating backward and forward the records returned were not always in the time period displayed. Fixed.
- **Alarms / Define / Alarm**
  - if a user had displayed an alarm definition, then changed to another screen, then returned to the same alarms definition using a right-click to 'Display Alarm definition' the screen would not load correctly. Fixed.
- **Alarms / Define / Export**
  - The last Alarm definition was not being included on the export list. Fixed.
- **Configure/ Client / Single Screen / Overview**
  - When the 'EMS Display Message Count' was changed the EMS message count would be set to its default for the 'Configure / Client / Single Screen / SubSystems / Logs / EMS' value. Fixed.
- **Configure/ Client / Single Screen / Processes / Process Detail**
  - 'Auto-Request' settings were not being set on the Process Detail screen. Fixed.
- **Configure / Client Access / User Define**
  - If user record 'NOT LOGGED ON' was set to not display any of the 'SubSystems / Logs' screen except the EventBX screen, the EventBX screen would not display when the user first logged on but would later if the user logged on as someone else who had EventBX enabled then logged off. Fixed.
- All Grids that contain a 'Tool' button to allow saving column order and hidden columns
  - If a grid had both hidden and reordered columns sometimes the order would not be correct when the Client was stopped then restarted. Fixed.

- When a user had a grid set with a Font size different than the default size and the number of items loaded into the grid was very high(10,000+) the grid would take an excessive time to load and sometimes to cause a 'connection timeout'. Fixed.
- When the MOMI client was started in a 'Maximized' screen setting and the default system was unreachable the screen would not resize correctly. Fixed.
- If a user tried to change systems but selected the current system the client would close then reopen the connection, Now the client will detect no change and leave connection alone. Fixed.

Misc. Items:

- **Overview / CPU Info**
  - Removed 'Process Created' and 'Process Deleted' charts and replaced with 'Process Activity' to show Processes Created and Deleted and total activity on same chart.
  - TLEs, High and Low PCBs now includes failures.
  - DiskIOs/sec and Cache Hits/sec now in single chart DiskIOs/sec.
- **Files / File Entity**
  - Added 'AutoUpdate' checkbox to allow user to stop measure after 1st results are received.
- **Processes / Process Entity**
  - Added 'AutoUpdate' checkbox to allow user to stop measure after 1st results are received.
- **SubSystems / Expand / Diagram**
  - Moving the diagram is now done by clicking on a clear part of the background and dragging rather that the previous method of using scroll bars.
- **SubSystems / OSS / CPU Chart**
  - Chart list is now sorted.
- **SubSystems / Logs / EMS Msgs**
  - The Next/Prev buttons on the Detail now are Up/Down and the hint reflects the direction in time based on if it is configured for reverse scrolling or not. (For David H.)
- **Configure / Client / General**
  - Changed 7 color triggers into single color trigger with dropbox to set item for trigger.
  - Added Red triggers for CPU Queue, Memory Queue and Disk IOs per second.
- **Configure / Server / Server Info**
  - Added display of new Server keywords 'CPU-NOT-PRESENT' and EVENTCX.
- 'Progress-type' popups will now reappear on a screen if the user changes screens then returns while the activity is still occurring.
- Disabled Client runtime param 'nocailautoregister' since it is no longer needed.
- Replaced 'Screen Print' routine used by 'Print Screen', 'Print to Clipboard', and 'Email BlackWood with Screenprint'. New routine improves print quality on newer versions of Windows.
- Optimized grid to reduce CPU usage on grids with a large number(20,000+) of entries.

Known issues:

- The **SubSystems / Discovery screen** is still under development and subject to change. Comments are welcome!

MOMI Server (includes 5.35 & 5.36 releases)

New Features:

- History files now have new default primary/secondary sizes:

file	old pri	old sec	new pri	new sec
hst01db	5000	5000	10000	10000
hst02db	4000	4000	5000	5000
hst03db	2500	2500	5000	5000
hst04db	1200	1200	5000	5000

- Added the CONFMOMI keyword CPU-NOT-PRESENT to specify which CPUS are not present in the system. MOMI will omit reporting CPU down for specified processors. This could be used by customers with configurations where processors will always be missing. See MOMI help for syntax and details.

- The screen Processes / Top Processes with R selected on newer platforms (H/J systems) now displays the top processes by the amount of time they spend on the READY-LIST (TIME-READY less TIME_BUSY). Previously and on older platforms only the READY-LIST flag was used.

Bug Fixes:

- The following OSS counters, relatively new and added at the last release, were processed incorrectly and generally reported (online and in history) as zero. The counters are now processed correctly both online and history (values already in this history file will continue to report as zero):

```
OSS_OPENS
OSS_OPENS_LIMIT
PXS_BUF_BYTES
PXS_BUF_BYTES_LIMIT
PXS64_BUF_BYTES
PXS64_BUF_BYTES_LIMIT
DISK_OPENS
DISK_OPENS_LIMIT
DISK_CACHE_BUF_BYTES
DISK_CACHE_BUF_BYTES_LIMIT
AF_INET_SOCKET_OPENS
AF_INET_SOCKET_OPENS_LIMIT
AF_INET_SOCKET_BUF_BYTES
AF_INET_SOCKET_BUF_BYTES_LIMIT
AF_UNIX_SOCKET_OPENS
AF_UNIX_SOCKET_OPENS_LIMIT
AF_UNIX_SOCKET_BUF_BYTES
AF_UNIX_SOCKET_BUF_BYTES_LIMIT
PIPE_FIFO_OPENS
PIPE_FIFO_OPENS_LIMIT
PIPE_FIFO_BUF_BYTES
PIPE_FIFO_BUF_BYTES_LIMIT
TTY_OPENS
```

TTY_OPENS_LIMIT
NFS_OPENS
NFS_OPENS_LIMIT
DIR_OPENS
DIR_OPENS_LIMIT
DIR_STREAMS
DIR_STREAMS_LIMIT

- A timing window has been eliminated where a client releasing context (i.e. disconnect or pressing the clear screen) could interfere with the creation of a MOMI server causing it to remain running after $MOMI was stopped.

- An occasional situation is corrected where a MOMI server could be started just for the purpose of releasing client context that did not exist.

- The percent full value of a disk as found on the screen **Files / Enscribe / Volume** and the alarm **Volume / Percent Full** now more closely matches DSAP (previously the computation could be off by 1 due to rounding).

- The reporting if a process was stuck in an I/O, in Inspect, or suspended is now corrected. This affected the alarm **Process / I/O Stuck in %004** and the screen **Processes / Top Processes**.

- Corrected a bug where the following alarms were monitored all the time (regardless of the monitor times setting):

  Device / * (i.e. all)
  Netbatch / * (i.e. all)
  Tape / State up/down

- Corrected a bug so that the primary/backup indicator of a process updates while a process is running. Previously, this indicator was only determined the first time a process was seen by MOMI.

- An internal procedure used to convert CPU,PIN or a process name to a process handle now uses a larger buffer to insure sufficient space is available when copying the name to local storage. Previously, a very long internal process name would have been cut-off possibly causing an unexpected failure in the conversion to a handle.

- Corrected computations in for OSS Name Server, both on-line and history to now report operations per second instead of average:

  rr_processed
  rr_redir_sent
  rr_redir_processed
  ic_lookups
  ic_hits
  ic_misses
  lc_lookups
  lc_hits
  lc_misses
  checkpoint_reqs
  checkpoint_blks
  sem_waits

dp2_dd_reqs
dp2_messages
ps_messages
ls_messages
gettime_reqs
settime_reqs

- Corrected processing of alarm Process / Running too long (wall clock). Alarm would not trigger if a process was totally inactive.

- Corrected bug in alarm processing that a change to the alarm record might not be reflected in processing. This showed up, for example, if CPU / Busy percent with Under Percent 80 and Entity Name was changed from 0 to * and an alarm was not triggered in all CPUs.

- If MOMI executable is simply run it no longer hangs for about a minute but not immediately stops. Run time help is also updated (most previous text removed).

Misc. Items:

- OSS CPU counters are now available on systems prior to G06.26 (this was removed in server version 5.32).

- A PING initiated by the server may require fewer DNS calls.

- Default values for the CONFMOMI keyword TCPIP-WRITE-BYTES-SEC has been updated (generally larger) for various processor types.

- Code updated per HS03259 to now use a 100 byte + key_length buffer for use in FILE_RESTOREPOSITION_ and FILE_SAVEPOSITION_ operating system procedures.

- Client / server encryption is now enabled by default (see CONFMOMI keyword ENCRYPTION-ALGORITHM in MOMI Help).

- Updated tool-tip for the alarm DiskFile / File existence to indicate a physical file is required (if wild-cards are used the specific portion of name must present or an error will result).

- Errors reported to the MOMI PC Client involving opening OSS directories now provide the error number encountered.

- Startup of MOMI servers, such as CPU collectors, previously did not report creation errors as they were not directly associated with a client. Now, process creation error information of any MOMI server is logged to the MOMI log and the system console.

- The OBYMOMI file, now version 5.01, adds HIGHPIN ON to the run command.

- Updated tool-tip for alarm Process / Running too long (wall clock) to reflect it excludes processes marked by the O/S as system processes. Previously, the tool-tip indicated processes in $system.system and sysnbr were excluded.

- The S-Series version no longer reference C++ libraries in compile/link.

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Release Package 5.35
Release Date (yyyy/mm/dd) 2013/11/21

Item	Version
Latest O/S tested	G06.32.01 & H06.27.00 & J06.16.00
Client Version	5.35
Server Version (VPROC)	5.34 T0000G06___V5_34____2013_11_20
Buffer Version	Client 21.41 Server 21.41
History database	3.00
CONFMOMI	3.09
OBYMOMI	5.00
OBYCSQL	5.00
MomiFTP.exe	2.00
ssMOMI.scr	4.13
MomiEMail.exe	1.09
SendMail.exe	1.00
IPCalc.exe	1.3.3
Minimum server version to provide main line client functions	5.32
Oldest client version tested with server	5.16

NEW FEATURES / BUGS FIXED

(see MOMI HISTORY.RTF for previous versions)

Common new features (requires current client and server)

*If you are using Client Access, newly added screens in a MOMI release update are not available to users by default. This action may be changed on the screen **Configure / Client Access / Global Settings** by checking the option **New screens enabled by default**. The user that started MOMI, known as the "Default Security User" always has new screens enabled by default.*

Impacts in this version

None

MOMI Client

New Screens:

- None

New Features:

- **History / Define / Alarm**
  - Speak User Specified Text now can contain a %entity that will translate into the entity name or number that the alarm occurred on. (for Rod D.)
- **SubSystems / Logs / EMS Log**
  - Added ability for the user to choose the color of the EMS log colors.

Right-click on one of the Color legend boxes, then select 'Display/Change Color Selections ...' then right-click on the color you want to change and select 'Set Color'. (for Doug H.)

Bug Fixes:

- **SubSystems / Logs / EMS Logs**
  - With the 'EMS Message Detail' displayed and a very short message (under 12 characters) if the user clicked the 'Text Clipboard' the client would crash. (Fixed)

Misc. Items:

- None

Known issues:

- The **SubSystems / Discovery screen** is still under development and subject to change. Comments are welcome!

MOMI Server

New Features:

- A new chartable item **CPU / Overhead percent** is now present on the screen **History / Chart.**

Bug Fixes:

- The alarm **Process / Memory leak** is now functioning fully (hopefully/finally).

Misc. Items:

- None

Known issues:

- None

MOMIFTP

- None

ssMOMI

- None

MomiEmail

- None

SendMail

- None

IPCalc

- None

****

Release Package 5.34
Release Date (yyyy/mm/dd) 2013/11/13

Item	Version

Latest O/S tested	G06.32.01 & H06.27.00 & J06.16.00
Client Version	5.34
Server Version (VPROC)	5.33 T0000G06___V5_33____2013_11_13
Buffer Version	Client 21.40 Server 21.40
History database	3.00
CONFMOMI	3.09
OBYMOMI	5.00
OBYCSQL	5.00
MomiFTP.exe	2.00
ssMOMI.scr	4.13
MomiEMail.exe	1.09
SendMail.exe	1.00
IPCalc.exe	1.3.3
Minimum server version to provide main line client functions	5.32
Oldest client version tested with server	5.16

NEW FEATURES / BUGS FIXED

(see MOMI HISTORY.RTF for previous versions)

Common new features (requires current client and server)

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Impacts in this version

None

MOMI Client

New Screens:

- None

New Features:

- None

Bug Fixes:

- **History / Export**
  - If 'Export Data ...' button was press and the 'Database to view' was empty (either because no history files were defined or Mini-MOMI was running) the client would crash. Fixed.

Misc. Items:

- **Systems / TraceRoute**
  - Altered font size of progress display to make consistent with PING.

Known issues:

- The **SubSystems / Discovery screen** is still under development and subject to change. Comments are welcome!

MOMI Server

New Features:

- None

Bug Fixes:

- On systems prior to H06.23/J06.11 the MOMI 5.32 server would fail to start with a process creation error 74 (unresolved reference). The object file now has a linker option set to ignore this issue (also no messages are logged). Internally, MOMI has always checked the O/S version and avoids calling routines not supported by the release it is operating under. This was not a problem on S-Series systems. Additionally, a permanent unresolved reference is now present in non-TNS/R MOMI code to help prevent a reoccurrence.

Misc. Items:

- The $MOMI backup process would fail after 60 seconds creating a SAVEABEND file if an unresolved reference was present. Two underlying problems were identified and are 1) fixed and 2) worked around. This problem was discovered in the 5.32a update version of the server. Technically, this issue no longer applies as runtime unresolved references are ignored but the code is still corrected/worked-around.

Known issues:

- None

MOMIFTP

- None

ssMOMI

- None

MomiEmail

- None

SendMail

- None

IPCalc

- None

****

Release Package 5.33
Release Date (yyyy/mm/dd) 2013/10/30

Item	Version
Latest O/S tested	G06.32.01 & H06.27.00 & J06.16.00
Client Version	5.33
Server Version (VPROC)	5.32 T0000G06___V5_32____2013_10_30

Buffer Version	Client 21.40 Server 21.40
History database	3.00
CONFMOMI	3.09
OBYMOMI	5.00
OBYCSQL	5.00
MomiFTP.exe	2.00
ssMOMI.scr	4.13
MomiEMail.exe	1.09
SendMail.exe	1.00
IPCalc.exe	1.3.3
Minimum server version to provide main line client functions	5.31
Oldest client version tested with server	5.16

NEW FEATURES / BUGS FIXED

(see MOMI HISTORY.RTF for previous versions)

Common new features (requires current client and server)

*If you are using Client Access, newly added screens in a MOMI release update are not available to users by default. This action may be changed on the screen **Configure / Client Access / Global Settings** by checking the option **New screens enabled by default**. The user that started MOMI, known as the "Default Security User" always has new screens enabled by default.*

Impacts in this version

None

MOMI Client

New Screens:

- None

New Features:

- In many locations the Cpu,Pin of a process will now show the IPU also.
  - The IPU displays after the Pin (Cpu,Pin[ipu]), superscripted and blue.
- In many locations where a right-click menu allowed Process Actions the menu now allows the user to set/clear IPU affinity (force the process to run in set IPU).
- **Configure / Client / Transfers / File extensions**
  - Now allows wildcards (* and ?) in extensions. This allows user to put * in ASCII list which then allows all files to be editable. Also if there is ever any conflict where an extension is set both ASCII and Binary, the ASCII takes precedence. (For Tom S.)
- **Configure / Client / Transfers / Editor**
  - Added 'Asis' to current setting of 'DOS' and 'UNIX' for file conversion types. This is needed when transferring files from the NonStop (line terminator = LF) into a file the Editor expects (DOS=CRLF or UNIX=LF).
- **SubSystems / Discovery**
  - User may now change between Static and live screen updates on the fly.

- Select additional values for display
- Move copy of Discovery screen into/out of client
- User can choose between hiding and showing processes that have stopped during the measurement.

- **Processes / Process Detail**
  - In PE3 tab removed obsolete fields 'MCQ-Inuse-Max', 'Pres-Pages-Max', and 'Ext-Pages-Max' and replaced with 'Main Stack', Privileged Stack', and 'Native Heap'. Also added new fields 'IPU Affinity Class' and 'Last/Prev IPU'.
  - In PE2 tab added 'Locked-pages'
- **Processes / All Processes**
  - Added new columns
    - 'IPU(lr)' for IPU that last ran
    - 'IPU(ac)' for IPU Affinity Class
    - 'BT' for Process Bit type (replaces 'N' native)
    - 'Seg64' for number of 64bit segments in use
- **SubSystems / OSS / OSS CPU** and **History / OSS CPU** and **History / Export / OSS CPU**
  - Added 30 new OSS CPU data columns.
- **SubSystems / OSS / CPU Charts**
  - Removed Pre-defined buttons and replaced with dropdown box to select and added the ability to user define up to 9 buttons.
  - Added 10 more charts

Bug Fixes:

- Beta version 5.32 introduced a screen resizing error for some screens. Fixed.
- **SubSystems / Logs / EMS Log**
  - If a user had a default collector list defined and clicked the 'Request' button not the Config's 'Request with new options' button the list would not be used instead the request was only sent to $0. Fixed.
- **Files / SQL/MP / Statements**
  - After first set of data was returned the Client would stop getting updates. Fixed.

Misc. Items:

- **Processes / Process Detail**
  - On Process Entity : PE3 tab replaced obsolete MCQ-InUse-Max, Pres-Pages-Max, and Ext-Pages-Max with Graphs of Main Stack, Privileged Stack, and Native Heap and added 'IPU Affinity Class' and ' IPU Last'
- **Configure / Server / Server Info**
  - Mouse scroll wheel now active
- **History / Export**
  - Added CPU Busy Interval and Window size to System export values.

Known issues:

- The **SubSystems / Discovery screen** is still under development and subject to change. Comments are welcome!

MOMI Server

New Features:

- The screen **Files / File Entity** now accepts an OSS path name.

- A variety of 64-bit related attributes and values are now available for processes along with IPU assignment information available in H06.24/J06.13 or later.

- A variety of OSS counters have been added in H06.24/J06.13 or later.

- The server supports setting of IPU Affinity for a process.

Bug Fixes:

- MOMI on the J series of the Operating System now uses version 2 (an internal MOMI identifier) of its routines for OSS calls which results in 64-bit instead of 32-bit calls and values returned.

- Use of file=<name> in a MOMI alarm definition no longer causes a looping condition. This problem was introduced in 5.31 version of the server.

Misc. Items:

- The alarm **Process / Memory leak** is now functioning.

- As shown in VPROC the dates for MOMI code and libraries are now show as YYYY_MM_DD instead of MM_DD_YYYY.

- OSS CPU information now uses the ZMS style instead of legacy.

- The computation for System CPU busy in history has been completely revised and now stores the raw busy time and raw total amount of time (multiplied by the number of IPUs). The percentage computation is revised accordingly prior to display or export. This change is to remove a mathematical "averages of averages" and help prevent a customer reported system CPU busy greater than 100%.

- The CONFMOMI file entry TCPIP-LISTEN now specifies port 2010 instead of port 2000 as the default for the file. We had found that on some networks port 2000 is 'used' and could prevent data from flowing correctly.

Known issues:

- None

MOMIFTP

- Added SFTP support.

ssMOMI

- None

MomiEmail

- None

SendMail

- None

IPCalc

- None

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Release Package 5.32
Release Date (yyyy/mm/dd) 2013/08/13

Item	Version
Latest O/S tested	G06.32.01 & H06.26.00 & J06.15.00
Client Version	5.32
Server Version (VPROC)	5.31 T0000G06___V5_31____07_31_2013
Buffer Version	Client 21.39 Server 21.39
History database	3.00
CONFMOMI	3.08
OBYMOMI	5.00
OBYCSQL	5.00
MomiFTP.exe	1.70
ssMOMI.scr	4.13
MomiEMail.exe	1.09
SendMail.exe	1.00
IPCalc.exe	1.3.3
Minimum server version to provide main line client functions	5.31
Oldest client version tested with server	5.16

NEW FEATURES / BUGS FIXED

(see MOMI HISTORY.RTF for previous versions)

Common new features (requires current client and server)

*If you are using Client Access, newly added screens in a MOMI release update are not available to users by default. This action may be changed on the screen **Configure / Client Access / Global Settings** by checking the option **New screens enabled by default**. The user that started MOMI, known as the "Default Security User" always has new screens enabled by default.*

Impacts in this version

None

MOMI Client

New Screens:

- **SubSystems / Discovery**
  - This screen will allow the user to select a process or diskfile and have the client diagram all its relationships (opens) to other processes and/or diskfiles. Any entity diagramed can then be queried and the client then adds that entities relationships to the diagram.
- **Configure / Tools / Other**
  - Moved the 3 MOMI tools (Calendar, TimeZone, and Lunch) from 'Time'

page and the TCPIP tool IP Workshop from the 'Network' page onto the 'Other' page to make room for new 'Time' tools.

New Features:

- The Multiple item selector used for screens allowing multiple entities to be used (for example **File Name** button on the screen **Files / Enscribe / File**) has been changed to new style allowing integrated File/Process locators and allowing for drag and drop. This enhancement also reduced Window resource usage by the client.
- **Systems / Ping** and **Systems / TraceRoute**
  - Changed screen layout. Added tabs with Config, Report and Chart. Added ability to set Time-to-Live(TTL), size of message, and if the message can be fragmented or not, For Host generated pings/TraceRoutes added ability to set Source Address (-S). Report can be copied into Clipboard. (For Vikas K.)
- **Configure / Unit Conversions**
  - Added new tabs with new conversion types:
    BandWidth - to replace 'Configure / Tools / Numbers' Bandwidth converter.
    Velocity - to show velocity conversions
    Celestial Weight - to reduce number of support calls we get from users wanting to know how much they would weigh on the surface of Neptune.
  - Added several new conversions for existing types:
    Time - Score
    Mass - Stone
    Distance – Lunar Distance, LightSeconds, LightMinutes, LightHours, LightDays.
- **Configure / Client / Actions**
  - Added section 'MOMI.INI actions'. The button will display a popup that allows the user to Import/Export and to Backup/Restore the MOMI.INI file. the restores will allow the user to choose from the last 3 backups or a fresh new INI file. After the file is restored the client will stop and restart using the newly restored file.
- **Configure / Client / File Locations**
  - Added HTML5 help as option
- **Configure / Client / Transfers** and **Systems / FTP** and **Files / File Explorer**
  - Added ability to set file extensions that mean the file is Binary for transfers.
- **Files / Enscribe / Cache**
  - Added Mini-Reports.
- **History / Chart**
  - Added ability to right-click on 'Preconfigured Chart' items and add a button for that Chart to the list of 'Preconfigured charts on the 'Config / Time and Database' screen.
- **Configure / Tools / Numbers**
  - Added Tool to calculate Table size allowing for growth.(for Vikas K.)
- **Configure / Tools / Time**
  - Added Tool to Add/Subtract time from a date.
  - Added Tool to calculate days between 2 dates.
  - Added Tool to show day of week and day of year for a date.

Bug Fixes:

- **SubSystems / Logs / EMS Logs**
  - When User changed config items them exited Config without requesting (using the X or Close) the config setting were not returned to their previous unchanged value. Fixed.
  - 'EMS Message detail' popup was caching the displayed CX,BX and Token data even when the Detail popup was closed so the user would not pick up a changed record until they selected another record. Fixed.
  - In both the Export and Export script config the 'Select Alarm Name' dropdown was not being populated with the list of alarm names. Fixed.
- **SubSystems / Logs / VHS Log**
  - When on the Export screen if the user cleared the LogFile(right-click), exited the Export screen then re-entered the Export screen the client would crash. Fixed.
  - When the Request button in the Config options was pressed the records would not always display until you scrolled backward. Fixed.
  - The 'Create Report' on the Export did not always use the correct logfile. Fixed.
- **Configure / Diagnostics**
  - if user was logged on and had Diagnostics page displayed then logged off and the logged off user was not allowed to view diagnostics the screen was still displayed. Fixed.
- **Files / Enscribe / Cache**
  - When user clicked on the cache block size header on the detail screen the client should have jumped to show what files on that volume had that block size but it showed an error instead. Fixed.
- **Files / View File**
  - When user Selected lines and copied them into the clipboard an extra carriage return added after every line. Fixed.
  - If the user selected a line in a file then later changed to a smaller file that did not contain that line number then tried to select any line the client would crash. Fixed.
- **SubSystems / Spooler / View Job**
  - When user Selected lines and copied them into the clipboard an extra carriage return added after every line. Fixed.
  - When exporting job to 'EMail' the 'FormFeeds' checkbox was not being checked, instead the Checkbox for 'Export to PC Text File' was being used. Fixed.
  - If the user selected a line in a job then later changed to a smaller job that did not contain that line number then tried to select any line the client would crash. Fixed.
- **SubSystems / OSS / CPU**
  - If a cpu was down the screen would not show it. Fixed.
- **SubSystems / Spooler**
  - If an error occurred during collection the screen would not show any items. Fixed.
- **History / Chart**
  - When the user was defining a chart and selected the File or Process Picker button before they had chosen a Element Sub-Type the client would crash. Fixed.

- If a chart was defined with the same start and stop times the client would crash. Fixed.

- On some grids if the Vertical Scrollbar was visible and the scrollbar was scrolled off the top position then the user deleted all items on the grid the client would crash. Fixed.
- if a MOMI log script was being executed and the 'NOT LOGGED ON' user had certain screens hidden the script would fail. Fixed.
- Occasionally when the user would copy text to the clipboard the client would crash. Fixed.
- On some WIN 7 PCs when the user changed systems, had the alarm screen hidden and had an active alarm with sound active in the alarm action the Client would report the sound system on the PC was not found and then hang. Fixed.

Misc. Items:

- **Systems / FTP**
  - Grids replaced with new 'MomiGrid'. Drag and drop has temporarily been removed.
- **SubSystems / Logs / EMS** Logs Define Filter and **Alarms / Define / Alarm** EMS Set and EMS Clear
  - Added ability to 'Limit by Type' on line whether or not text was already entered.
- **Alarms / Define / Export and Import**
  - Added right-click on the progress status popup to allow copy to clipboard.
- **Files / File Explorer**
  - Grids replaced with new 'MomiGrid'. Drag and drop has temporarily been removed.
- **Processes / Process Detail**
  - When obtaining the 'Files Entity has Open' File Entity the returned values will only contain files the Primary has open. Previously files opened by the backup were also included. As a result of this change this screen will not operate with a server version older than 5.31.
- **Processes / ProcessH**
  - Changed the PFS values to graphical display like Process Detail.
- **Configure / Server Info**
  - Screen was changed from 5 screens (Server Info 1-5) to a single scrollable screen.
  - Added CNF01DB and LOG01DB file locations to screen and report.
  - Also added DNS-TCP01-NAME.
- **Configure / Client / Actions**
  - Added ability to register and unregister the CAIL emulator as a user other than the current user (i.e. do as administrator).
- **Configure / Client / File Locations**
  - Added buttons to restart client with new clean INI file and to restore old INI.
- **History / Chart**
  - Changed Chart configure to enable changing the chart display (bold,stairs,trends, scaling etc by right click menu instead of config popup.
  - Removed flickering when moving the chart Start and Stop Time lines.
- **Configure / Client / General**
  - Added new setting 'Active Page Cache'. This value is used to

determine how many screen changes must occur before a screen is eligible to be deleted. Valid values are (0-99 0=delete immediately when leaving)

- Improved the error display when some type of password failure occurred.
- Added Client runtime param "nocailautoregister' to prevent the automatic attempt to register the Cail emulator at client startup if it was not already registered.
- Screen print replaced with version that retains screen proportions and screen color resolution (no longer converted to 256 colors).
- When running a 'script' the client will no longer resize its window nor enable the CAIL emulator. This speeds up the processing and prevents unneeded work.
- To decrease startup time and reduce the impact on the PC's resources, many screens are no longer created at startup but instead the first time the user views them. Also when the user moves to another screen the old screen is eligible to be deleted. When a user has not displayed a screen in a set number of screen changes the screen is checked to see if it can be deleted. It can be deleted if:
  1) A set number of screens have been viewed since the screen was last viewed.
  2) The screen is of a type that is designed to be deleted when it is not needed.
  3) The screen is not actively performing any work.
  4) The screen does not have data collected that require messages to the Server to recreate.

- Screens converted to be created only when viewed and then deleted when the screen is not selected (unless screen contains data):
  - 'Systems'
    - 'FTP'
    - 'Ping'
    - 'TraceRoute'
  - 'CPUs'
    - all screens
  - 'Processes'
    - all screens
  - 'Files'
    - 'Enscribe'
      - 'Volume'
      - 'SubVol'
      - 'Openers'
      - 'View File'
      - 'Cache'
      - 'Locks'
    - 'SQL/MP'
      - all screens
    - 'Disk Entity'
    - 'DiskFile Entity'
    - 'DiskOpen Entity'
    - 'File Entity'
  - 'SubSystems'
    - 'Spooler'
      - all screens
    - 'TCP/IP'
      - all screens
    - 'OSS'

- all screens
- 'Expand'
- '$ZEXP'
- '$NCP'
- 'History'
- all screens
- 'Configure'
- 'Server Info'
- 'Tools'
- all screens
- 'Reference'
- all screens
- Chat'
- TimeZone, Calendar and Lunch popups

Known issues:

- The **SubSystems / Discovery screen** is still under development and subject to change.

MOMI Server

New Features:

- Support for Ping and Trace Route is totally written and provides options such as binding to a source address (in support of CLIMs), setting the ping length and setting the Don't Fragment (DF) bit.

- Support for new alarm **TMF / Transactions active count (per CPU).**

- Several alarms now support the ability to define a process name using a range in the format of $name[n1..n2]. For example, $AB[1..3] is interpreted as $AB1, $AB2 and $AB3.

- The TCP/IP stack used for the resolution of DNS names is now explicitly set with the CONFMOMI keyword DNS-TCPIP-NAME. This keyword has a default of the value of the first occurrence of the keyword TCPIP-LISTEN. Previously, a TCP/IP stack was not explicitly defined prior to converting a DNS entry. It was possible that under certain conditions or with certain network topologies that a DNS server was not always available.

- The alarm **TCP/IP / Ping host** now allows the specification of a TCP/IP address in which to BIND. In a CLIM environment, this determines which physical Ethernet port issues the PING message. By default no BIND is issued which was the previous way the alarm functioned.

- The server now stores and returns the last status of obtaining time and adjusting the system time (if enabled). This is seen on the screen **Configure / Server / Server Info.**

- Support for new alarm **Process / Memory leak.**

Bug Fixes:

- The default work location for MOMI temporary files is now displayed correctly in the system information file.

- A potential MOMI server crash has been corrected if a logged on user did not have execute access to the MOMI object and then several sensitive commands were attempted. The commands will still fail due to the inability to start a MOMI server under the logged on User ID but the crash is prevented.

- Alarms specified with only a minus name, such as -$A, and no positive range are now considered invalid (as nothing was specified to be examined) and will display as a purple alarm on the **Alarms / Active** screen. This screen should be checked after running this version of the server for the first time.

- Certain EMS logs with user defined templates did not format correctly after translation from tokens to text. MOMI now uses a default template header for the process ID, date, and time conversion to text form but extracts the needed information from EMS tokens. The EMS text seen by the user is now partially constructed by MOMI and the rest the O/S. These changes help to insure the conversion from text to tokens is always consistent.

- If an EMS log file was examined from another Expand network the process system name may not have been correct. Now MOMI extracts the system name from a token within the EMS event.

- An error message relating to a failure to send an email message incorrectly referenced a CONFMOMI keyword ALARM-SMTP-SERVER-ADDRESS. It now reads ALARM-SMTP-SERVER-ADDR.

- The following CONFMOMI keywords now accept the value of -1 or zero:
  hst02db-delete-time
  hst03db-delete-time
  hst02db-delete-time

- History consolidation code no longer generates nor deletes data from a history file when the delete time is zero.

- OSSCPU information now sets the CPU_STATE value. Previously, this field was not set but also was not used by the client.

- ProcessH on a 16-bit process with a library no longer generates the message “Wrong type of object file specified”.

Misc. Items:

- The minimum O/S version for the MOMI server is now G06.20.

- Internal message traffic has been reduced for a process with the attributes of IO_STUCK, INSPECT or SUSPENDED.

- An internal collection of MEASURE data on H/J series now collects all processes in all CPUs and may result in a slight increase in overall background CPU consumption by MOMI. The data being collected will be used in future enhancements.

- Various spooler error messages now contain the supervisor name in

question.

- Certain internal operations, such as retrieving active TMF transactions, are now preformed more quickly as intentional processing delays are placed in-between actual physical I/Os and not between logical message processing.

- The sockets interface now uses socket_get_len to determine the number of bytes actually transferred after a socket write. No issue had been encountered but the code now more closely follows published documentation.

- Processing for OBYMOMI for obsolete params BWTCP-NAME and TCPIP-PROCESS-NAME have been removed.

- During the creation of the BWSSG object, if needed, be sure specify the FUP DUP option of SOURCEDATE or SAVEALL.

Known issues:

- The new alarm **Process / Memory leak** is still under development and subject to change.

MOMIFTP

- No longer called a 'installer' so security elevation not needed.

ssMOMI

- None

MomiEmail

- Changed default port to 8080

SendMail

- None

IPCalc

- None

****

Release Package 5.31
Release Date (yyyy/mm/dd) 2012/11/16

Item	Version
Latest O/S tested	G06.32.01 & H06.24.00 & J06.13.00
Client Version	5.31
Server Version (VPROC)	5.31 T0000G06___V5_30____09_06_2012
Buffer Version	Client 21.38 Server 21.38
History database	3.00
CONFMOMI	3.08
OBYMOMI	5.00
OBYCSQL	5.00
MomiFTP.exe	1.69

ssMOMI.scr	4.13
MomiEMail.exe	1.08
SendMail.exe	1.00
IPCalc.exe	1.3.3
Minimum server version to provide main line client functions	5.25
Oldest client version tested with server	5.16

NEW FEATURES / BUGS FIXED

(see MOMI HISTORY.RTF for previous versions)

Common new features (requires current client and server)

*If you are using Client Access, newly added screens in a MOMI release update are not available to users by default. This action may be changed on the screen **Configure / Client Access / Global Settings** by checking the option **New screens enabled by default**. The user that started MOMI, known as the "Default Security User" always has new screens enabled by default.*

Impacts in this version

None

MOMI Client

New Screens:

- None

New Features:

- None

Bug Fixes:

- **SubSystems / User Defined / Diagram**
  - Saving a user defined screens would fail with no warning if the user saved a screen into an empty database. If the database contained at least one screen created by a previous version of the client it would save correctly. Fixed.
- **SubSystems / Spooler / View Job**
  - Under some circumstances when a user was clicking on searched text the client would crash. Fixed.

Misc. Items:

- None

Known issues:

- None

MOMI Server

New Features:

- None

Bug Fixes:

- None

Misc. Items:

- None

Known issues:

- None

MOMIFTP

- None

ssMOMI

- None

MomiEmail

- None

SendMail

- None

IPCalc

- None

****

Release Package 5.30
Release Date (yyyy/mm/dd) 2012/09/07

Item	Version
Latest O/S tested	G06.32.01 & H06.24.00 & J06.13.00
Client Version	5.30
Server Version (VPROC)	5.30 T0000G06___V5_30____09_06_2012
Buffer Version	Client 21.38 Server 21.38
History database	3.00
CONFMOMI	3.08
OBYMOMI	5.00
OBYCSQL	5.00
MomiFTP.exe	1.69
ssMOMI.scr	4.13
MomiEMail.exe	1.08
SendMail.exe	1.00
IPCalc.exe	1.3.3
Minimum server version to provide main line client functions	5.25
Oldest client version tested with server	5.16

NEW FEATURES / BUGS FIXED

(see MOMI HISTORY.RTF for previous versions)

Common new features (requires current client and server)

*If you are using Client Access, newly added screens in a MOMI release update are not available to users by default. This action may be changed on the screen **Configure / Client Access / Global Settings** by checking the option **New screens enabled by default**. The user that started MOMI, known as the "Default Security User" always has new screens enabled by default.*

Impacts in this version

The Auto Logon function will not operate for clients prior to version 5.28 and using server version 5.29. See below for additional details.

MOMI Client

New Screens:

- None

New Features:

- None

Bug Fixes:

- None

Misc. Items:

- **SubSystems / Logs / EMS Message**
  - A filter looking for Event number will now be an exact match not a partial match(i.e. looking for '5' will only find event 5 not event 1521).

Known issues:

- None

MOMI Server

New Features:

- None

Bug Fixes:

- If the CPU of the primary $NCP crashed the message **Error obtaining info from $NCP - Error 60** was displayed on the screen **SubSystems / Expand / Overview** and also reported that **Expand is NOT Available.** Recovery required MOMI on the NonStop System to be stopped and restarted. MOMI now closes and reopens to file to $ZNET (which in turn closes and reopens to $NCP) to automatically recover from the error 60.

Misc. Items:

- None

Known issues:

- None

MOMIFTP

- None

ssMOMI

- None

MomiEmail

- 1.08 – added option of BlackWood port 8080

SendMail

- None

IPCalc

- None

****

Release Package 5.29
Release Date (yyyy/mm/dd) 2012/08/27

Item	Version
Latest O/S tested	G06.32.01 & H06.24.00 & J06.13.00
Client Version	5.29
Server Version (VPROC)	5.29 T0000G06___V5_29____08_27_2012
Buffer Version	Client 21.38 Server 21.38
History database	3.00
CONFMOMI	3.08
OBYMOMI	5.00
OBYCSQL	5.00
MomiFTP.exe	1.69
ssMOMI.scr	4.13
MomiEMail.exe	1.07
SendMail.exe	1.00
IPCalc.exe	1.3.3
Minimum server version to provide main line client functions	5.25
Oldest client version tested with server	5.16

NEW FEATURES / BUGS FIXED

(see MOMI HISTORY.RTF for previous versions)

Common new features (requires current client and server)

*If you are using Client Access, newly added screens in a MOMI release update are not available to users by default. This action may be changed on the screen **Configure / Client Access / Global Settings** by checking the option **New screens enabled by default**. The user that started MOMI, known as the "Default Security User" always has new screens enabled by default.*

Impacts in this version

The Auto Logon function will not operate for clients prior to version 5.28 and using server version 5.29. See below for additional details.

MOMI Client

New Screens:

- None

New Features:

- **Files / File Explorer / OSS**
  - Right-clicking on the Guardian name will now allow that Guardian name to be put into the clipboard instead of the OSS path. (for Paul B.)
- **Configure / Client / Single Screen / SubSystems / Logs / EMS Message**
  - Added Setting for 'Single Line limit text width display'. This is a setting for the 'SubSystems / Logs / EMS Message' screen. Checking this option will remove the Horizontal scrollbar and limit the text viewable for 'Single Line' display to the width of the screen. This option was added because some PCs (mostly running Windows7) are unacceptably slow if the text being displayed is very large (long EMS message text).

Bug Fixes:

CPUs / CPU Info

- If when Grid was sorted CPU number would get mixed up. Fixed.

- **Processes / All Processes**
  - On a system with a large number of processes running the grid was taking an excessive amount of time to display the records after they had been collected. Fixed.
- **Files / Enscribe / View File**
  - No error was displayed when file not found. Fixed.
- **Files / DiskFile Entity**
  - Right-click action 'View DiskOpen Entity by "Requests Blocked"' did not work. Fixed.
- **SubSystems / Logs / EMS Messages**
  - if 'Find' dialog 'Clear' button was pressed when the Grid was empty(no messages displayed) the client would crash. Fixed.
  - When Reverse scrolling was enabled until the screen filled up with messages the update was 'jerky' and sometimes would not show all records. Fixed.
- **SubSystems / Logs / EMS EventBX**
  - in 'Find' dialog the 'Match Case' and 'Whole Word' options did not work. Fixed.
  - in 'Find' dialog the 'Up' and 'Down' direction options did not work. The direction was always down. Removed option (for now). Fixed.
- **SubSystems / User Defined / Diagram**
  - When a previously saved User defined page was re-saved the page was incorrectly written to the database and the page was lost. Fixed.
- The Socket Connection Timer was not being honored. The default value of 30 seconds was always used. Fixed.

Misc. Items:

- **Files Files / Enscribe / View File**
  - Changed Export status from 'Working...' every 100 records to progress bar updating every 1000 records.
- **SubSystems / Logs / EMS Msgs**
  - On 'Config' display the Collector settings(Single or List) that will be used when the Request button is pressed are now light blue instead of green.
- **SubSystems / Spooler / View job**

- Changed Export status from 'Working...' every 100 records to progress bar updating every 1000 records.

Known issues:

- None

MOMI Server

New Features:

- None

Bug Fixes:

- A crash of the main MOMI server that occurred during internal testing highlighted a missing particular internal protocol validation check. After the protocol check was added it brought to the surface a client protocol error which was corrected. These fixes have a side effect that Auto Logon will not function when using this server and versions of the MOMI PC Client prior to 5.29. The 5.28 version of the MOMI server (available on our website as an update) could be used while MOMI PC Client are migrated to 5.29

Misc. Items:

- Minor performance improvements at the TCP/IP processing level.

Known issues:

- None

MOMIFTP

- None

ssMOMI

- None

MomiEmail

- None

SendMail

- None

IPCalc

- None

****

Release Package 5.28
Release Date (yyyy/mm/dd) 2012/06/29

Item	Version
Latest O/S tested	G06.32.01 & H06.23.00 & J06.13.00
Client Version	5.28
Server Version (VPROC)	5.28 T0000G06___V5_28____05_31_2012
Buffer Version	Client 21.38 Server 21.38
History database	3.00

CONFMOMI	3.08
OBYMOMI	5.00
OBYCSQL	5.00
MomiFTP.exe	1.69
ssMOMI.scr	4.13
MomiEMail.exe	1.07
SendMail.exe	1.00
IPCalc.exe	1.3.3
Minimum server version to provide main line client functions	5.25
Oldest client version tested with server	5.16

NEW FEATURES / BUGS FIXED

(see MOMI HISTORY.RTF for previous versions)

Common new features (requires current client and server)

*If you are using Client Access, newly added screens in a MOMI release update are not available to users by default. This action may be changed on the screen **Configure / Client Access / Global Settings** by checking the option **New screens enabled by default.** The user that started MOMI, known as the "Default Security User" always has new screens enabled by default.*

Impacts in this version

None

MOMI Client

New Screens:

- None

New Features:

- **SubSystems / Logs / EMS Msgs**
  - -Changed to tabbed filter type like Alarms for EMS messages. (for Tom S.)
  - -Added new filter type (Exclude if All).
  - -Added ability to limit filter matching to message fields (ssid, event nbr, etc).
  - -Template file now set and displayed for EMS tokens. If Template file is set EMS Message Detail screen will display Template file in use.
  - -Users can now left-click on color legend and filter to display only that color messages. (for Jeff B.)
  - -EMS Filters can now filter by Collector logs. (for Jeff B.)
  - -EMS Message Detail screen when copied to Text Clipboard now has a copy of the message in EMSDIST format as well as the Detailed list. (for Jeff B.)
  - -Added 'Find' button to allow user to search thru all non-filtered messages and locate every message that contains the 'Find' text. (for Tom S.)
  - -Added new Mini-report 'by Collector' and sped up the calculations.
- **SubSystems / Logs / EventBX / Define**
  - -Added a 'Find' button for the text within the definition. (for Tom S.)

- **Overview** and **Configure / Client / Single Screen / Overview**
  -Added ability to turn on/off color highlighting of EMS messages displayed on the Overview screen. (for Ken K.)
- **Files / SQL/MP / Indexes**
  -Added new column 'IndxVar'. This column displays the variance between the 'IndexL' (UPDATE STATISTICS) index level and the 'ActIndx' (actual current index level). If the Variance is not zero all three values will be orange to signal user.
- **Files / Disk Entity**
  -Added new Right-click action 'View DiskFile Entity by "Requests blocked" to jump to DiskFile Entity for that disk sorted by Requests Blocked (Locks).
- **Files / DiskFile Entity**
  -Added new Right-click action 'View DiskOpen Entity by "Requests Blocked" to jump to DiskOpen Entity for that DiskFile sorted by Requests Blocked (Locks).

Bug Fixes:

- **Configure / Tools / Time / Countdown Timer**
  -If Date was too far in future/ past client would crash. Fixed.
- **Files / Enscribe / View Files / Export**
  -The Export to PC Text file did not work. Fixed.
- **SubSystems / Logs / EMS Msgs**
  -If On some systems with many new EMS messages coming in when a filter was activated the client could display a message that should have been filtered out. Fixed.
  -EMS Message Detail 'Text Clipboard' would break lines within a word. Now lines are broken between words. Fixed.
  -When Stop time was used and records were received after the stop time the Queued column on the Collector Log status grid would show the records as queued. Fixed.
- **Overview**
  -If the Overview screen was visible and the user held down the Enter Key (or had a stuck keyboard) the client would attempt to open many copies of the Help then after a couple minutes would crash. Fixed.
- **Processes / All Processes**
  -If user chose a 'tree' display then left the page before if displayed the client would crash. Fixed.
- **Configure / UserHints**
  -Documentation and hints indicated the UserHint Key value (value to look up) is not case-sensitive but it actually is so updated hints.
- **Configure / Define Systems**
  -The Selected(Clicked) system did not highlight correctly. Fixed.
- On some grids the default number of fixed columns was not being set. Fixed.
- On some grids the if the user right-clicks on one of the grid count fields and tries to copy the value to the clipboard the client would crash. Fixed.
- If MOMI password expired or was invalid the user was not able to generate a Diagnostic System Info report. Fixed.
- Socket inactivity timer (default 30 seconds) did not always detect and reset the socket. Fixed.
- When the user was Exporting History data, paused then resumed the MOMI

client the History export did not resume. Fixed.

Misc. Items:

- **Files / File Explorer / OSS**
  -Broken Symbolic Links are now indicated with a SLink symbol with a red line through it. (for Tom S.)
- **SubSystems / Logs / EMS Msgs**
  -Added ability to display Message detail with embedded LineFeeds.
  = On 'Config' display the Collector settings(Single or List) that will be used when the Request button is pressed are now light green to help reduce confusion as to what Collector(s) will be queried.
- **Processes / All Processes**
  -Improved speed of building 'Trees' for systems with a lot of processes.
  -Added ability to display process sequence number in 'Tree' display.
- **Files / Disk Entity** and
  Files / DiskFile Entity and
  Files / DiskOpen Entity and
  Files / File Entity and
  Processes / Process Entity
  -Improved speed of converting between Rated and Unrated values.
- **Systems / Probe / Base**
  -Improve display if probing to a system that does not respond.
- **Overview**
  - Removed 'Send' value from CPU stack chart.
- First time new client is ran the records from new calendar file (CALENDAR.NEW) are merged into the active calendar file (CALENDAR.MOM).
- Changed Logic detecting CAIL emulator already installed to make sure Licensed version will be used if available.
- Improved reporting of timeouts for socket connections.

Known issues:

- None

MOMI Server

New Features:

- OSS files with broken links now return what underlying data is available. Previously, nothing was return except it was broken.

- The display of EMS tokens now accepts a template file name to use in the translation process.

- Several new fields provide the process sequence number for the message used in support of the screen **Processes / All Processes**. This supports building more accurate parent / child relationships where the process name is the same but the process has stopped / restarted. Additionally, the server provides an ancestor in more situations when dealing with unnamed processes.

Bug Fixes:

- The server no longer crashes if an existing **UserHint** is resized larger (could require a resize of 31 characters).

- The server no longer retries a client request if the message causes an abend in a persistent server. Previously, the message would be retried and could cause an 'abend loop' condition requiring a MOMI restart to clear the condition.

Misc. Items:

- Unprintable characters for the screen **Subsystems / Logs / EMS Msgs** are no longer filtered. This function is now handled by the client.

- The internal use of system procedures FILENAME_FINDSTART_ and FILENAME_FINDNEXT_ now use waited I/O instead of no-wait I/O. A bug in J06.13.00 and H06.24.00 caused the no-waited usage of these system calls to fail. This resulted in the inability (hangs) in certain situations to list disk volumes and process names affecting some pop-up windows and certain aspects of alarm processing. HP case 10-120430-0530.

Known issues:

- None

MOMIFTP

- None

ssMOMI

- None

MomiEmail

- None

SendMail

- None

IPCalc

- None

****

Release Package 5.27
Release Date (yyyy/mm/dd) 2012/03/09

Item	Version
Latest O/S tested	G06.32.01 & H06.23.00 & J06.13.00
Client Version	5.27
Server Version (VPROC)	5.27a T0000G06___V5_27A___03_22_2012
Buffer Version	Client 21.36 Server 21.36
History database	3.00
CONFMOMI	3.08
OBYMOMI	5.00
OBYCSQL	5.00
MomiFTP.exe	1.69

ssMOMI.scr	4.13
MomiEMail.exe	1.07
SendMail.exe	1.00
IPCalc.exe	1.3.3
Minimum server version to provide main line client functions	5.25
Oldest client version tested with server	5.16

NEW FEATURES / BUGS FIXED

(see MOMI HISTORY.RTF for previous versions)

Common new features (requires current client and server)

*If you are using Client Access, newly added screens in a MOMI release update are not available to users by default. This action may be changed on the screen **Configure / Client Access / Global Settings** by checking the option **New screens enabled by default**. The user that started MOMI, known as the "Default Security User" always has new screens enabled by default.*

Impacts in this version

None

MOMI Client

New Screens:

- None

New Features:

- None

Bug Fixes:

- If user had multiple monitors and primary monitor was not on the left some popups would appear on the wrong monitor. Fixed.
- With Popup Memo and EventBX Define screen when Ctrl-V was used to paste from clipboard the copied text was pasted twice. Fixed.
- If during startup the client detected invalid fatal MOMI.ini settings the client would crash. Now it allows the user to either
  1) stop the client or
  2) stop the client then automatically restart with a default MOMI.ini file. Fixed.
- 'SubSystems : Logs : EventBX : Define'
  If EventBX database had old records created in version 5.25 they could display incorrectly on version 5.26. Now any version can read records from any other version. Fixed.
- Hint on 'Overview' connected system showed time connected as PC time not NonStop Time. Fixed.

Misc. Items:

- 'SubSystems : Logs : EventBX : Define'
  Changed editor settings toolbar look.
- 'SubSystems : Logs : EMS Log : Detail'
  Enhanced 'Text Clipboard' to include copy of what ever tab was active. Detail(EventTX), EventCX, EventTX or Tokens.

- Client run-time params changed (old param still allowed for Now)
  'script-userhints-import=' replaced with
  'function-userhints-import='
  'script-eventbx-export-unformatted=' replaced with
  'function-eventbx-export-unformatted='

Known issues:

- None

MOMI Server

New Features:

- None

Bug Fixes:

- A small memory leak no longer occurs when an alarm generates an email.

Misc. Items:

- If an alarm generates an email and the CONFMOMI keyword ALARM-SMTP-SERVER-ADDRESS is not defined only three error messages are generated to the MOMI Log and EMS. Previously, every email generated a message.

Known issues:

- None

MOMIFTP

- When transfer fails the log will now show file sizes sent and received.

ssMOMI

- None

MomiEmail

- Added Copy from clipboard button.

SendMail

- None

IPCalc

- None

****

Release Package 5.26
Release Date (yyyy/mm/dd) 2012/02/17

Item	Version
Latest O/S tested	G06.32.01 & H06.23.00 & J06.12.00
Client Version	5.26
Server Version (VPROC)	5.26 T0000G06___V5_26____02_17_2012

Buffer Version	Client 21.36 Server 21.36
History database	3.00
CONFMOMI	3.08
OBYMOMI	5.00
OBYCSQL	5.00
MomiFTP.exe	1.69
ssMOMI.scr	4.13
MomiEMail.exe	1.05
SendMail.exe	1.00
IPCalc.exe	1.3.3
Minimum server version to provide main line client functions	5.25
Oldest client version tested with server	5.16

NEW FEATURES / BUGS FIXED

(see MOMI HISTORY.RTF for previous versions)

Common new features (requires current client and server)

*If you are using Client Access, newly added screens in a MOMI release update are not available to users by default. This action may be changed on the screen **Configure / Client Access / Global Settings** by checking the option **New screens enabled by default**. The user that started MOMI, known as the "Default Security User" always has new screens enabled by default.*

Impacts in this version

Database format of EventBX records has changed to get correct sorting order. Any records created using version 5.24 must be re-created.

MOMI Client

New Screens:

- None

New Features:

- **'Configure : Client : Single Screen : Logs : EventBX'**
  - added ability to change EventBX non-formatted Export Delimiter and Linefeed replacement characters.

Bug Fixes:

- **'SubSystems : Logs : EMS Logs'**
  - The Clear button would not reset the Client Filter. Fixed.
  - When 'Reversed Scrolling' was enabled, sometimes the last message (bottom of screen) would not fully display. Fixed.
- **'Processes : ProcessH Entity'**
  - **'Print List'** was not printing the first line of the report. Fixed.
- if running as MiniMOMI and the TMF chart on the Overview screen was clicked the client would crash. Fixed.
- **'Configure : Client : General'**
  - When a user changed the Export characters the grids would not be notified of the change until the client was stopped and restarted. Fixed.
- **'History : Process Start/Stop'**

- Under some circumstances when using the **'Backward/Forward'** buttons some records might be not displayed. Fixed.

Misc. Items:

- On Most Grids added display altered indicator (purple triangle in top/right corner) to indicate Grid Tools are set to alter the display of this column.
- **'Configure : Diagnostics'**
  - added which timer (Client, Client Access User or Client Access Global) caused an AutoLogoff.

Known issues:

- None

MOMI Server

New Features:

- None

Bug Fixes:

- Remote process names are now displayed correctly on the screen **Logs / EMS Msgs**. Previously, the first two letters were missing.
- Unnamed processes now display the CPU,PIN on the screen **Logs / EMS Msgs**. Previously, the Process field was empty.
- Only Start / Stop records are now returned on the screen **History / Process Start/Stop** if a process name is specific in the search. Previously, other history records were returned.

Misc. Items:

- None

Known issues:

- None

MOMIFTP

- When transfer fails the log will now show file sizes sent and received.

ssMOMI

- None

MomiEmail

- None

SendMail

- None

IPCalc

- None

****

Release Package 5.25
Release Date (yyyy/mm/dd) 2012/02/03

Item	Version
Latest O/S tested	G06.32.01 & H06.23.00 & J06.12.00
Client Version	5.25
Server Version (VPROC)	5.25 T0000G06___V5_25____02_03_2012
Buffer Version	Client 21.36 Server 21.36
History database	3.00
CONFMOMI	3.08
OBYMOMI	5.00
OBYCSQL	5.00
MomiFTP.exe	1.68
ssMOMI.scr	4.13
MomiEMail.exe	1.05
SendMail.exe	1.00
IPCalc.exe	1.3.3
Minimum server version to provide main line client functions	5.25
Oldest client version tested with server	4.22

NEW FEATURES / BUGS FIXED

(see MOMI HISTORY.RTF for previous versions)

Common new features (requires current client and server)

*If you are using Client Access, newly added screens in a MOMI release update are not available to users by default. This action may be changed on the screen **Configure / Client Access / Global Settings** by checking the option **New screens enabled by default**. The user that started MOMI, known as the "Default Security User" always has new screens enabled by default.*

Impacts in this version

Database format of EventBX records has changed to get correct sorting order. Any records created using version 5.24 must be re-created.

MOMI Client

New Screens:

- None

New Features:

- **'Processes : Process Detail : SQL Statements'** and **'Files : SQL/MP : Statements'** now have column 'Selectivity%' that is a calculated value of what percent of records accessed were used.

- **'SubSystems : Logs : EMS Log : Config'** now allows the user to set a message stop count. So no messages will be collected after the count is reached.

- **'Processes : Process Entity'** added column showing present memory use in bytes. Column labeled 'Pres Memory Bytes'.

Bug Fixes:

- For most Grids the Tools display for Show Columns did not resize test correctly when the client was resized. fixed.

Misc. Items:

- **'SubSystems : EMS Log : Message Detail'** display now shows/hides the EventCX/EventBX buttons and tabs based on the Client Access settings.

- **'Configure : Client : Single Screen : SubSystems : Logs : EMS'** added Default Distributor Filter and Template File.

- Database format of EventBX records has changed to get correct sorting order. Any records created using version 5.24 must be re-created.

- **'Processes : Process Entity'** removed the following columns because the values are no longer available: pres pages max , ext segs max , recv qlen max , abs segs qlen max , msgs sent qlen max.

Known issues:

- None

MOMI Server

New Features:

- None

Bug Fixes:

- A request by the client to delete all EventBX records now completes correctly if there are no EventBX records. Previously, the command to delete all would hang if there was nothing to delete.

Misc. Items:

- When MOMI stops a process as a result of an internally generated request, such as a MOMI CPU collector that is not reporting on a timely basis, the message written to the MOMI log no longer includes User field. Previously, the User field was populated by the Logon ID used to start MOMI. This was a bit misleading as the action was internally generated.

- The format of EventBX records is changed and not compatible with the previous release. Any existing data must be deleted and reloaded.

Known issues:

- None

MOMIFTP

- None

ssMOMI

- None

MomiEmail

- None

SendMail

- None

IPCalc

- None

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Release Package	5.24
Release Date (yyyy/mm/dd)	2012/01/27

Item	Version
Latest O/S tested	G06.32.01 & H06.23.00 & J06.12.00
Client Version	5.24
Server Version (VPROC)	5.24 T0000G06___V5_24____01_26_2012
Buffer Version	Client 21.35 Server 21.35
History database	3.00
CONFMOMI	3.08
OBYMOMI	5.00
OBYCSQL	5.00
MomiFTP.exe	1.68
ssMOMI.scr	4.13
MomiEMail.exe	1.05
SendMail.exe	1.00
IPCalc.exe	1.3.3
Minimum server version to provide main line client functions	5.24
Oldest client version tested with server	4.22

NEW FEATURES / BUGS FIXED

(see MOMI HISTORY.RTF for previous versions)

Common new features (requires current client and server)

*If you are using Client Access, newly added screens in a MOMI release update are not available to users by default. This action may be changed on the screen **Configure / Client Access / Global Settings** by checking the option **New screens enabled by default**. The user that started MOMI, known as the "Default Security User" always has new screens enabled by default.*

Impacts in this version

This version requires upgrading both the Client and the server to get full functionality. For example the EMS Messages screen in the 5.24 version of the client will not work with servers before 5.24.

MOMI Client

New Screens:

- Added **SubSystems / Logs / EMS EventBX / Define** (for Tom S.)

- Added **SubSystems / Logs / EMS EventBX / List/Import/**Export

New Features:

- EventBX is a new user-defined EMS detail record. Like the built-in EventTX supplied by HP and the EventCX supported by HP but populated by the user. EventBX (Event Blackwood eXtension) is EMS message information. The EventBX is a RTF (RichText) formatted message of unlimited length. (for Tom S.)

- **SubSystems / Logs / EMS Msgs** Detail added tab for EventBX.(for Tom S.)

- New MOMI Runtime param:
  'script-EventBX-Export-Unformatted="<pc-file-name>"'
  This param will cause the MOMI Client to start then export the UNFORMATTED EventBX records to the specified PC based file, then stop the client at completion. Format of the EventBX export unformatted text file is located in the MOMI Help and on the page hint for screen **SubSystems / Logs / EMS EventBX / List/Import/Export** (For Tom S.)

- **Configure / Settings / Single Screen / Processes / ProcessH Entity** now has the ability to set the default Measurement Code type for the **Processes / ProcessH Entity** screen. (For Hans B.)

- **Alarms / Define** EMS message alarms now can be set/cleared by items within a specified field only (Owner, SSID ,Event Nbr, Process name, or within the text). (for Tom S.)

- On **SubSystems / Logs / EMS Logs** added to the Configure the ability to set a starting Client Filter so records will start filtering immediately. Also added default starting client filter to **Configure / Client / Single Screen / Logs :EMS**. (for Tom S. and Alan H.)

- On **SubSystems / Logs / EMS Logs** added to the Configure the ability to set a EMS Template file for the EMS screen. (for Doug H. and Tom S.)

- On **Configure / Client / Single Screen / Overview / EMS display** added the ability to set an EMS Template file for the Overview EMS screen.

- On **SubSystems / Logs / EMS Logs** added right-click popup menu for date/time column that allows the user (if they have an active filter) to turn off the filter then scroll the selected record to the top of the grid so they can see surrounding events.

- On **Configure / Client / Single Screen / SubSystems / Logs / EMS** changed 'Display Format' to 'Line Color Options' that now allow user to select
  1. Set if Color Highlighting is on or off
  2. If Color Highlighting is on, set if the color legend displayed or not
  3. Set if an Action/Emphasis should color(Yellow/Red) 1st column or entire line

4. if an Action/Emphasis is displayed as entire line Set if A/E color or content color takes precedence.
(for Tom S.)

- Popup Memo for Notes (right click on 'Print Screen' button) now allows setting font and font attributes on selected text.

- On most grids the grid tools on 'Show Columns' tab the 'string' type columns can now alter the display by chopping leading or trailing characters off the display for that column. (for Tom S.)

Bug Fixes:

- On a WinXP pc when Screensaver engages and is then unlocked the client would sometimes crash. Fixed.

- If a system had Client Access activated then changed the MOMI server to run in MiniMOMI mode, the Client Access setting were still applied. This meant that if Client Access turned off all screens except Overview all other screens would be hidden and since MiniMOMI prevents logon you could never see any screens. Fixed.

- On **SubSystems / Spooler / View Job** when a job of more than 325,000 lines was displayed the client would crash with an 'out of memory' error. Totally rewrote View Job to prevent the crash and to speed it up. Fixed.

- On **Files / Enscribe / View File** when a file of more than 325,000 lines was displayed the client would crash with an 'out of memory' error. Totally rewrote View File to prevent the crash and to speed it up. Fixed.

- On **Files / Enscribe / View File** when a file started with a null the client would crash. Fixed.

- If the PC ever had its time set backward (including setting daylight savings on) the client would not perform some timed tasks until the time caught up again. Fixed.

- On **Systems / Probe / Base** sometimes the first system on the list would have a smaller font than the rest of the systems. Fixed.

- On **SubSystems / Logs / EMS Msgs** Config when new Collectors where added to the Collector lists and the Client was maximized the font was too small. Fixed.

- On **CPUs / Priority Charts / Charts 2 / 3D CPU Busy** chart. If system had 16 cpu and the client was maximized the cpu numbers on the bottom axis were garbled. Fixed.

Misc. Items:

- On **SubSystems / Logs / EMS Msgs** Detail moved the EventCX to its own tab.

- On **SubSystems / Logs / EMS Msgs** when an item was added to the color coding both the label and the message content had the text added to

it. Now the text is only added to the label if it is not empty. (For Doug H.)

- Added EventBX screens and actions to Client Access.

- On **Configure / Client Access / User Define** now color coding (orange) is used to show a Group is being displayed/defined or if a user is part of a group (meaning the user settings can only be changed by changing the group setting).

- Change tab **Configure / Settings** to **Configure / Client**.

- On **Configure / Client / Single Screen** changed 'System Wide' tab to 'General'.

- On **Configure / Client / Single Screen** added a set of sub tabs for the SubSystems tab.

- On Grid Toolbox changed tab from 'Hide columns' to 'Show Columns'

- On **Configure / Server / Server Info 2** flags
  1. Removed D47 or later , D48 or later , G06.12 or later
  2. Added Client Initial Msg and Logon View Job

- On **Files / Enscribe / File Opener , Files / Enscribe / File** and **Files / Enscribe / File Detail** added ability to lookup OSS type files. (for Tom S.)

- On **Configure / Client / General / Chart Backgrounds** added ability to set background color of Overview CPU Busy chart separate from rest of charts.

- On **Configure / Server / Trace Log** added clear button.

- On **Configure / Client / Actions** changed the Database Actions from individual buttons to a selection screen and added the ability to delete all EventBX records.

Known issues:

- None

MOMI Server

New Features:

- Supports ability to specify particular fields of SSID, Event Number, Process Name or Event text when searching for set/clear criteria in the alarm **EMS / User defined**. Previously (and still the default), the search of the EMS message always included the entire message.

- Supports virtually unlimited record sizes written to the MOMI configuration file CNF01DB. I/O's to the file now use record locking.

- Support is added for new/updated client screens:
  - **Logs / EMS EventBX**

- **Logs / EMS Msgs**
- **Enscribe / File Opener**
- **Enscribe / File**

- The CONFMOMI keyword CLIENT-INITIAL-MSG determines if an extra level of initial protocol in the communication is required. The feature is provided for environments that might issue random communication messages (i.e. security penetration testing) on the TCP/IP port where the MOMI server listens. See MOMI help for additional information.

- New alarm DiskFile / EOF (megabytes) that triggers if a disk file is over or under a particular size.

- The CONFMOMI keyword LOGON-SPOOLER-VIEW-JOB provides the ability to view Spooler jobs under the user authority of MOMI instead of requiring the user to logon. The default requires the user to logon and have the authority to view the contents of a Spooler job. See MOMI help for additional information.

- MOMI no longer requires logon to view the contents of EventCX information.

- The screen Enscribe / Locks now displays RECORD-LOCKG when a generic lock is in effect. Previously, this attributed was not checked an only RECORD-LOCK was displayed.

Bug Fixes:

- The translation of EMS tokens to text now uses routines that support token overrides. This affects the display of EMS messages in **Logs / EMS Msgs** and alarm processing in **EMS / User defined**. Previously, if an EMS template overrode with ZEMS_TKN_EMPHASIS it was not picked up.

- The server now correctly responds when an unknown message is received. Previously, no response was issued.

Misc. Items:

- EMS messages displayed in an alarm **EMS / User defined** is no longer changed to upper case but now displayed as written.

- The default size of CNF01DB is now has primary/secondary extent size of 1000/5000 instead of 1000/1000.

- The alarm DiskFile / Percent Full no longer has the capability to function on an OSS file. The ability was added but not published. The issue is that there is no clearly documented and consistent method for determining the percent full for an OSS file.

- The positioning with an EMS file/collector is now by log time instead of generation time.

- The MOMI CPU collectors no longer request device information for

subtype 30 processes if they are suspended. Previously, they only checked for suspended. This will help improve collector consistency on development systems.

- The processing for the screen **Processes / All Processes** now reports error 160 in the DI Error column and skips a device inquiry for a subtype 30 process that is suspended or in a debug/inspect state. This will help improve screen loading performance on a development system.

- Under heavy load the server directed screens such as **Alarms / Active** to reload or redisplay (intended as a optimization) if more than 500 items were queued for display. This logic is removed as stress testing encountered a situation where a stream of items reaching 4000 (or so) could get the client so busy it could not keep up.

Known issues:

- None

MOMIFTP

- None

ssMOMI

- Recompiled to take advantage of new Sockets code. This allows the program to function if the server has the CONFMOMI keyword CLIENT-INITIAL-MSG enabled.

MomiEmail

- None

SendMail

- None

IPCalc

- None

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Release Package 5.23
Release Date (yyyy/mm/dd) 2011/10/20

Item	Version
Latest O/S tested	G06.32.01 & H06.23.00 & J06.12.00
Client Version	5.23
Server Version (VPROC)	5.23 T0000G06___V5_23____10_14_2011
Minimum Server Version	5.00
Buffer Version	Client 21.34 Server 21.34
History database	3.00
CONFMOMI	3.08
OBYMOMI	5.00
OBYCSQL	5.00
MomiFTP.exe	1.68
ssMOMI.scr	4.12
MomiEMail.exe	1.04

SendMail.exe 1.00
IPCalc.exe 1.3.3

Oldest client version
tested with server 4.22

NEW FEATURES / BUGS FIXED

(see MOMI HISTORY.RTF for previous versions)

Common new features (requires current client and server)

*If you are using Client Access, newly added screens in a MOMI release update are not available to users by default. This action may be changed on the screen Configure:Client Access:Global Settings by checking the option **New screens enabled by default**. The user that started MOMI, known as the "Default Security User" always has new screens enabled by default.*

Impacts in this version

None

MOMI Client

New Screens:

- None

New Features:

- 'Alarms : Active' if alarm detail '[+]' is being displayed the detail may now be split into multiple lines of a fixed length. This is set in the 'Configure : Settings : Single Screen : Alarms' section labeled as ' Split Alarm detail into shorted lines [####]'. (for Tom S.)
- Created ability to use previously exported ini file to create new ini when client is first started. This will allow administrator to setup default startup ini for new installs. See 'MOMI_INIT.INI' help for how to setup and use.
- On 'SubSystems : Logs : EMS Logs' added ability to add/select multiple collectors at same time by using a comma between collectors in the 'Collector or LogFile' location. If the user then presses the Add arrow they are all added and if the user presses the 'Request with new options' button they are all added and the collection starts. (for Hal D.)
- On 'SubSystems : Logs : EMS Logs' the Config display shows the state of each collector. (this may also be displayed by right-clicking the 'Config' button.
  - 'Requesting - no recs yet' = messages requested but not yet received.
  - date and time = date time of last messages received.
  - 'Stop Time reached' = Collector has reached stop time.
  - error text = any error receiving messages from collector.

Bug Fixes:

- On 'Processes : All Processes', 'Files : Enscribe : Files' and 'SubSystems : Spooler : Jobs' if the AutoUpdate checkbox was checked a very small memory leak was occurring with each update. Fixed.
- On most grid-type screens, If user stopped the update before all records were loaded the screen would remain 'locked' and not repaint once the user left the screen and then returned to it. Fixed.

- Previously if a user created a shortcut to start MOMI and set that shortcut to 'Start Minimized' the MOMI Icon would not minimize to the Task bar but instead put a small window above the Task bar that would need to be right-clicked then restored to get the Client to start. Then it would not be minimized. Fixed.
- If the user selected the Overview screen EMS Messages and the EMS system was very backed up with messages, the client would hang until it caught up. Fixed.
- If 'Configure : Client Access : Overview' setting 'Allow Display of EMS Msgs' was not checked the EMS button was still available on Overview' and 'Configure : Settings : Single Screen : Overview' setting 'CPU/Process/EMS' was still available. Fixed.
- If user was viewing more than 2 EMS collectors and then changed systems the client would crash. Fixed.
- On 'Systems : FTP' when a file was transferred from a remote Windows Host to the local PC the confirm dialog would not display names and was locked and a transfer was impossible. Fixed.
- When the Overview screen was setup to display EMS messages and the CPU History chart was clicked the History detail was displayed behind the EMS messages. Fixed.
- 'Processes : Last Start/Stop' was duplicating records with every update. Fixed.
- Grid Exports did not always show the correct system name when the client had changed systems. Fixed.
- On 'SubSystems : Logs : EMS Logs' when displaying records in reverse order(last at bottom) the last few records would not display. Fixed.
- On 'SubSystems : Logs : EMS Logs' when records were received while the Config settings display was visible and the EMS display was paused the records would not update on the screen once the config was closed. Fixed.
- On 'SubSystems : Logs : EMS Logs' after a screen resize the define filter popup was being displayed in an incorrect location. Fixed.

Misc. Items:

- Dramatically decreased the time taken to clear (delete all records) a Grid with a large number of rows.
- Client Security Logon maximum length values changed to fit buffer sizes.
    1. UserId max length changed from 39 to 32
    2. Password max length changed from 39 to 25
    3. New and confirm new password max length each changed from 64 to 25
- On 'Processes : All Processes' changed column for 'Qualifier Info Available' from a '?' label to 'Q' and added new synthetic object file type.
- On 'Processes : Process Detail' and Processes : ProcessH' added new synthetic object file type.
- Removed code for old 'History Chart 1'. Chart 1 has been hidden since 5.20.
- Changed logic used when changing to a system that client access requires the screen to be hidden. Previously the screens would display then be hidden causing a 'flash'. Now they are just hidden.
- Grid data exports can now be stopped during collection and creation.

- When using File selector to get ems log file for EMS LogFile the EMS start date and time are now set equal to that file.
- Moved the 'Auto-start MOMI' items from 'Configure : Settings : File Locations' to the 'Actions' page.
- Added 'Cail File path' to 'Configure : Settings : File Locations'.
- In 'Client Access' if someone attempts to update or delete the record for the 'Default Security User'(the user that started MOMI) a popup will display informing them that users record may not be changed.
- Dramatically sped up the Grid Tools 'Export to Clipboard' and 'Export to HTML'.
- On 'SubSystems : Logs : EMS Logs' when records are being received and the 'Config' button is pressed the Display will not Pause but will keep retrieving records unless the user presses the 'Pause' button.
- Added Socket info to 'Config Info' report.

Known issues:

- None

MOMI Server

New Features:

- A new field of Code Type is now returned, obtain from Guardian rather than Measure as seen on the screen Processes / All Processes, which more accurately displays the type of process or the type of load file. These are the current values:
  TNS
  TNS Accelerated
  Native (Non-PIC)
  Native (PIC)

Bug Fixes:

- Load files, displayed on **Processes / Process Detail**, sometimes were not sorted.
- Corrected the processing of EMS messages so that if a users templates have an override of the token ZEMS^TKN^EMPHASIS it is now picked up.

Misc. Items:

- Load files, displayed on the Processes / Processed Detail, now show as a space instead of ??? for a TNS Library in column Library Type. The column only applies to native object files.

Known issues:

- None

MOMIFTP

- added success popup message when done.

ssMOMI

- None

MomiEmail

- None

SendMail

- None

IPCalc

- None

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Release Package 5.22
Release Date (yyyy/mm/dd) 2011/07/11

Item	Version
Latest O/S tested	G06.32.01 & H06.22.00 & J06.11.00
Client Version	5.22
Server Version (VPROC)	5.22 T0000G06___V5_22____07_11_2011
Minimum Server Version	5.00
Buffer Version	Client 21.33 Server 21.33
History database	3.00
CONFMOMI	3.08
OBYMOMI	5.00
OBYCSQL	5.00
MomiFTP.exe	1.67
ssMOMI.scr	4.12
MomiEMail.exe	1.04
SendMail.exe	1.00
IPCalc.exe	1.3.3

Oldest client version tested with server 4.22

NEW FEATURES / BUGS FIXED

(see MOMI HISTORY.RTF for previous versions)

Common new features (requires current client and server)

If you are using Client Access, newly added screens in a MOMI release update are not available to users by default. This action may be changed on the screen Configure:Client Access:Global Settings by checking the option ***New screens enabled by default****. The user that started MOMI, known as the "Default Security User" always has new screens enabled by default.*

Impacts in this version

None

MOMI Client

New Screens:

- Added new screen 'CPUs : Detail Chart'. Allows user to see history of the cpu with a chart that shows the cpu busy percent for each of the following process types:
  - NSK System processes
  - OSS System processes
  - NSK User processes
  - OSS User processes
  - Disk processes

Tape processes
Communications processes
Hardware Interrupts
Software Interrupt processes
Overhead
other un-categorized items

The user can:
select what type processes to view
select if chart 100% equals available cpu or used cpu.
select number of time periods (10-200) to show records for.
select which cpu to display or show average for all cpus.
click on chart to display all values for that time.

Currently the chart starts obtaining its data when the connection to the system is established so the history will only go back to that time, also when the system is changed any history is lost.

Remember: if you are using Client Access and the Global setting for "New screens enabled by default" is not checked the new screen will not be visible until the client access record for the user is enabled.

New Features:

- The Yellow Color triggers set in 'Configure : Settings : System Wide : Color Triggers : CPU Queue' and 'Disk I/Os' now are used on the Overview CPU Info chart for CPU Queue and Disk IOs/Sec. Normal is Blue with any value over the setting displays as yellow.
- Process Locator now allows user to select the process name or the object.
- 'Alarms : Define : Import' now has the ability to import a user created list of emails. The format of each line in the file is:
  name,description,address
  Any line starting with == will be a comment and will be ignored.
  The email will be added as active, monitor time of always, not part of any email group and no extra detail.
  (for Morris L.)
- The Socket Connection Timer used to detect no messages from the Server for a period of time(30 sec default) is now also used on 'Probe' connections. When this timer expires the client shows the connection has timed out.
- The 'Debug' popup (displayed when connection LED is clicked) now has a screen showing all sockets and their status.

Bug Fixes:

- When a CPU with multiple IPUs was displayed in the Overview 3D CPU Busy chart and the option for Chart Smoothing was turned on, the IPUs would not display. Fixed.
- When a CPU with multiple IPUs was displayed in the Overview 3D CPU Busy chart and a cpu failed the IPUs would rotate between being displayed and being hidden. Fixed.
- On 'Subsystems : Logs : EMS Logs', If collectors on multiple systems were being simultaneously monitored and the user changed systems the client would crash. Fixed.

- On 'History : Chart' under some rare circumstances (chart minimum value was not 0 but was a very high number) if a user clicked on a chart the client would crash. Fixed.
- Version 5.21 has bug fix for Client crashes when Screensaver engaged. This fix did not work correctly on some machines. New fix should work on all PC's. Fixed..

Misc. Items:

- Changed Socket code to serialize socket messages. Original code could be interrupted by an Application.ProcessMessages and lose its context causing unforeseen results and sometimes client crashes.

Known issues:

- None

MOMI Server

New Features:

- Support for new client screen **CPUS / Detail Chart**.
- Support for listing directories and files up to a particular level. This allows the client to perform a direct drill-down to a particular path location.
- Memory pages used by a process, as seen on client screens **Processes / Top Processes** and **All Processes** are no longer limited 1023.9 MB (maximum of a 16-bit page value). A new 32-bit memory page value is used when available (i.e. later NonStop Integrity and NonStop Blade Systems).

Bug Fixes:

- An internal routine no longer indicates reserved process names as running. Previously, process names reserved by the operation system but not running would be indicated by this routine as running.
- The following alarms now omit file/process names that are omitted (i.e. -$name):
  Process / State running/stopped *
  DiskFile / File Existence
  DiskFile / Open or Closed
  DiskFile / Timestamp age
  Expand / Path state up/down
  Expand / Line state up/down
  * an issue only in an early version of 5.22 server

Misc. Items:

- The NSKCOM process used by MOMI to gather virtual memory information is now automatically restarted. Previously, if the process was externally stopped a restart of MOMI was required.
- The NSKCOM and TMFSERV processes started by MOMI now request 5 character instead of four character process names.
- CPU-BUSY-TIME no longer has PROCESS-OVHD (Process Overhead) subtracted from it for certain computations.

Known issues:

- None

MOMIFTP

- None

ssMOMI

- None

MomiEmail

- None

SendMail

- None

IPCalc

- None

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Release Package 5.21
Release Date (yyyy/mm/dd) 2011/05/09

Item	Version
Latest O/S tested	G06.32.01 & H06.22.00 & J06.11.00
Client Version	5.21
Server Version (VPROC)	5.21 T0000G06___V5_21____05_09_2011
Minimum Server Version	5.00
Buffer Version	Client 21.32 Server 21.32
History database	3.00
CONFMOMI	3.08
OBYMOMI	5.00
OBYCSQL	5.00
MomiFTP.exe	1.67
ssMOMI.scr	4.12
MomiEMail.exe	1.04
SendMail.exe	1.00
IPCalc.exe	1.3.3

Oldest client version tested with server 4.22

NEW FEATURES / BUGS FIXED

(see MOMI HISTORY.RTF for previous versions)

Common new features (requires current client and server)

*If you are using Client Access, newly added screens in a MOMI release update are not available to users by default. This action may be changed on the screen Configure:Client Access:Global Settings by checking the option **New screens enabled by default**. The user that started MOMI, known as the "Default Security User" always has new screens enabled by default.*

Impacts in this version

None

MOMI Client

New Screens:

- None

New Features:

- Added values for 8k,16k,32k and 64k cache sizes to
  'Files : Disk Entity' ,
  'Files : File Cache' and
  'Processes : Process Detail : Disk Entity'.
  Also added new cache sizes to the detail.
- On 'Configure : Settings : Single Screen : Files' added ability to set the text color of SMF Volumes and Files (default is Gray). This will set the color used for Names when the Volume is SMF (for Kazem K.)

Bug Fixes:

- If the Overview screen was configured to show EMS messages at the bottom, the EMS messages never displayed. The message to get EMS was only sent when the EMS Button was pressed not if it was already displayed. Fixed.
- On some Vista and Win7 machines:
  If the user does not have administrator rights and the screensaver is displayed then when the user activates the screen at the same time an internal client timer went off then MOMI would crash with "system error 5 - access is denied". Problem is caused by a Delphi error in Constrols.pas function MouseCursorPos. Changed MouseCursorPos and added isOpenInputDesktop function to prevent error. Fixed.

Misc. Items:

- None

Known issues:

- None

MOMI Server

New Features:

- Disk 'stats' are now provided for 8192, 16384, 32767 and 65536 block sizes for the client.

- The CONFMOMI keyword PROCESS-ENTITY-EXCLUDE allows the definition of object file names, in Guardian format, that are excluded from the MEASURE entities Process and SQLPROC. This is provided as a workaround as described in HP HotStuff HS03067. See MOMI Help (CONFMOMI / Advanced Keywords) for additional information.

Bug Fixes:

- The value Window Size (i.e. Delta-Time) is now reported as zero on the first update as displayed on the screen Processes / Process Detail - PE3. Previously, the total time since the process was under measurement was reported. The second and subsequent updates were reported correctly.

Misc. Items:

- None

Known issues:

- None

MOMIFTP

- None

ssMOMI

- None

MomiEmail

- None

SendMail

- None

IPCalc

- None

****

Release Package 5.20
Release Date (yyyy/mm/dd) 2011/04/18

Item	Version
Latest O/S tested	G06.32.01 & H06.22.00 & J06.11.00
Client Version	5.20
Server Version (VPROC)	5.20 T0000G06___V5_20____04_18_2011
Minimum Server Version	5.00
Buffer Version	Client 21.31 Server 21.31
History database	3.00
CONFMOMI	3.08
OBYMOMI	5.00
OBYCSQL	5.00
MomiFTP.exe	1.67
ssMOMI.scr	4.12
MomiEMail.exe	1.04
SendMail.exe	1.00
IPCalc.exe	1.3.3

Oldest client version tested with server 4.22

NEW FEATURES / BUGS FIXED

(see MOMI HISTORY.RTF for previous versions)

Common new features (requires current client and server)

*If you are using Client Access, newly added screens in a MOMI release update are not available to users by default. This action may be changed on the screen Configure:Client Access:Global Settings by checking the option **New screens enabled by default**. The user that started MOMI, known as the "Default Security User" always has new screens enabled by default.*

Impacts in this version

None

MOMI Client

New Screens:

- None

New Features:

- On 'Configure : Tools : Numbers' added a tool to Calculate File Sizes based on Format 1 or 2 files and Primary and Secondary extent sizes and Max Extents.
- On 'History : Cpu Detail , CPU , Process , OSS CPU, and OSS NameServer' when records are displayed then the config button is pressed the time in the config is the time of the current displayed data not the time originally entered.
- When the charts on the Overview screen for CPU Busy, CPU Info and Mem Info are displaying data in 3D charts a single CPU may be viewed by moving the mouse in the area above the CPU number and below the bottom of the chart.
- When the charts on the 'SubSystems : OSS : CPU Charts' screen are displaying data in 3D charts a single CPU may be viewed by moving the mouse in the area above the CPU number and below the bottom of the chart.
- On 'History : Chart' chart elements added 3 Item Totals. The Item Totals can add all data elements together and plot it with a user-defined name. (i.e. cpu busy for 0,1,2,3 each plotted and put into item total named 'All CPUs' would plot lines cpu busy for each cpu and another line labeled 'All CPUs' would plot showing the total of the 4 cpus.)
  The 1st item total will plot a line in Black with dots. The 2nd item total will plot a line in Black with dashes.
  The 3rd item total will plot a line in Black with dots and dashes.
- On 'History : Chart' when an item on the chart is clicked, a popup chart will display showing what items were plotted at that time.

Bug Fixes:

- On 'History : Chart 2' screen. Clear button would not always work correctly when locked Trend chart was displayed. Fixed.
- On 'Systems : FTP' screen. When editing an OSS file the prompt to confirm sending the changed file back to the Tandem formatted the name as a NSK not OSS file name. Fixed.
- On 'History : Chart 2' when user selected 'Chart all CPUs for Busy percent' and the number of cpu currently on the system is less than when the history records were captured, the chart would only show CPUs up to the current max cpu number. Fixed.
- If Overview screen was set by default to display the EMS messsages and the CPU Busy chart was set to 3D the chart would not size correctly. Fixed.
- On 'SubSystems : Expand : Diagram' made adjustments to positions of elements when the diagram was resized. If an element was moved while the screen was reduced in size the position was wrong when the screen was resized and/or when the client was restarted. Fixed.

Misc. Items:

- Removed 'History : Chart 1' and renamed 'Chart 2' to 'Chart'. The old 'Chart 1' was obsolete and 'Chart 2' had been available since version 4.15 2006/09/15.
- All new features (i.e. trending etc) have only been added to 'Chart 2'.
- Server Trace Log Config now has ability to display only single message number.
- 'Processes : Top Processes' has increased the precision of cpu busy from whole number to 2 decimal points.
- On 'History : Chart' chart elements removed the 'Data Manipulation' field. It added unneeded complexity to the chart.
- In Tandem-to-Delphi message structures (MOMIDE.PAS) changed single character definition from CHAR to ANSICHAR to start preparing for conversion to Unicode.
- Changed EMS Request message to send delete message when context id is deleted.

Known issues:

- None

MOMI Server

New Features:

- The internal code used to determine the processor name, i.e. S72000, NB54000c, etc..., now uses a system procedure call to obtain the name. New HP CPU models names should appear within MOMI automatically and not require a MOMI code update.
- The MEASURE Process Entity now allows measurement by object name. The object name may either be Guardian or OSS. Note that MEASURE only allows wild card at the volume, subvolume or file portion of the name (i.e. partial wild cards are not supported by MEASURE).
- The internal processing code used by MOMI to start general 'non secured' servers now allows 4 simultaneous operations. Previously, this was limited to 1. The net effect is faster server startup for a one heavily loaded system.

Bug Fixes:

- Certain operations for the display of history for CPUs did not work correctly with $*. Now the code correctly accepts $*.
- History for processes limited by process name no longer returns all records (introduced in 5.19).
- The server now accepts from the client a cleanup command that stops MOMI servers started for the purpose of viewing EMS logs. Previously, switching between different log files or viewing times caused MOMI servers to accumulate. Note that this fix also requires the 5.20 version or later of the MOMI PC Client to fully implement.
- Corrected a potential memory leak in server startup. This leak would only occur if MOMI encountered an error starting a server.
- Corrected a bug that caused a MOMI crash that logged an "Unexpected Otherwise...". This error indicated a state machine violation in server startup logic. If MOMI requests a server startup and the operation took a long time (perhaps due to a overworked CPU) and an internal table entry managing server startup was deleted and reused the resulting server startup could be assigned to the wrong entry

resulting in the crash. Now, a check it made to insure the server startup is assigned only to the original requesting instance (or simply discarded).
- Corrected a bug where extraneous data might appear on the screen **Files/Enscribe/Cache** in the column Volume.

Misc. Items:
- A compiler, linker or debugger problem was worked around that prevented the viewing of certain internal data structures in a SAVEABEND file. This affected only TNS/R code.
- Under certain timing conditions, rather unlikely, a MOMI server may not automatically stop. Now, general MOMI servers will automatically stop after 90 seconds unless they are opened from their parent process.
- An internal structure was changed to allow 63 (from 16) total partitions on an Enscribe file. This is in support of Enscribe Enhanced Keyed-sequence files.

Known issues:
- None

MOMIFTP
- None

ssMOMI
- None

MomiEmail
- None

SendMail
- None

IPCalc
- None

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Release Package 5.19
Release Date (yyyy/mm/dd) 2011/01/06

Item	Version
Latest O/S tested	G06.32.00 & H06.21.00 & J06.10.00
Client Version	5.19
Server Version (VPROC)	5.19 T0000G06___V5_19____12_23_2010
Minimum Server Version	5.00
Buffer Version	Client 21.30 Server 21.30
History database	3.00
CONFMOMI	3.08
OBYMOMI	5.00
OBYCSQL	5.00

MomiFTP.exe	1.67
ssMOMI.scr	4.12
MomiEMail.exe	1.04
SendMail.exe	1.00
IPCalc.exe	1.3.3

Oldest client version
tested with server 4.22

NEW FEATURES / BUGS FIXED

(see MOMI HISTORY.RTF for previous versions)

Common new features (requires current client and server)

*If you are using Client Access, newly added screens in a MOMI release update are not available to users by default. This action may be changed on the screen Configure:Client Access:Global Settings by checking the option **New screens enabled by default**. The user that started MOMI, known as the "Default Security User" always has new screens enabled by default.*

Impacts in this version

The screens 'Systems:Basic' and 'Systems:Detail' are replaced with 'Systems:Probe'. The new screen combines the functionality of the previous. The new button **Select Systems** on each display method (Base, All Sys, 1-4 Sys) is now used to independently configure what systems are reported. The user will need to select the displayed systems at least once per display method.

The new independent configuration is also present and must be set at least once by the user for the screen 'SubSystems:Expand:Diagram'. The system the MOMI PC Client has selected (the drop-down box at the top-right of the screen) is always displayed for Expand.

Client Access provides a setting to enable/disable the display of the screen 'Systems:Probe'. It and assumes the previous display setting of 'Systems:Detail'. It is necessary to use version 5.17 or earlier of the client to toggle the display setting of 'Systems:Basic'.

Alarms **Process / Running too long (CPU cycles)** and **Process / Running too long (wall clock)** no longer automatically exclude program files located in $SYSTEM.SYSNN and $SYSTEM.SYSTEM. See MOMI Server below for more information.

MOMI Client

New Screens:

- None

New Features:

- Moved 'Systems:Basic' and Systems:Detail' to new consolidated 'Systems:Probe' screen.

- Changed 'Systems:Probe' and 'SubSystems:Expand:Diagram' to allow user to select what systems are being monitored/probed/displayed for

that screen. Previously if the system was selected on the 'Systems:Basic' screen it could not be hidden on any of the other 'Probe' screens.

- On 'SubSystems:Logs:EMS Msgs' added ability to monitor multiple collectors at the same time. (for Tom S.)
- On 'SubSystems:Logs:EMS Msgs' now displays the collector the record is from in the tooltip hint shown when the mouse is over the 1st column and in the Detail Popup screen.

- On 'Configure:Settings:Single Screen:SusSystems:Logs:EMS' added ability to save default EMS Collector List.

- On 'Configure:Tools:Time' added buttons to display TimeZone Map, MOMI Calendar and Lunch Finder.

- 'History:Export Data:Create Export Script' now allows the export date selection of 'This Quarter' and 'Last Quarter'. Quarters are defined as Jan-Mar, Apr-Jun, Jul-Sep and Oct-Dec. (For Randy K.)

- 'History:Chart 2' now has trending added to the chart. For active chart trending either Right-click the 'Config' button or check the 'Trend Lines' checkbox in the 'Config:Chart Definition'. For Trend chart that projects into the future either Right-click the 'Config' button or check the checkbox in the 'Config:Trend Chart'.

- on 'History:Chart 2' added process name picker and file name picker to 'Configure:Chart Elements' for correct types.

- on 'History:Chart 2' added button 'Display DB Dates' to popup list of all History Databases and the oldest Record in each.

- on 'History:Chart 2' when dragging the start and/or end time lines to drill down to a higher detail database the Databases with records available within the Chart times will show at the top of the chart.

- If 'Chat' has recent activity the button now will flash rather than just turning green and the popup hint will show how long since last message.

- In 'Configure:Client Access:User Define' added ability to Delete the Default Security User,'Not Logged On', and 'User Not Defined' IDs. When they are deleted they will automatically be re-added since they are required IDs. This will allow the deletion of a corrupt record if needed.

- On 'Alarms:Active' the multiline alarms may now be expanded automatically when they are displayed by checking the 'Auto-expand multi-line [+] Alarms' On the 'Configure:Settings:Single Screen:Alarms' screen. (for Tom S.)

- On 'History:Export and Export Script' added button to clear all export items to match the select all export items button. (For Doug H.)

- Added new Client Access value to allow/prevent the display of the EMS Msgs on the Overview Screen. The New value is on the 'Client Access:User Define:Overview' tab labeled as 'Allow Display of EMS Msgs. (for Tom S.)

- Added 'Count by Severity' to EMS Messages Mini-Reports.

- On 'Configure:Settings:Misc. Settings:PC Registry Settings' added display of GDI and Users handles limits set by Windows and their current usage.

- Added new Client run-time parameter of "freeresources". When this param is used the client will free all windows handles whenever the screen is changed. This will slow the changing of pages but it will prevent the client from crashing if enough screens are displayed to exceed the 10,000 user handles limit set by default within Windows.

- On 'Configure:Settings:Misc. Settings' added display of Client Run-time Parameters.

Bug Fixes:

- 'Alarms:Define:Import' did not notify user when export failed because the export file was from different version of client than the import. Fixed.

- 'Configure:Settings:Single Screen:SubSystems'. If user checked/Unchecked the 'Logs:VHS' or 'Logs:MOMI' 'Reverse Scrolling' checkbox before that screen had been viewed (created) the client would crash. Fixed.

- 'Configure:Client Access:Global Settings'. The Default Security User could not turn off Client Access checking because once the checkbox to disable was checked the button to save the setting was disbled. Fixed.

- During startup if the client was able to verify the existence of the CAIL license file then before it was able to complete the reading of that file the network connection was lost the client would crash. Fixed.

- On 'Files:Enscribe:Files' and 'SubSystems:Spooler:Jobs' if many (>50) files/jobs were selected to be acted upon (deleted etc.) the client would get an error that the server had an internal queue that was full. Fixed.

- On 'Systems:FTP' after a binary transfer was performed if the next action is to edit a file the file was transfered binary and was editable. Fixed.

- On 'Systems:FTP' if a user attempted to edit more than 1 file at a time, the transfer would fail but no message was displayed to indicate why. Now will display error indicating only 1 file edit at a time. Fixed.

- On 'Systems:TraceRoute:from PC' added retry logic for failures instead of sending 'retries' number of simultaneous pings and using first non-failure. The old way was getting to many 'unknown' values. Fixed.

- Overview CPU Busy chart popup menu for 2d,2d-stacked and 3d was not always in-sync with the same values in the 'Configure:Settings:Single Screen' chart type. Fixed.

- On 'Alarms:Active' fixed timing window where it was possible to right-click to delete or temp turn off an alarm but after the right-click and before the action menu to delete/turn off was selected a new alarm arrived. The wrong alarm could be selected. Fixed.

- On 'Alarms:Define:Alarm' when the user pressed the 'Save New' or 'Change' button the screen would clear. Fixed.

- On some slow connections it was possible to create a User-defined screen layout that would crash the client when displayed. Fixed.

- On 'Files:Enscribe:File Explorer' if the user keeps clicking on subvols multiple times without waiting for the complete list to be displayed the Server would eventually return an error 34 (out of PFS Space). Fixed.

- On 'Configure:UserHints' if the user tried to import UserHints from an empty file or one that was not correctly formatted for UserHints the client would crash. Fixed.

- Found that UserDefined and UserHint records were being requested twice upon connecting to a system plus once more whenever a logon was successful causing excessive message traffic. Fixed.

- If User had Client configured to use Buttons instead of Tabs and all screens (except Overview) were hidden when no one was logged on the Client would crash at startup. Bug was in versions 5.14-5.17. Fixed.

- Modified Connect to Host logic because on Blade systems if Measure is not started the system will delay approx 5 seconds before reporting Measure not running instead on instantly like all previous systems. This was causing a loop in the client where the socket would connect wait 5 seconds then disconnect and repeat. Fixed.

- VHS Export/Reports would fail if the report had the logfile ‘CURRENT SELECTED VHS LOG’ selected and the display screen had ‘CURRENT ACTIVE VHS LOG’ selected. The conversion from the text ‘CURRENT ACTIVE VHS LOG’ into a filename failed. Fixed.

Misc. Items:

- On most grids added color to displayed count, record count and total count (if displayed). Orange indicates records being collected, green indicates records are filtered. Also if column has an active filter on it the column header will also be green.

- Reduce size of backward/forward button and altered some screen layouts to prevent MOMI screen from needing scrollbars when large fonts are used.

- On 'CPUs:CPU Summary' removed the Send% column since Send Interrupts are no long used. This made more room for longer CPU Model type descriptions.

- Added 'SNTP-BIND-ADDR' info to Server Config screen and report.

- Rewrote UserHints logic to improve speed of loading and importing.

- 'SubSystems:Spooler:Jobs' changed to only update changed item instead of re-displaying the entire grid full of data with each change.

- On 'Cpu.Servernet I/O' and 'OSSCpu.PipeServer' entities stopped reloading values for ToCpu's that did not exist.

- Grids changed to new BWGrid for increased performance and functionality:
  'Processes:Top Process'
  'Processes:Last Start/Stop'
  'History:Process Start/Stop'

Known issues:

- None

MOMI Server

New Features:

- The CONFMOMI keyword SNTP-BIND-ADDR defines the IP address where NTP (Network Time Protocol) requests originate. Used to support fault-tolerant CLIM configuration. See the MOMI help for additional information.

- The CONFMOMI keyword ALARM-SMTP-BIND-ADDR defines the IP address where output alarm email messages originate. Used to support fault-tolerant CLIM configuration. See the MOMI help for additional information. (from server 5.18)

- The server now uses the ZMS style for the MEASURE Process entity.

- The following alarm is now available:
  CPU / Breakpoints

- The server now provides several new ANSI fields for Enscribe files. (from server 5.18)

- The CONFMOMI keyword SNTP-OFFSET to modify the time returned from an NTP server. This allows sites that don't use GMT as their system base to use MOMI SNTP capability. See the MOMI help for additional information. (from server 5.18)

- The alarm **CPU / Busy percent** now has the top 5 processes of the CPU ($name, object, busy%) in the extra text line of the display. (from server 5.18)

- The following alarms are now available (from server 5.17):
  CPU / Breakpoints
  Process / Messages received (per second)
  Process / Messages sent (per second)

- The alarm **DiskFile / Subvolume file count** now accepts and entity name pattern of $vol.#* (for example $SYSTEM.#*) to determine the count of temporary files on a volume. Previously, this pattern was rejected with an error 13 (file name not in proper form). (from server 5.17).

Bug Fixes:

- Corrected a problem in the processing of the alarm **EMS / User defined** if the alarm was configured for automatic delete. Several back-to-back EMS messages triggering the same alarm did not all process. The automatic delete logic previously could delete all messages. Now, the automatic delete logic only applies to the alarm already processed.

- **Code Space File/Path** name now displays on S-Series systems for the screen **Processes / ProcessH Entity**.

- Corrected a limitation that certain alarms such as **Spooler / Collector - Percent Full** were limited to 40 Entity Names. If 41 were specified, the alarm did not process. The new limit is 200 (which is more than can be defined for this type of alarm).

- Corrected a problem where the processing of **EMS / User defined** alarms did not occur if the EMS Distributor (EMSDIST) was externally stopped. The distributor was restarted but failed during configuration causing a stop of this particular alarm processing. Now, the logic waits 60 seconds, correctly restarts the EMS Distributor, logs a general error message to the system log and a detailed diagnostic message to the MOMI Log.

- Corrected a problem where $MOMI would crash if an undelete-able alarm was deleted. We don't know how alarm that could not be deleted was, but the main MOMI process will now accept the request (without crashing) and politely reject it. (from server 5.18)

- The server no longer temporarily turns off all instances of an **EMS / User defined** alarm when only one instance was specified. (from server 5.18)

- Corrected a problem in the processing of the CNF01DB (configuration database) where an error 10 (record already exists) occurred when updating a user in **Client Access**. (from server 5.18)

- The alarm **CPU / Busy percent** now triggers on 99%. Previously, the math used did not contain the same rounding logic and could differ

from what was displayed on the Overview screen. (from server 5.17)

Misc. Items:

- Internal processing was improved and memory allocation was reduced, in some cases significantly, for **UserHints**.
- Internal processing was improved for **Spooler** commands.
- Internal processing was improved in history for **Process** and **Process Start/Stop**.
- Configuration data such as **Client Access**, **Alarms** and **UserHints** are now sent to the client more efficiently if a connect occurs during a small timing window present immediately after the server was started. The MOMI server now holds this data until it is all loaded from disk then makes it available to the client. This has the effect of improving the data transfer performance if the MOMI server is stopped and restarted when a client is already connected (or trying to connect).
- Performance can now be significantly improved when the server is processing repetitive requests that require logon security such as the display of a Spooler job. (from server 5.18)
- The display of EMS collectors now filters out $ZOPR which is a helper process for $0. (from server 5.18)
- The alarms **Process / Running too long (CPU cycles)** and **Process / Running too long (wall clock)** no longer exclude all program files located in $SYSTEM.SYSNN and $SYSTEM.SYSTEM. Instead, any process with an attribute of a 'system process' which is bit .<3> of the process state is automatically excluded. This allows the setting of alarms for non-system object files in these subvolumes. If desired, or needed, these files can be excluded by adding "-$SYSTEM.SYSTEM.* -$SYSTEM.SYS??.*" to the Entity Name field. (from server 5.17)

Known issues:

- None

MOMIFTP

- None

ssMOMI

- None

MomiEmail

- None

SendMail

- None

IPCalc

- None

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Release Package 5.17
Release Date (yyyy/mm/dd) 2010/04/16

Item	Version
Latest O/S tested	G06.32.00 & H06.20.00 & J06.09.00
Client Version	5.17
Server Version (VPROC)	5.16 T0000G06___V5_16____04_14_2010
Minimum Server Version	5.00
Buffer Version	Client 21.27 Server 21.27
History database	3.00
CONFMOMI	3.08
OBYMOMI	5.00
OBYCSQL	5.00
MomiFTP.exe	1.67
ssMOMI.scr	4.12
MomiEMail.exe	1.04
SendMail.exe	1.00
IPCalc.exe	1.3.3

Oldest client version tested with server 4.22

NEW FEATURES / BUGS FIXED

(see MOMI HISTORY.RTF for previous versions)

Common new features (requires current client and server)

*If you are using Client Access, newly added screens in a MOMI release update are not available to users by default. This action may be changed on the screen Configure:Client Access:Global Settings by checking the option **New screens enabled by default**. The user that started MOMI, known as the "Default Security User" always has new screens enabled by default.*

MOMI Client

New Screens:

- None

New Features:

- ANSI names added to 'Files' grids 'File Entity','DiskFile Entity', and 'DiskOpen Entity'.
- ANSI names added to 'Process:Process Detail' grids 'File Entity has Open', 'File Entity Opened by','DiskOpen Entity'.
- Grids with ANSI names now first column (File Name) is a synthetic name i.e. if ANSI use ansi name else if OSS use OSS pathname else use NSK Name.
- Left Click on Synthetic name and display all 3 (ANSI,OSS,NSK).

Bug Fixes:

- 'Alarms:Define:Import' did not notify user when export failed because the export file was from different version of client than the import. Fixed.
- 'Configure:Settings:Single Screen:SubSystems'. If user checked/Unchecked the 'Logs:VHS' or 'Logs:MOMI' 'Reverse Scrolling'

checkbox before that screen had been viewed(created) the client would crash. Fixed.

- 'History:Export Data:Scripts' the export dates 'this week,last week,this month and last month' did not work for any data type except CPU. Fixed.

Misc. Items:

- Converted PFS value display on 'Processes:Process Detail' to show used percentage.

Known issues:

- None

MOMI Server

New Features:

- The MEASURE entities DiskFile, DiskOpen and File now provide an ANSI file name for SQL/MX objects.

Bug Fixes:

- Tool-tip information now displays on the screen Alarms/Define/Alarm field area Delay Alarm.
- BWSSG is now used if MOMI is operated under a Group.Manager (i.e. *.255) User ID. Previously, MOMI did not utilize BWSSG causing Ping and Tracert to fail due to lack of needed security - "Failure to open socket - Error 4013 - (Permission denied)"

Misc. Items:

- Additional error information is now logged in the event that the value specified for ALARM-SMTP-SERVER-ADDR was invalid or a connect failed.
- The internal processing for a demand type of measurement is revised to work around issues discovered with ZMS style of MEASURE entities and the different NonStop platforms.
- Various OSS counters are now loaded for Guardian processes to allow reports where these processes are using OSS calls.
- The MEASURE entities DiskFile, DiskOpen and File now provide 'cleaner' OSS path information by not reporting /G/ in the OSS Path Names.
- The MEASURE entities Disk, DiskFile, DiskOpen and File now internally use ZMS style of counters on G06.26 and later releases. ZMS counters generally drop support for ^MAX type of counters and information such as channel/address from older K series systems.
- As of H06.20.00 & J06.09.00 it is no longer necessary to operate BWSSG as Super.Super. It may now be operated under Super.Group. HP corrected (somewhere) the underlying issue.

Known issues:

- None.

MOMIFTP

- Prevent timeout on inactivity. Fixed bug not displaying NSK filenames.

ssMOMI

- None

MomiEmail

- None

SendMail

- None

IPCalc

- None

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Release Package 5.16
Release Date (yyyy/mm/dd) 2010/03/05

Item	Version
Latest O/S tested	G06.32.00 & H06.20.00 & J06.09.00
Client Version	5.16
Server Version (VPROC)	5.15 T0000G06___V5_15____03_03_2010
Minimum Server Version	5.00
Buffer Version	Client 21.26 Server 21.26
History database	3.00
CONFMOMI	3.08
OBYMOMI	5.00
OBYCSQL	5.00
MomiFTP.exe	1.66
ssMOMI.scr	4.12
MomiEMail.exe	1.04
SendMail.exe	1.00
IPCalc.exe	1.3.3

Oldest client version
tested with server 4.22

NEW FEATURES / BUGS FIXED

(see MOMI HISTORY.RTF for previous versions)

Common new features (requires current client and server)

If you are using Client Access, newly added screens in a MOMI release update are not available to users by default. This action may be changed on the screen Configure:Client Access:Global Settings by checking the option ***New screens enabled by default****. The user that started MOMI, known as the "Default Security User" always has new screens enabled by default.*

MOMI Client

New Screens:

- 'Configure:Tools' now broken down into 3 new screens 'Numbers','Time' and 'Network'.

New Features:

- Added new level of detail for Client Access. Now 'Allow Process Action' is broken down to 5 items (Stop, Abend, Suspend, Activate

and Alter Priority). Added 'Allow File Alter' with breakdown of 22 items. (for Ken K.)

- Added EMS messages to User Defined screens (for Cathy M. and Carl B.)
- 'Configure:Tools:Network' now has a DNS Lookup and a WhoIs Lookup tool.
- 'Configure:Tools:Time' now has a small calendar.
- 'Configure:Define Systems' screen now displays the DNS Lookup results if the connect fails(so IP Address being used is known).
- 'SubSystems:Logs:Momi Log' and 'SubSystems:Logs:VHS Log' now have buttons to move forward and back 1 or 10 records at a time.
- All 'Files:SQL/MP' grids now have column to display error if error occurred getting SQL catalog info.
- 'Configure:UserHints' now lists successful and failed imports on different lists to make finding failures easier.
- New MOMI Runtime param added 'script-userhints-import="<pc-file-name>"'. This param will cause the MOMI Client to start then import the UserHints defined within the specified PC based file, then stop the client at completion. Format of the UserHint import text file is located in the MOMI Help and on the page hint for the screen Configure:UserHints (For Tom S.)
- 'Configure:Settings:Actions' now has a section to allow the User that started MOMI (Default Security User) to delete entire sections of the Server Database if the need arises. The 3 sections that can be individually deleted are 'Client and User Access Security records', 'UserHints' and 'User Defined Screens'. Confirmation is required to perform the delete.
- 'Alarms:List:EMail Group' now has ability to see user ids for email users who are members that group.
- 'Alarms:List:EMail' now has ability to see of what groups the email user is a members.
- 'Systems:FTP' now allows user to select multiple files(with X) then using the right-click delete it will delete all selected files.
- 'Systems:FTP' now allows user who select multiple files(with X) to cancel the list of files to act upon as well as skip individual files.

Bug Fixes:

- On 'Systems:FTP' added protection to prevent client from crashing when a Host Name was not able to be converted into an IP address. Fixed.
- If a client had initialized the 'SubSystems:Expand' screens (displayed the screens for first time) and an Expand Path was deleted the Client would crash. (Bug introduced in 5.08) Fixed.
- If MOMI was using encryption and the MOMI Client was paused, when the client was resumed an error could display ('Element within a message has an invalid length') and the socket connection would break and reconnect. Fixed.
- On some grids if you scroll down to lower rows then updated the grid the scrollbar would disappear. Fixed.
- On some grids, sorting and filtering would lose records that should not have been filtered out. Fixed.
- Fixed bug in 'Configure:Define Systems' that would allow a user to click on the header row of the grid then click the 'Set Default

System' or 'Delete selected system' causing the client to crash. Fixed.

- 'SubSystems:Logs:Momi Log' was not displaying some records after changing scrolling direction several times. Fixed.
- 'History:Export:TMF' would only return non-rated values. now will return Rated/NonRated and Window values for both Export and Scripts. Fixed.
- on the 'File Locator', OSS File locator' and 'Process locator' popups, if the user clicked on the list before it was full populated it could crash the client. Now they are 'locked' until fully populated. Fixed.
- 'Configure:Client Access:User Define' was allowing a security user to change the user settings for a member of a group but the change was not saved to the database. Now the user cannot change a user setting within a group settings, the change must be made to the group record. Fixed.
- History charts CPU Detail, CPU, Process, OSS CPU and OSS Name Server would lose the filter when scrolling forward or backward in time. Fixed.

Misc. Items:

- 'Processes:All Processes' trees now do not show records that have been filtered out.
- Added 'Reg. SharedSection' value to MOMI crash file (MOMI.LOG).
- Improved the display of the OSS object file name on the Overview screen. (Instead of last 8 chars now entire name cut off at length of display).
- 'Configure:Tools:Time' Countdown timer now has enhanced display.
- 'Configure:UserHints' re-written to improve speed for import/export and startups initial load of data when there is a large number of Hints.
- 'CPUs:Memory Detail' has the column 'UCME' (Un-Correctable Memory Errors) changed to 'HCME' (Hard Correctable Memory Errors) to match HP's new definition of the error.
- Changed to single set of sound files for FTP transfers and Edit on PC.
- Client Access now has setting for user to turn off AutoLogoff for that user even if Client Access has Globally turned it on.
- Grids changed to new BWGrid for increased Performance and functionality: 'SubSystems:Logs:Momi Log' and 'SubSystems:Logs:VHS Log'
- 'SubSystems:Logs:EMS Msgs' improved performance when changing from Color-coded to non-Color-coded.

Known issues:

- None

MOMI Server

New Features:

- A new method is now provided to the client for releasing context. This feature is used internally.
- Processing for the screen SubSystems / Logs / MOMI Log is now handled more efficiently.

- A new CONFMOMI keyword TCPIP-LISTEN functionally supersedes the keyword TCPIP-INFO-1 by allowing the specification of the IP address in which to 'listen' for MOMI client connections. Previously, the keyword TCPIP-INFO-1 always 'listened' to all IP addresses on the specified TCP/IP stack. This new feature was made at the request of HP to better support the CLIM hardware on the NonStop Blade Systems. See MOMI help for syntax specification.

Bug Fixes:

- Corrected a problem that could cause an alarm email to trigger an error in sending even though the operation completed successfully.
- Corrected a problem that if a DNS name was used for the CONFMOMI keyword Alarm-SMTP-Server-Addr and multiple IP addresses were available and a TCP/IP connect error occurred on the first address the second and any subsequent addresses could not be used.
- Corrected a problem where an Error 22 was generated on the screen Files / Enscribe / File Opener.
- An optimization for computing the length of a subvolume name has been removed. Previously, certain combinations of file names did not result in the proper length computation. (from version 5.14)
- Previously during CPU failures, a MOMI server process failed or during normal MOMI server process creation traffic to/from client and main MOMI process was suspended for a period of time. This was due to a window of time where startup messages being sent to a newly created process was effectively being performed waited within the same 'thread' of execution for client/server I/O. Now, the logic has been completely redesigned to virtually eliminate this window. (from version 5.14)
- A bug was corrected where a PING command or PING alarm could have failed due to a CPU specification not being specified. (from version 5.14)
- SQL/MP processing to allow commands to continue processing even if one or more catalogs cannot be accessed. Previously, processing stopped on the first catalog in error. Now, the processing displays the catalog in error but otherwise continues. (from version 5.14)
- A bug was corrected that if a large number of User Hints (+800) were defined certain message processing within MOMI would hang. (from version 5.14)
- Internal processing of obtaining file name lists (filename_findnext_) is now no-waited and is preformed much more quickly. Previously, hard delays were present to intentionally slow processing. A side effect of this change is file name based alarms may complete much more quickly than in previous versions of the server. The alarm "Check Interval" could be increased. (from version 5.14)
- The MOMI stand alone alarm servers have had their default CPU limit reduced from 10% to 5%. This change reflects the changes filename_findnext_ processing. The MOMI CONFMOMI advanced keyword CPU-LIMIT-ALARM-DETECT can be used to alter this value. (from version 5.14)
- Corrected a bug that prevented SQL process information from being returned. (from version 5.14)
- Worked around a 'feature' of the Integrity compilers that optimized out an empty procedure call that had the side affect of preventing a

checkpoint to the backup MOMI process. The lack of checkpoint caused the backup $MOMI process to stop if the primary was stopped. This 'feature' did not affect S series versions of MOMI. (from version 5.14)

Misc. Items:

- All disk volumes are now added to the default measurement MOMI configures at startup. This change is for support of future enhancements. (from version 5.14)
- Systems running H06.14 or later may notice slightly higher CPU utilization levels in the MOMI CPU collectors (one is started for each processor). This is due to additional information being collected and in support of future enhancements. (from version 5.14)
- Internal processing is now optimized to handle a large number of User Hints and other configuration information more efficiently at MOMI startup. (from version 5.14)
- The MOMI server now returned 40 instead of 30 occurrences of 'top process' information. (from version 5.14)

Known issues:

- None.

MOMIFTP

- None

ssMOMI

- None

MomiEmail

- None

SendMail

- None

IPCalc

- None

****

Release Package 5.15
Release Date (yyyy/mm/dd) 2009/07/22

Item	Version
Latest O/S tested	G06.32.00 & H06.17.00 & J06.06.00
Client Version	5.15
Server Version (VPROC)	5.12 T0000G06___V5_12____07_14_2009
Minimum Server Version	5.00
Buffer Version	Client 21.24 Server 21.24
History database	3.00
CONFMOMI	3.07
OBYMOMI	5.00
OBYCSQL	5.00
MomiFTP.exe	1.66
ssMOMI.scr	4.12

MomiEMail.exe	1.04
SendMail.exe	1.00
IPCalc.exe	1.3.3

Oldest client version tested with server 4.22

NEW FEATURES / BUGS FIXED

(see MOMI HISTORY.RTF for previous versions)

Common new features (requires current client and server)

*If you are using Client Access, newly added screens in a MOMI release update are not available to users by default. This action may be changed on the screen Configure:Client Access:Global Settings by checking the option **New screens enabled by default**. The user that started MOMI, known as the "Default Security User" always has new screens enabled by default.*

MOMI Client

New Screens:

- None

New Features:

- on most drop boxes added ability to copy value to clipboard. (for Vikas K.)
- on 'Processes:All Processes' config added ability to select OSS file. (for Vikas K.)
- on 'SubSystems:TCP/IP/Process Status' user can now right click on either Local or Foreign Addr and start a TraceRoute of that address.
- on all OSS file security (CHMOD) screens (display and Change) added the numeric value of that security (000->777). (For Cathy M.)
- on 'CPUs:PCBs/TLEs' add left-click jump from Low PCBs and High PCBs to display All Processes filtered to show only Low or High Pins.(For Vikas K.)
- on 'Systems:FTP' to transfer a structured file into a textfile on the PC use the 'ASCII' transfer button. If the 'Auto' transfer button is used it will transfer the file in Binary and include record header info. To Transfer the textfile back into a structured file the file structure must be set in the 'More...' button and the 'ASCII' button must be pressed. (For Bill B.)

Bug Fixes:

- On 'Subsystems:Logs:EMS Msgs' fixed bug where Color was not set correctly when using reverse scrolling and color selection text was in the message text area of the message.
- On grids that contained a very large number of rows of data (5K+) the loading speed was too slow. Greatly improved loading speed.
- When importing a large number of User Hints the loading speed was too slow. Greatly improved loading speed.

Misc. Items:

- Protection is now in place on most grid displays to prevent a client crash when available memory is exhausted. This protection currently activates when client memory exceeds 1.2 GB. When triggered, an error

message is displayed and the collected records are displayed.
- Replace Borland Memory Manager (borlndmm.dll) with FastMM4 Memory Manager to speedup memory manipulation.

Known issues:
- None

MOMI Server

New Features:
- None

Bug Fixes:
- Previously, if a Spooler Plus was not identified to MOMI, via the CONFMOMI keyword FNAME-SPOOLER-PLUS-n, nothing would be displayed on the screen Subsystems / Spooler / Job when the user tried to displayed just their jobs. Now, an error message is displayed.

Misc. Items:
- Performance is slightly improved on screens Files / Enscribe / SubVolume & File.
- The leading 'type' for error messages displayed on the SubSystems / Spooler screens are slightly revised (old -> new):

```
Collector         -> Spool Collector
Spool control file -> Spool Supervisor
Device           -> Spool Device
Print Process     -> Spool Print Process
```

Known issues:
- On the TNS/E system, prior to H06.09.00, in CPU where the OSS Name Server operates, the MOMI CPU collector in that processor consumes progressively more CPU cycles than the other collectors. This has been traced down to obtaining OSS Name Server information via MEASURE. On TNS/E systems, the CONFMOMI keyword DISABLE-MEAS-OSSNS TRUE should be added to prevent collection of this MEASURE entity.

MOMIFTP

- None

ssMOMI

- None

MomiEmail

- None

SendMail

- None

IPCalc

- None

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Release Package 5.14
Release Date (yyyy/mm/dd) 2009/06/11

Item	Version
Latest O/S tested	G06.32.00 & H06.17.00 & J06.06.00
Client Version	5.14
Server Version (VPROC)	5.11 T0000G06___V5_11____06_10_2009
Minimum Server Version	5.00
Buffer Version	Client 21.24 Server 21.24
History database	3.00
CONFMOMI	3.07
OBYMOMI	5.00
OBYCSQL	5.00
MomiFTP.exe	1.66
ssMOMI.scr	4.12
MomiEMail.exe	1.04
SendMail.exe	1.00
IPCalc.exe	1.3.3

Oldest client version tested with server 4.22

NEW FEATURES / BUGS FIXED

(see MOMI HISTORY.RTF for previous versions)

Common new features (requires current client and server)

*If you are using Client Access, newly added screens in a MOMI release update are not available to users by default. This action may be changed on the screen Configure:Client Access:Global Settings by checking the option **New screens enabled by default**. The user that started MOMI, known as the "Default Security User" always has new screens enabled by default.*

MOMI Client

New Screens:

- None

New Features:

- on 'Files:File Explorer:OSS' added right-click menu to create OSS file. (for Vikas K.)

Bug Fixes:

- On most grids if a number had more that 3 commas the width of the columns was calculated wrong. Fixed.
- on Version 5.12 if cpu 0 was down client would crash on startup. Fixed.
- on 'Processes:Process Detail' and 'Processes:Process Entity' the processes hometerm name was cut off. Fixed.
- Under certain conditions a client crash could occur if screens were hidden using Client Access on one system but available on another. Screen initialization logic has been completely redone to prevent this problem. Fixed.
- The Export/Import of Alarms had a bug that would corrupt an EMS message alarm record. When the Alarm was triggered it would cause the alarm server to crash. Fixed.
- Chat did not always display scrollbars when needed. Fixed.

Misc. Items:

- Optimized EMS message processing.
- Improved processing when new CAIL License File is available.

Known issues:

- None

MOMI Server

New Features:

- Support for creating an OSS file.
- A longer field is now provided for a process home terminal name as returned by MEASURE. This prevents a possible truncated name on the screens Processes / Process Detail and Processes / Process Entity.

Bug Fixes:

- The server will no longer allow the delete of an EMS / User defined alarm in the purple state. The purple state indicate a configuration error (perhaps a version mismatch). Now, the alarm record must be corrected.
- MEASURE error 3264 is no longer generated when a OSS 16-bit process is specified on the ProcessH screen.
- A bug was corrected in Chat processing that would cause a "Maximum client context reached" error.

Misc. Items:

- The master measurement (i.e. DCPUS file) started by MOMI will no longer log data to this file if run on a Blade system running J06.06 or later. This change will prevent the EMS message "*Measurement 0 $vol.subvol.DCPUS: write to datafile failed. File error 45.*"
- When an OSS file is copied, the destination file is now opened for exclusive access. Previously, it was opened for shared access.
- The server now accepts an invalid character on the import of Alarm information for EMS / User defined. This works around an import issue corrected in the client and prevents a MOMI server crash.

Known issues:

- On the TNS/E system, prior to H06.09.00, in CPU where the OSS Name Server operates, the MOMI CPU collector in that processor consumes progressively more CPU cycles than the other collectors. This has been traced down to obtaining OSS Name Server information via MEASURE. On TNS/E systems, the CONFMOMI keyword DISABLE-MEAS-OSSNS TRUE should be added to prevent collection of this MEASURE entity.

MOMIFTP

- Version 1.66 – corrected file counts

ssMOMI

- None

MomiEmail

- None

SendMail

- None

IPCalc

- None

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Release Package 5.12
Release Date (yyyy/mm/dd) 2009/04/10

Item	Version
Latest O/S tested	G06.32.00 & H06.16.00 & J06.06.00
Client Version	5.12
Server Version (VPROC)	5.10 T0000G06___V5_10____04_07_2009
Minimum Server Version	5.00
Buffer Version	Client 21.23 Server 21.23
History database	3.00
CONFMOMI	3.07
OBYMOMI	5.00
OBYCSQL	5.00
MomiFTP.exe	1.65
ssMOMI.scr	4.12
MomiEMail.exe	1.04
SendMail.exe	1.00
IPCalc.exe	1.3.3

Oldest client version tested with server 4.22

NEW FEATURES / BUGS FIXED

(see MOMI HISTORY.RTF for previous versions)

Common new features (requires current client and server)

If you are using Client Access, newly added screens in a MOMI release update are not available to users by default. This action may be changed on the screen Configure:Client Access:Global Settings by checking the option ***New screens enabled by default****. The user that started MOMI, known as the "Default Security User" always has new screens enabled by default.*

MOMI Client

New Screens:

- None

New Features:

- Added button to Debug Panel to allow user to crash the client.

Bug Fixes:

- Bug in new BwGrid was causing crash when Client started when Server had a down CPU. Fixed.
- Bug in 'SubSystems:Logs:EMS Messages' would cause PC CPU utilization to be excessive when reading a large amount of long EMS Messages (like when reading the Hardware Log $ZLOG). This excessive utilization would cause the TCP/IP Session timer to pop causing the error 'Error> TCP/IP protection timer has expired' to display and

all sockets to the host would drop and attempt to reconnect.. Fixed.

Misc. Items:

- In the event of a client crash, new code is now used and a new window displays additional diagnostic information. This information is written to the MOMI.LOG file created on the user's desktop. The client will automatically terminate from this window if no button is pressed within 60 seconds.
- In 'Files:File Explorer' OSS and NSK users can now edit an empty file. (for Vikas K.)
- Made change in EMS Message display to prevent scrollbar flashing when using multiple-line display.

Known issues:

- None

MOMI Server

New Features:

- None

Bug Fixes:

- None

Misc. Items:

- The MOMI alarm Volume / Physical - State up/down now retries under an additional error condition and now waits 3 seconds instead of 1 second prior to the retry.

- The master measurement (i.e. DCPUS file) started by MOMI will no longer log data to this file if run on a Blade system running J06.06 or later. This change will prevent the EMS message "*Measurement 0 $vol.subvol.DCPUS: write to datafile failed. File error 45.*"

Known issues:

- On the TNS/E system, prior to H06.09.00, in CPU where the OSS Name Server operates, the MOMI CPU collector in that processor consumes progressively more CPU cycles than the other collectors. This has been traced down to obtaining OSS Name Server information via MEASURE. On TNS/E systems, the CONFMOMI keyword DISABLE-MEAS-OSSNS TRUE should be added to prevent collection of this MEASURE entity.

MOMIFTP

- None

ssMOMI

- None

MomiEmail

- None

SendMail

- None

IPCalc

- None

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Release Package 5.11
Release Date (yyyy/mm/dd) 2009/02/25

Item	Version
Latest O/S tested	G06.32.00 & H06.16.00 & J06.05.00
Client Version	5.11
Server Version (VPROC)	5.09 T0000G06___V5_09____02_19_2009
Minimum Server Version	5.00
Buffer Version	Client 21.23 Server 21.23
History database	3.00
CONFMOMI	3.07
OBYMOMI	5.00
OBYCSQL	5.00
MomiFTP.exe	1.65
ssMOMI.scr	4.12
MomiEMail.exe	1.04
SendMail.exe	1.00
IPCalc.exe	1.3.3

Oldest client version tested with server 4.22

NEW FEATURES / BUGS FIXED

(see MOMI HISTORY.RTF for previous versions)

Common new features (requires current client and server)

*If you are using Client Access, newly added screens in a MOMI release update are not available to users by default. This action may be changed on the screen Configure:Client Access:Global Settings by checking the option **New screens enabled by default**. The user that started MOMI, known as the "Default Security User" always has new screens enabled by default.*

MOMI Client

New Screens:

- None

New Features:

- None

Bug Fixes:

- Client would crash when CPU went down. Fixed.

Misc. Items:

- None

Known issues:

- None

MOMI Server

New Features:

- None

Bug Fixes:

- None

Misc. Items:

- The MOMI alarm Volume / Physical - State up/down now retries under an additional error condition and now waits 3 seconds instead of 1 second prior to the retry.

Known issues:

- On the TNS/E system, prior to H06.09.00, in CPU where the OSS Name Server operates, the MOMI CPU collector in that processor consumes progressively more CPU cycles than the other collectors. This has been traced down to obtaining OSS Name Server information via MEASURE. On TNS/E systems, the CONFMOMI keyword DISABLE-MEAS-OSSNS TRUE should be added to prevent collection of this MEASURE entity.

MOMIFTP

- None

ssMOMI

- None

MomiEmail

- None

SendMail

- None

IPCalc

- None

****

Release Package 5.10
Release Date (yyyy/mm/dd) 2009/02/20

Item	Version
Latest O/S tested	G06.32.00 & H06.16.00 & J06.05.00
Client Version	5.10
Server Version (VPROC)	5.09 T0000G06___V5_09____02_19_2009
Minimum Server Version	5.00
Buffer Version	Client 21.23 Server 21.23
History database	3.00
CONFMOMI	3.07
OBYMOMI	5.00
OBYCSQL	5.00
MomiFTP.exe	1.65
ssMOMI.scr	4.12
MomiEMail.exe	1.04
SendMail.exe	1.00
IPCalc.exe	1.3.3

Oldest client version
tested with server 4.22

NEW FEATURES / BUGS FIXED

(see MOMI HISTORY.RTF for previous versions)

Common new features (requires current client and server)

If you are using Client Access, newly added screens in a MOMI release update are not available to users by default. This action may be changed on the screen Configure:Client Access:Global Settings by checking the option ***New screens enabled by default.*** *The user that started MOMI, known as the "Default Security User" always has new screens enabled by default.*

MOMI Client

New Screens:

- None

New Features:

- None

Bug Fixes:

- None

Misc. Items:

- Improved hint timer for new BWGrid to better use the same hint timer values as the rest of the client.

Known issues:

- None

MOMI Server

New Features:

- None

Bug Fixes:

- None

Misc. Items:

- The MOMI alarm Volume / Physical - State up/down now retries under an additional error condition and now waits 3 seconds instead of 1 second prior to the retry.

Known issues:

- On the TNS/E system, prior to H06.09.00, in CPU where the OSS Name Server operates, the MOMI CPU collector in that processor consumes progressively more CPU cycles than the other collectors. This has been traced down to obtaining OSS Name Server information via MEASURE. On TNS/E systems, the CONFMOMI keyword DISABLE-MEAS-OSSNS TRUE should be added to prevent collection of this MEASURE entity.

MOMIFTP

- None

ssMOMI

- None

MomiEmail

- None

SendMail

- None

IPCalc

- None

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Release Package 5.09
Release Date (yyyy/mm/dd) 2009/02/13

Item	Version
Latest O/S tested	G06.32.00 & H06.16.00 & J06.05.00
Client Version	5.09
Server Version (VPROC)	5.08 T0000G06___V5_08____02_04_2009
Minimum Server Version	5.00
Buffer Version	Client 21.23 Server 21.23
History database	3.00
CONFMOMI	3.07
OBYMOMI	5.00
OBYCSQL	5.00
MomiFTP.exe	1.65
ssMOMI.scr	4.12
MomiEMail.exe	1.04
SendMail.exe	1.00
IPCalc.exe	1.3.3

Oldest client version
tested with server 4.22

NEW FEATURES / BUGS FIXED

(see MOMI HISTORY.RTF for previous versions)

Common new features (requires current client and server)

If you are using Client Access, newly added screens in a MOMI release update are not available to users by default. This action may be changed on the screen Configure:Client Access:Global Settings by checking the option ***New screens enabled by default****. The user that started MOMI, known as the "Default Security User" always has new screens enabled by default.*

MOMI Client

New Screens:

- None

New Features:

- 'SubSystems:Logs:EMS Logs' added year to EMS log datetime only if

the year is different than the current year.
- 'Systems:FTP' now has percent completion display for file transfers.

Bug Fixes:
- Found and fixed memory leak in new BWGrid causing excessive memory use for the Client.
- 'Files:Enscribe:File Detail' the File grid would not display the selected file if the font had been increased for that grid. Fixed.
- 'SubSystems:Logs:EMS Logs' define filter display was not completely visible preventing the create, delete and updating of the filters. Fixed.
- 'Files:Enscribe:File Detail' would crash the client when the user attempted to alter max extents. Fixed.
- 'SubSystems:Logs:EMS Logs' would flicker violently when new records were being read and a filter was being used. Fixed.
- 'Files:Enscribe:Files' and 'SubSystems:Spooler:Jobs' had bug causing multiple item delete/purge to fail after first item. Fixed.

Misc. Items:
- 'Overview:CPU Info and Mem Info' moved buttons and title around to display correctly in either Overview format.
- Improved performance of initial loading of the 'Active Alarms' screen when large number of alarms are active.
- 'Systems:FTP' changed 'Cancel' button to cancel all file transfers and added 'Skip' button to skip only single file.

Known issues:
- None

MOMI Server

New Features:
- Additional CPU 'friendly names' defined.
- Performance for the alarm "DiskFile / Percent full" improved.

Bug Fixes:
- A problem was corrected that MOMI logged the message "Failure on PROCESSOR_GETINFOLIST_ - CPU :n" every minute when a CPU failure occurred. The message was erroneous and no MOMI data was affected.
- A problem was corrected that memory was not released for the alarm "EMS / User defined".

Misc. Items:
- Different SPI structures are now used that should report additional information on the NonStop Blade systems for the screen TCP/IP / Process Info. Previously, some fields were not reported.
- Default values for the CONFMOMI keyword TCPIP-WRITE-BYTES-SEC have been adjusted (values increased).

Known issues:

- On the TNS/E system, prior to H06.09.00, in CPU where the OSS Name Server operates, the MOMI CPU collector in that processor consumes progressively more CPU cycles than the other collectors. This has been traced down to obtaining OSS Name Server information via MEASURE. On TNS/E systems, the CONFMOMI keyword DISABLE-MEAS-OSSNS TRUE should be added to prevent collection of this MEASURE entity.

MOMIFTP

- None

ssMOMI

- None

MomiEmail

- None

SendMail

- None

IPCalc

- None

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Release Package 5.08
Release Date 2009/01/08

Item	Version
Latest O/S tested	G06.32.00 & H06.16.00 & J06.05.00
Client Version	5.08
Server Version (VPROC)	5.07 T0000G06___V5_07____01_07_2009
Minimum Server Version	5.00
Buffer Version	Client 21.23 Server 21.23
History database	3.00
CONFMOMI	3.07
OBYMOMI	5.00
OBYCSQL	5.00
MomiFTP.exe	1.65
ssMOMI.scr	4.12
MomiEMail.exe	1.04
SendMail.exe	1.00
IPCalc.exe	1.3.3

Oldest client version tested with server 4.22

NEW FEATURES / BUGS FIXED

(see MOMI HISTORY.RTF for previous versions)

Common new features (requires current client and server)

*If you are using Client Access, newly added screens in a MOMI release update are not available to users by default. This action may be changed on the screen Configure:Client Access:Global Settings by checking the option **New screens enabled by default**. The user that started MOMI, known as the "Default Security User" always has new screens enabled by default.*

MOMI Client

New Screens:

- None

New Features:

- Added button on Overview screen to show EMS Messages on Overview. Also added selection on 'Configure:Settings:Single Screen:Overview' to allow setting the EMS collector ,Distributor Filter, and message count retained for use on these messages. (For Vikas K.)

- 'Overview screen now has an optional display format. The original style display shows Charts and Top Processes. The new option shows Charts, Top Processes and EMS Messages. The selection is made and can be saved on the 'Configure:Settings:Single Screen:Overview' section with 'Chart/Procs' giving the original view and 'Chart/Procs/EMS' showing the new format. (For Vikas K.)

- 'Systems:Ftp' added ability to change port number without going into Config screen.

- 'CPU:CPU Info' now shows all available CPU values.

- 'Process:Process Detail' and 'Process:Process Entity' now show number of IPU switches.

- 'Expand:Diagram' now has default picture for Blade system.

- 'Overview:CPU Busy' button right click now allows selection of 3D chart of CPU busy and each IPU busy for Blade systems with multiple IPUs. Also can be set and saved in 'Configure:Settings:Single Screen:Overview'.

- 'Overview:CPU Info' charts now has charts for IPU Dispatches per second, Average IPU Queue Length and Measure Timer Cells.

- 'Systems:Emulators' now allows a external program to be defined. This allows a Windows exe program such as an emulator or any other program to have a button defined that will launch the program when pressed. (for Bill B.)

- Alarms for EMS Messages now can include 'Exclude if ALL' as well as the older 'Include if ANY', 'Include if ALL', and 'Exclude if ANY'. also the entries were previously limited to 10 lines of 64 bytes each, now limit is any number of lines with total length maximum of 640 bytes (one byte is consumed to terminate each line).

- Added MOMI Client memory usage chart to debug popup and system info report.Added display of new Server Keywords SNTP-STARTUP-CHECK,FLAG-H0614_OR-LATER, FLAG-DISABLE-MEAS-COUNTER-WRITE, and MAX-COUNT-CONTEXT-ALLOWED to 'Config:Server Info' screen and Config Info report.

Bug Fixes:

- 'SubSystems:Logs:EMS Msgs' filters using Action or Emphasis flags did not work correctly. Fixed.

- ScreenPrints to Clipboard would not capture all screen items(ie. EMS Msgs) Fixed.

- Overview:CPU History chart was not capturing all cpus on remote systems if the remote system had less CPU than the current system. Fixed.

- on some PCs the 'SubSystems:Logs:EMS Msgs' would not display the vertical and/or horizontal scrollbar. Fixed.

- on systems with a lot of Spoolers,Spooler Collectors and TCP/IP processes the amount of time required to change systems was excessive. Fixed.

- 'History Export' for CPU Busy rated the value was incorrect, The decimal point was misplaced. Fixed.

Misc. Items:

- 'Overview:CPU Info' charts consolidated the 3 Link(Large,Prepush and ReadLink) into single chart and the 3 ReadLink Cache(All,Control and None) into another chart.

- 'Configure:Setting:Single screen' and 'Configure:Client Access:User Define' have changed layout (multiple tabs) to allow more room.

- 'Suspend ALL Alarms' popup is now RED to make it look different from 'Suspend One Alarm' popup. This should help prevent mistaking ALL for One. (for Vikas K.)

- added values to CPU history records (comp traps,ipus,timer cells,page requests, page scans, processh samples and swaps).

- 'Alarms:Define:Alarm' for EMS Msg type alarms changed the EMS Set and EMS Clear to tab selectors to allow room for new 'Exclude if ALL'.

- Grids changed to new BWGrid for increased Performance and functionality:
  'Alarms:Active'
  'Alarms:Alarms List'
  'Alarms:Actions List'
  'Alarms:Emails List'
  'Alarms:Email Groups List'
  'CPUs:Cpu Info'
  'Files:Enscribe:Volume'
  'Files:Enscribe:SubVolume'
  'Files:Enscribe:File'
  'Files:Enscribe:File Opener'
  'Files:Enscribe:File Detail' 4 grids
  'Files:Enscribe:File Cache'

'Files:Disk Entity'
'Files:Disk File Entity'
'Files:Disk Open Entity'
'Files:File Entity'
'Files:SQL/MP:Catalog' 2 grids
'Files:SQL/MP:Base Table'
'Files:SQL/MP:Table'
'Files:SQL/MP:File'
'Files:SQL/MP:Index'
'Files:SQL/MP:Partition'
'Files:SQL/MP:Usage'
'Files:SQL/MP:Table Detail' 5 grids
'History:CPU Detail'
'History:CPU'
'History:Processes'
'History:OSS CPU'
'History:OSS Name Servers'
'Processes:All Processes'
'Processes:Process Detail' 6 grids
'SubSystems:Spooler:Spooler'
'SubSystems:Spooler:Collecor'
'SubSystems:Spooler:Device'
'SubSystems:Spooler:Job'
'SubSystems:Spooler:Loc'
'SubSystems:Spooler:Print'
'SubSystems:TCPIP:Process Info'
'SubSystems:TCPIP:Process Status'
'SubSystems:TCPIP:SubNet'
'SubSystems:TCPIP:Route'
'SubSystems:Expand:Connections' 4 grids
'SubSystems:Expand:Paths:Info' 4 grids
'SubSystems:Expand:Paths:Status'
'SubSystems:Expand:Paths:Stats'
'SubSystems:Expand:Lines:Info' 4 grids
'SubSystems:Expand:Lines:Status'
'SubSystems:Expand:Lines:Stats' 5 grids
'SubSystems:OSS:CPU Info'
'SubSystems:OSS:Name Servers'

Known issues:

- None

MOMI Server

New Features:

- The alarm EMS / User define now supports "Exclude if ALL" and provides support for more than 10 lines. Overall an EMS SET or EMS CLEAR item is still capped at 640 bytes (each line of data has one internal terminator character). Any existing alarm will be flagged by MOMI and need to be resaved.

- The alarm EMS / User defined now allows the EMS collector to be specified. Previously, only $0 could be examined for alarms.

- Server can now provide lists of processes to the client such as a list of EMS collectors.

- The following spooler alarms now display the supervisor name following the device/process name (i.e. $name ($super)):

    1. Spooler / Device - State down/not ready
    2. Spooler / Print Process - State down/not ready
    3. Spooler / Collector - State down/not ready

- Internally, support was added to allow the quicker release of client context for certain message types.

- Internally, support added for PGMRAY 2.

- The following alarms now provide a list of spooler collectors for the user to select instead of a list of all processes on the system:

    - Spooler / Collector - Percent full
    - Spooler / Collector - State down/not ready

- The following alarms now provide a list of either physical disk or virtual disk (as appropriate):

    - Volume / Physical - State up/down
    - Volume / Virtual - State up/down

Bug Fixes:

- None

Misc. Items:

- The compiler optimization level for certain code sections is changed from 2 to 1 per support note S08125. We were not using the affected compilers, but better safe than sorry.

Known issues:

- On the TNS/E system, prior to H06.09.00, in CPU where the OSS Name Server operates, the MOMI CPU collector in that processor consumes progressively more CPU cycles than the other collectors. This has been traced down to obtaining OSS Name Server information via MEASURE. On TNS/E systems, the CONFMOMI keyword DISABLE-MEAS-OSSNS TRUE should be added to prevent collection of this MEASURE entity.

MOMIFTP

- None

ssMOMI

- None

MomiEmail

- None

SendMail

- None

IPCalc

- None

****

```
Release Package           5.06
Release Date         2008/08/06

   Item                Version
   ----                -------
   Latest O/S tested     G06.31.00 & H06.14.00
   Client Version        5.06
   Server Version (VPROC) 5.05   T0000G06___V5_05____08_04_2008
   Minimum Server Version 5.00
   Buffer Version        Client 21.21   Server 21.21
   History database      3.00
   CONFMOMI             3.07
   OBYMOMI              5.00
   OBYCSQL              5.00
   MomiFTP.exe           1.65
   ssMOMI.scr            4.12
   MomiEMail.exe         1.04
   SendMail.exe          1.00
   IPCalc.exe           1.3.3

   Oldest client version
    tested with server    4.22
```

NEW FEATURES / BUGS FIXED

Common new features (requires current client and server)

If you are using Client Access, newly added screens in a MOMI release update are not available to users by default. This action may be changed on the screen Configure:Client Access:Global Settings by checking the option ***New screens enabled by default****. The user that started MOMI, known as the "Default Security User" always has new screens enabled by default.*

MOMI Client

New Screens:

- None

New Features:

- Added Server Virtual memory values to Config Info report.

- Added display of new Server Keywords SNTP-STARTUP-CHECK,FLAG-H0614_OR-LATER, FLAG-DISABLE-MEAS-COUNTER-WRITE, and MAX-COUNT-CONTEXT-ALLOWED to 'Config:Server Info' screen and Config Info report.

Bug Fixes:

- Systems being probed and 'SubSystems:User Defined' were erroneously re-requesting Alarm status messages even though the original request was still outstanding. This caused excessive resource consumption on the server and periodic 'hanging' of the Server when it was cleaning up those resources. Fixed.

- on 'SubSystems:Logs:EMS Msgs' some messages would not appear if the Pause button was pressed at the instant an EMS update request was needed to be sent. Fixed.

- on 'SubSystems:Logs:EMS Msgs' some messages would not format correctly if the Grid Font or Font size was changed and multi-line display was wanted. Fixed.

- Version 5.05 introduced a bug causing User-defined screens saved under previous versions to sometime crash the client(update frequency was inconsistent). Fixed.

- If Client Access Required a Minimum client version, a client of a lower version could still be used by Clicking the Pause/Resume button a few times. Fixed.

- SubSystems tabs were not correctly changing fonts when font name and/or font size was changed. Fixed.

- on 'SubSystems:Logs:EMS Msgs' when the EMS Message Detail screen was displayed and the user pressed the Graphic Clipboard button the client would crash. Fixed.

- If a user was logged on as the 'Default Security User' the client would autologoff regardless of the setting set for the User. Fixed.

Misc. Items:

- Overview CPU Chart will now do smoothing when displaying as a stack chart.

- SubSystems:Logs:EMS Msgs' increased the Filter number of items in 'Include if any', 'Include if all' and 'Exclude if any' from 10 to 20.

Known issues:

- None

MOMI Server

New Features:

- If MOMI is maintaining the System time, the SNTP server is now accessed a few minutes after MOMI startup. Previously, MOMI would not access the SNTP server until a multiple of the specified interval (i.e. if checking every 24 hours the first access would not occur until midnight). This initial access provides verification that the SNTP server is accessible. This initial access operates by default in preview mode (i.e. it won't make a time adjustment). A new CONFMOMI keyword SNTP-STARTUP-CHECK may be used to alter this default action. See MOMI help for additional information.

- On H06.14 or later O/S releases MOMI will use a new feature of MEASURE that prevents counter records from being written to the measurement data files. This feature is used in situations where MOMI does not read from the data file but instead accesses the

counter records via LISTACTIVE. This change will prevent the EMS message "*Measurement 0 $vol.subvol.DCPUS: write to datafile failed. File error 45.*"

Bug Fixes:

- None

Misc. Items:

- MOMI no longer logs the message "System time does not require adjustment by MOMI" if adjustments to the system time were not enabled (i.e. operating in preview mode).

- The MOMI server now has an internal protection to prevent the client from requesting too many context resources.

- An EMS and MOMI Log error message is now generated if the TCP/IP stack cannot be opened by MOMI. This situation could be triggered by invalid name specified or a security failure. Previously, this situation was not logged. The TCP/IP stack process name is specified in the CONFMOMI file with the keyword TCPIP-INFO-n.

Known issues:

- On the TNS/E system, prior to H06.09.00, in CPU where the OSS Name Server operates, the MOMI CPU collector in that processor consumes progressively more CPU cycles than the other collectors. This has been traced down to obtaining OSS Name Server information via MEASURE. On TNS/E systems, the CONFMOMI keyword DISABLE-MEAS-OSSNS TRUE should be added to prevent collection of this MEASURE entity.

MOMIFTP

- The FTP port number, which defaults to 21, may now be specified in the connection information to the NonStop System. This allows the use of non-standard port numbers.

ssMOMI

- None

MomiEmail

- None

SendMail

- None

IPCalc

- None

****

Release Package 5.05
Release Date 2008/07/10

Item	Version
Latest O/S tested	G06.31.00 & H06.13.00
Client Version	5.05

```
Server Version (VPROC) 5.04   T0000G06___V5_04____07_03_2008
Minimum Server Version 5.00
Buffer Version        Client 21.20   Server 21.20
History database       3.00
CONFMOMI              3.07
OBYMOMI               5.00
OBYCSQL               5.00
MomiFTP.exe            1.64
ssMOMI.scr             4.12
MomiEMail.exe          1.04
SendMail.exe           1.00
IPCalc.exe            1.3.3

Oldest client version
 tested with server    4.22
```

NEW FEATURES / BUGS FIXED

Common new features (requires current client and server)

If you are using Client Access, newly added screens in a MOMI release update are not available to users by default. This action may be changed on the screen Configure:Client Access:Global Settings by checking the option ***New screens enabled by default****. The user that started MOMI, known as the "Default Security User" always has new screens enabled by default.*

- Added new Alarm 'DiskFiles:Timestamp age' to alarm if a File Timestamp (any of several) is too old or too new.

MOMI Client

New Screens:

- None

New Features:

- On 'SubSystems:Logs:EMS Msgs' now allows user to hide a color as well as show only a color.
- On popup menus items that require the user to be logged on will now be disabled if the user is not logged on. Guardian security will still be used to actually perform the action.

Bug Fixes:

- on 'SubSystems:EMS Msgs' if Grid Tools was display and the user changed to another screen the Tool box would remain displayed. Fixed.
- on 'Systems:Detail' when using the button to jump between systems the client would mistakenly 'Pause' the connection. Fixed.
- on 'Files:File Explorer:NSK' if subvol was changed while subvols were being updated the display would be incorrect. Fixed.
- once the client connected to a system running in Mini-MOMI mode the 'Systems:FTP' and 'Files:File Explorer' screens would never reset to allow use when connected to a Full version(non-MiniMOMI) until the client was stopped and restarted. Fixed.
- on 'SubSystems:Logs:EMS Msgs' some messages would lose data if the display was set for multiple lines and was not compressed. Fixed.

Misc. Items:

- on 'SubSystem:User Defined:Diagram' swapped position of Clear and

Config button to prevent mistakenly hitting the clear button when turning on/off Design mode

Known issues:

- None

MOMI Server

New Features:

- Additional CPU types such as NEOVIEW, NB50000c, NS3200AC are now recognized.
- Alarm DiskFile / Timestamp age

Bug Fixes:

- If invalid DNS/IP was given to the CONFMOMI param SNTP-SERVER-ADDR, the EMS error message now logs correctly. Additionally, a failure to convert a DNS name to an IP address now logs additional error information.

Misc. Items:

- The MOMI log message about a MOMI server processing stopping now contains the CPU number where the affected process was running.

Known issues:

- On the TNS/E system, prior to H06.09.00, in CPU where the OSS Name Server operates, the MOMI CPU collector in that processor consumes progressively more CPU cycles than the other collectors. This has been traced down to obtaining OSS Name Server information via MEASURE. On TNS/E systems, the CONFMOMI keyword DISABLE-MEAS-OSSNS TRUE should be added to prevent collection of this MEASURE entity.

MOMIFTP

- None

ssMOMI

- None

MomiEmail

- None

SendMail

- None

IPCalc

- None

****

Release Package 5.04
Release Date 2008/06/06

Item	Version
Latest O/S tested	G06.31.00 & H06.13.00
Client Version	5.04
Server Version (VPROC)	5.03 T0000G06___V5_03____05_30_2008
Minimum Server Version	5.00

Buffer Version	Client 21.19	Server 21.19
History database	3.00	
CONFMOMI	3.07	
OBYMOMI	5.00	
OBYCSQL	5.00	
MomiFTP.exe	1.64	
ssMOMI.scr	4.12	
MomiEMail.exe	1.04	
SendMail.exe	1.00	
IPCalc.exe	1.3.3	

Oldest client version
tested with server 4.22

NEW FEATURES / BUGS FIXED

Common new features (requires current client and server)

If you are using Client Access, newly added screens in a MOMI release update are not available to users by default. This action may be changed on the screen Configure:Client Access:Global Settings by checking the option ***New screens enabled by default****. The user that started MOMI, known as the "Default Security User" always has new screens enabled by default.*

- None

MOMI Client

New Screens:

- None

New Features:

- None

Bug Fixes:

- Encryption state was not correctly updating on the Config Server Info screen. Fixed.

Misc. Items:

- Added Server run-time param 'DISABLE-LIST-LOCKS'.

Known issues:

- None

MOMI Server

New Features:

- None

Bug Fixes:

- None

Misc. Items:

- None

Known issues:

- None

MOMIFTP

- None

ssMOMI

- None

MomiEmail

- None

SendMail

- None

IPCalc

- None

****

Release Package 5.03
Release Date 2008/05/30

Item	Version
Latest O/S tested	G06.31.00 & H06.13.00
Client Version	5.03
Server Version (VPROC)	5.03 T0000G06___V5_03____05_30_2008
Minimum Server Version	5.00
Buffer Version	Client 21.19 Server 21.19
History database	3.00
CONFMOMI	3.07
OBYMOMI	5.00
OBYCSQL	5.00
MomiFTP.exe	1.64
ssMOMI.scr	4.12
MomiEMail.exe	1.04
SendMail.exe	1.00
IPCalc.exe	1.3.3

Oldest client version tested with server 4.22

NEW FEATURES / BUGS FIXED

Common new features (requires current client and server)

If you are using Client Access, newly added screens in a MOMI release update are not available to users by default. This action may be changed on the screen Configure:Client Access:Global Settings by checking the option ***New screens enabled by default.*** *The user that started MOMI, known as the "Default Security User" always has new screens enabled by default.*

- None

MOMI Client

New Screens:

- None

New Features:

- None

Bug Fixes:

- Vertical scrollbar on EMS Msgs was sometimes hidden after a screen was resized. Fixed.

Misc. Items:

- Added OSS Files to Alarm Define Templates.

Known issues:

- None

MOMI Server

New Features:

- The CONFMOMI keyword DISABLE-LIST-LOCKS provides the ability to prevent the listing of locks on the system. See MOMI help for additional information.

Bug Fixes:

- Wild card expansion for some DiskFile alarms would trigger an error if the subvolume specified was empty. Generally speaking, a specification for a wild-card Entity Name should not generate an error if no files are found. However, a specific file name should generate an error if it is not found.

- The current priority of MOMI is now obtained correctly for the ASCII text file created by pressing the button "Save Diagnostic and Config Info to File" on the screen Configure / Diagnostics. Previously, this value was for the process that started the main MOMI.

- The alarm Process / State running/stopped no longer triggers if a MOMI CPU collector stops reporting or is externally stopped.

Misc. Items:

- None

Known issues:

- On the TNS/E system, prior to H06.09.00, in CPU where the OSS Name Server operates, the MOMI CPU collector in that processor consumes progressively more CPU cycles than the other collectors. This has been traced down to obtaining OSS Name Server information via MEASURE. On TNS/E systems, the CONFMOMI keyword DISABLE-MEAS-OSSNS TRUE should be added to prevent collection of this MEASURE entity.

MOMIFTP

- None

ssMOMI

- None

MomiEmail

- None

SendMail

- None

IPCalc

- None

****

Release Package 5.02
Release Date 2008/05/15

Item	Version
Latest O/S tested	G06.31.00 & H06.13.00
Client Version	5.02
Server Version (VPROC)	5.02 T0000G06___V5_02____05_14_2008
Minimum Server Version	5.00
Buffer Version	Client 21.18 Server 21.18
History database	3.00
CONFMOMI	3.07
OBYMOMI	5.00
OBYCSQL	5.00
MomiFTP.exe	1.64
ssMOMI.scr	4.12
MomiEMail.exe	1.04
SendMail.exe	1.00
IPCalc.exe	1.3.3

Oldest client version tested with server 4.22

NEW FEATURES / BUGS FIXED

Common new features (requires current client and server)

If you are using Client Access, newly added screens in a MOMI release update are not available to users by default. This action may be changed on the screen Configure:Client Access:Global Settings by checking the option ***New screens enabled by default.*** *The user that started MOMI, known as the "Default Security User" always has new screens enabled by default.*

- None

MOMI Client

New Screens:

- None

New Features:

- None

Bug Fixes:

- On FTP screen, if user set HOST directory then connected, the selected directory was correct but the display showed the users default directory.

Misc. Items:

- Added Windows error codes into Error/Codes page.

- Added one time display message at client startup that notifies user if Windows registry should be changed to increase windows SharedSection

internal control blocks. The change will allow more windows resources to be available for multiple copies of the MOMI client or the client and other resource-intensive programs(like Lotus Notes) to run at the same time.

Known issues:

- None

MOMI Server

New Features:

- The alarm DiskFile / File Existence now accepts OSS file paths. Additional infrastructure work prepares converting other alarms in this category to also support OSS path names.

Bug Fixes:

- A bug was corrected that if alarms were updated, such as adding a new alarm, delete or update an existing, a momentary alarm might appear indicating a process was not running when in fact it was. Several conditions were required to cause this situation to occur.

Misc. Items:

- At MOMI startup, messages are no longer logged that indicate Alarm processing is no longer suspended. This occurred when no initial delay of alarm processing was requested.

- The SQL/MP error 6006 now provides an ASCII text description.

Known issues:

- On the TNS/E system, prior to H06.09.00, in CPU where the OSS Name Server operates, the MOMI CPU collector in that processor consumes progressively more CPU cycles than the other collectors. This has been traced down to obtaining OSS Name Server information via MEASURE. On TNS/E systems, the CONFMOMI keyword DISABLE-MEAS-OSSNS TRUE should be added to prevent collection of this MEASURE entity.

MOMIFTP

- added Help button

ssMOMI

- None

MomiEmail

- None

SendMail

- None

IPCalc

- None

****

Release Package 5.01
Release Date 2008/05/05

Item	Version
Latest O/S tested	G06.31.00 & H06.13.00
Client Version	5.01
Server Version (VPROC)	5.01 T0000G06___V5_01____05_02_2008
Minimum Server Version	5.00
Buffer Version	Client 21.17 Server 21.17
History database	3.00
CONFMOMI	3.07
OBYMOMI	5.00
OBYCSQL	5.00
MomiFTP.exe	1.63
ssMOMI.scr	4.12
MomiEMail.exe	1.04
SendMail.exe	1.00
IPCalc.exe	1.3.3

Oldest client version tested with server 4.22

NEW FEATURES / BUGS FIXED

Common new features (requires current client and server)

*If you are using Client Access, newly added screens in a MOMI release update are not available to users by default. This action may be changed on the screen Configure:Client Access:Global Settings by checking the option **New screens enabled by default**. The user that started MOMI, known as the "Default Security User" always has new screens enabled by default.*

MOMI Client

New Screens:

- None

New Features:

- 'Files:File Explorer:NSK' added right-click to jump to enscribe screens for subvols,files,openers and copy to clipboard.

Bug Fixes:

- 'SubSystems:User Defined:Diagram' if the user saved a diagram then immediately deleted it without reselecting it from the list the client would crash. Fixed.

- 'SubSystems:User Defined:Diagram' if the user saved a diagram then displayed that diagram on a different PC that that the MOMI Client did not have that system defined(same logical name) the client would crash. fixed. Now warns user that system not found.

- Alarm Export/Import was not correctly setting a certain type of value (specifically the DiskFiles Files Extents value). Fixed.

Misc. Items:

- None

Known issues:

- None

MOMI Server

New Features:

- Alarm suspend general messages are now logged to EMS along with previously to the MOMI log. Individual alarms active at the time of the suspend still log as directed.

- The Alarm Process / I/O Stuck in %004 will now display the object file name of the process.

- A new CONFMOMI keyword PATHWAY-TCP provides the ability to specify an additional location for the PATHTCP2 object file. See MOMI help for additional information.

- An additional message is now logged to EMS when MOMI stops a CPU collector. This is primarily due to a collection not reporting on a timely basis.

Bug Fixes:

- A problem was corrected that caused unrelated alarms to clear as processes started and stopped on the System. This was primarily evident on H06.13 systems.

Misc. Items:

- None

Known issues:

- On the TNS/E system, prior to H06.09.00, in CPU where the OSS Name Server operates, the MOMI CPU collector in that processor consumes progressively more CPU cycles than the other collectors. This has been traced down to obtaining OSS Name Server information via MEASURE. On TNS/E systems, the CONFMOMI keyword DISABLE-MEAS-OSSNS TRUE should be added to prevent collection of this MEASURE entity.

MOMIFTP

- None

ssMOMI

- None

MomiEmail

- None

SendMail

- None

IPCalc

- None

****

Release Package 5.00
Release Date 2008/04/18

Item	Version
Latest O/S tested	G06.31.00 & H06.12.00
Client Version	5.00
Server Version (VPROC)	5.00 T0000G06___V5_00____04_14_2008
Minimum Server Version	5.00
Buffer Version	Client 21.16 Server 21.16
History database	3.00
CONFMOMI	3.07
OBYMOMI	5.00
OBYCSQL	5.00
MomiFTP.exe	1.63
ssMOMI.scr	4.12
MomiEMail.exe	1.04
SendMail.exe	1.00
IPCalc.exe	1.3.3

Oldest client version tested with server 4.22

NEW FEATURES / BUGS FIXED

Common new features (requires current client and server)

If you are using Client Access, newly added screens in a MOMI release update are not available to users by default. This action may be changed on the screen Configure:Client Access:Global Settings by checking the option ***New screens enabled by default****. The user that started MOMI, known as the "Default Security User" always has new screens enabled by default.*

- 'Files:File Explorer' is a new screen that gives a Windows 'Explorer-like' view of the NonStop NSK and OSS file system. The screen provides the ability to right-click on a filename and download a copy of that file into your PC editor. When the editor is closed the file is optionally uploaded to the NonStop System. MOMI creates and maintains copies of the original and changed files on the PC.

- 'Configure:Chat' is a new screen that allows users to communicate using text messages among themselves. If Client Access is enabled the user must have been given authority to view the Chat screen and the user must be logged on to be able to send messages. There are 5 public chat channels (ALL and ch1-ch4) plus 2 private channels (ch5 and ch6). Public channels may be viewed by anyone, Private channels are only visible to users that are logged on. (for Vikas K.)

- 'SubSystems:User Defined:Diagram' is a flexible new screen that provides a list of objects selected and arranged by the user. The objects are graphical items such as boxes and other selected portions of System, CPU and Process information available to the MOMI PC Client. Information is available from any system probed on the 'Systems:Basic' screen. Screens may be saved for later reuse.

- 'SubSystems:User Defined:List' is a new screen allowing the selection of

user-defined screens previously created. The screens may display in a window independent of the MOMI PC Client (the client must be running but can be minimized separately). The user may select multiple independent screens, determine there placement and the degree of transparency (i.e. a see-through level').

- 'Processes:ProcessH' has been totally re-written to provide additional information such as LoadFile (DLL/SRL) usage, allows the **System** & **Both** measurements on TNS/E platform and demangles C++ function names.

- 'Configure:Settings:Transfers' is a new screen that allows the user to configure the FTP Settings (like 'Systems:FTP') and the settings to be used by the Editor on the new 'Files:File Explorer' screen when editing files on the PC.

- Various drop-down boxes in the MOMI PC Client that provide references Spooler supervisor names, Spooler Collector names and TCPIP process names now update dynamically. Previously, these fields were only populated at client startup (or when a system connects).

- The screen Files:Enscribe:File Opener now provides OSS Pathnames when applicable.

- A WAV file "unexpected error…" is played when a purple alarm (i.e. really red) is displayed on the screen Alarms:Active.

- Data between the client and server may now be encrypted. The CONFMOMI keyword ENCRYPTION-ALGORITHM is used to enable and determine the type. The three choices are None, FAS and AES. The default is None. If encryption is enabled, MOMI 4.xx clients will still work with this but their data is not encrypted. See MOMI help for additional information.

- MOMI now has the capability to be started with alarm processing suspended for a period of time and to toggle this setting on/off during operation. When alarm processing is suspended, a message is displayed over the "MOMI" panel at top of screen. The CONFMOMI keyword ALARM-SUSPEND-DELAY determines the period of time to delay alarm processing when MOMI is started and the screens 'Alarms:Active' and 'Configure:Settings:Actions' provide a button to suspend or re-enable alarm processing.

MOMI Client

New Screens:

- Described above in Common new features

New Features:

- Changed String Filter type for standard MomiGrids to allow use of full standard masking allowing '*' and '?'. Note that the old method of just putting 'text' and having all items that contain that 'text' will need '*' added before and after 'text' to match (i.e. *text*).

- Added new tab on 'Processes:Process Detail' section for Process Entity. New tab is labeled 'LF' for Load Files. This tab will list all DLL/SRL's used by this process.

- 'Processes:All Processes' config now allows to display only processes that use a set LoadFile(DLL/SRL).

- Added ability to use SendMail.Exe to send emails without 'hanging' the client.

- Added more places that User hints will display.

- 'Systems:FTP' now allows 'drag and drop' for file transfers.

- 'Systems:FTP' now has added confirmation settings in Config.

- 'Systems:FTP' has had changes made to keep a FTP-session alive while the user is logged on and improvements were made to keep copies of the original and changed files on the PC when files were edited.

- Added ability to do FTP structured File transfers from PC to NonStop. (for Alan H.)

- On the screens 'Overview', 'Top Process','Last Started', 'All Processes', and 'Process Entity' now if users selects cpu,pin it will be used for process identification instead of process name. So now a 'Process Detail' of a backup process or an individual disk process is available.

- added ability to create an 'Alarm Report' from the 'Alarms:Define:Export' screen. Report will contain all alarm elements.

- Added TraceLog highlights for text and submsg number.

- On the screen 'Configure:Client Access:Global Settings' changed 'Enable Client Access Checking on this System' to new title 'Enable User Access Checking on this System'. Added a new lower level checkbox 'Enable Client Access Checking on this System'. When checked 'Enable Client Access Checking on this System' now allows 'Enable User Access Checking on this System' and setting in 'Any Security Users' selections to be turned On/Off. This allows the use of the Global Security setting in 'Any Security User' to be set while the User Access checking is not enabled. 'Enable User Access Checking on this System' will turn On/Off the enabling/disabling of screens/actions based on the user that is logged on.

- On the screen 'Configure:Client Access:Global Settings' added checkbox for 'New screens enabled by default'. When checked any new screens added to a version will appear on all users screens until they are specifically disabled by updating the users/group record. When not checked new screens will not appear until the records are updated indicating they should be enabled for that user.

- On the screen 'Processes:Top Processes' now you can right-click on the object name and perform actions and copy the object name into the clipboard. (for Morris L.)

- On the screen 'Processes:Process Detail' and Process:All Processes' added elapsed time to hint for Start Time. On 'Overview' popup added

elapsed time since created. (for Morris L.)

- On the screen 'Processes:Process Detail' added Starting Elapsed time and CPU Time on the PE3 tab. (For Morris L.)

- On the screen 'Overview:CPU Hist' Chart right-click will now bring up action menu allowing you to jump to 'History:Process' for that time (For Vikas K.)

- On the screen 'SubSystems:Logs:MOMI Log and VHS Log' added record progress while reading records with a filter set. (For Alan H.)

- On the screen 'Configure:Settings:Actions' added section to display Backup files created when editing Host files on the PC. Also allows user to edit the files and delete them. Also can be set to automatally delete all backup files when the MOMI client is stopped.

- 'History:Export Data' now has a checkbox allowing the exported data or Script to exclude commas(,) from the data. Some exports when used by ACCESS would get #NUM errors when imported if the value contained a comma. The default is still format with commas.

- The screen 'Configure:Settings:File Locations' added selection when 'Import...' button on 'Export/Import MOMI.INI section' that allows the user to either import entire ini file or only the defined systems. (for Vikas K.)

- The 'Help' button when pressed is now context sensitive and displays help applicable to the current MOMI screen selected. If the current MOMI screen is ‘unknown’ to Help it will display the first help topic in the document.

- Process Name locator now includes Object File name.

- Lunch Finder now has Load button to obtain from the MOMI Website our pick of locations into the lunch Finder list.

Bug Fixes:

- The screen 'Systems:Basic' Probe 'BreakAway' windows would not clear the alarm display when the alarms were cleared. Fixed.

- On some PC using ATI's HydraVision program the client would not resize correctly (and possibly crash) for Client version 4.19-4.22. Fixed. Workaround was uncheck the 'Application position memory' selection in HydraVision either for all programs or just the MOMI client. Fixed.

- 'Files:View Files' did not display correctly if the file contained a null - major rewrite to correct and improve performance. Fixed.

- Standard Grid Tool to print grid to printer would not work. Fixed.

- On 'Overview' screen sometime a right-click on Process/Disk name would not correctly determine process type and the popup menu would display a process menu instead of a disk menu. Fixed.

- Under some circumstances the Standard MomiGrid would lose records when using the scrollbar to scroll up or down. Fixed.

- If a PC did not have speech capability the 'Configure:Settings:Single Screen:Systems' checkbox 'Request Alarm Status' was incorrectly hidden. Fixed.

- In 'Client Access' if a User was logged on and no client access record was defined for that user and no 'Wildcarded user' record matched the user the 'Not Logged On' client access record was used instead of the 'User Not Defined' record. Fixed.

- on 'Alarms:Active' if a user changed column order to a certain order then under some circumstances the user would be allowed to delete an active alarm that was not an EMS alarm thus should be un-deleteable. This would cause the server to crash. Fixed.

- If the PCs regional and language options were set to Italian (Italy) the time separator was '.' instead of the ':' expected causing a crash on client startup. Fixed.

- On the 'SubSystems:Logs:EMS Msgs' after a filter was used then cleared sometimes the display would lose some of the messages. Fixed.

Misc. Items:

- Converted to use new Socket Control so regular messages and probes use the same method for communications.

- 'SubSystems:Logs:EMS Msgs' replaced Grid with new high-performance BWGrid.

- The internal TraceLog processing has been rewritten to reduce PC cpu usage

- New external program SendMail.exe added to MomiEmail directory. This program allows the user to email from EMS Msgs, View File, View Spooler jobs and Alarm Export without 'hanging' the MOMI client.

- Improved speed and reduced CPU usage when viewing file content.

- made some changes to make 'Systems:FTP' more reliable.

- Added PCs registry setting for SharedSection to Config Info report and 'Configure:Setting:Misc. Setting'.

- Added MOMI Server object info(FileName and Security) to Config Info report and 'Configure:Setting:Misc. Setting'.

- Added PC CPU Count and description to Config Info report.

- Added history file compression type to Config Info report.

- Converted 'Readme.txt' and 'MOMI History.txt' to RichText (.rtf) files.

- Changed indicator that AutoUpdate Limit had been reached from *Time Out* to *AutoUpdate Limit* to prevent confusion.

- Changed max number of EMS messages allowed to be kept in memory from 32K to 250,000 and allowed directly setting the value without using the spin buttons (for Michael B.)

- Added An Encrypt/Decrypt test to the Debug panel.

- Added Disable-TMF-Report flag, SQLSTMT-WILD-CARD and OSS01-API-VERSION to Server Info 2 screen and report.

- 'Systems:Basic' screen is now active when running Mini-MOMI.

Known issues:

- None

MOMI Server

New Features:

- Message buffer memory in many cases is now aligned to page boundaries. This allows activation of a more efficient message system transfer on TNS/E Systems.

- The internal processing of client requests in the servers that MOMI launches is completely rewritten to enhance performance and support new capabilities in the main MOMI process.

- The compression of history data has a new algorithm available that is more efficient with larger data records. Additionally, compression may be turned off. This capability will be externalized in a later release.

- MOMI, when started, now logs a message to EMS if MEASURE does not appear to be running or if MEASURE is not running in a particular processor in the system. However, MOMI does continue to operate.

- The TCP/IP I/O processing now supports larger internal buffers and the future capability to increase the message size to the client.

- The default number of bytes per second that MOMI writes to all MOMI PC Clients is updated to reflect new processor types. This is the CONFMOMI keyword TCPIP-WRITE-BYTES-SEC.

- The MOMI now starts independent servers for many types of history requests from the client. Previously, these requests shared a common server.

- Server memory consumption is reduced in some additional cases where data is internally backing up (for example the client is slow to respond or has a slow link).

- Server now logs an EMS message if the port assigned to MOMI is used by another process (i.e. is not free and available).

- Additional message protection is added to inbound TCP/IP data in the event a 'foreign' process is trying to send data into the server.

- Additional MEASURE error codes are now translated into readable text.

- MOMI has reduced, or in some cases eliminated the need for supplemental TLE's (Time List Elements). This code is reworked to help better report when TLE's are running low in a processor. However, the MOMI subsystem must have been able to start correctly in order to report a low TLE alarm.

- The logic MOMI uses to access an SNTP server has been enhanced to better compensate for delays in the network. This results in a more accurate time value being obtained.

- Some intentional delays are now removed during the startup logic of the main MOMI server.

- The CONFMOMI keyword SNTP-SET-IF-BEHIND provides an ability to have MOMI set the system time IF the clock is behind.

- On G06.26 and later systems MOMI now uses ZMS style of MEASURE counters to obtain the CPU entity. This prevents overflow or loss of certain counters on the TNS/E platforms.

- The default MOMI object file uses 64-bit OSS directory/file calls when looking up directory information on the TNS/E platform and 32-bit directory/file OSS calls on the TNS/R platform. This change/feature is a result of the O/S changes introduced at G06.29 to support OSS files larger than 2 Gigabyte in size.

- The alarm DiskFile / File existence now has a Delay Alarm attribute. Previous definitions of this alarm will trigger a version mismatch requiring the alarm to be displayed and resaved.

- Percentage values for history, where the server performs the computation, are now reported out to 4 decimal digits instead of 2.

- The alarm DiskFile / Percent Full now has an option of "Open or Closed" attribute. Previous definitions of this alarm will trigger a version mismatch requiring the alarm to be displayed and resaved.

- The log message generated when a MOMI server is externally stopped now displays the purpose of the server (for example "HST01DB write").

- The CONFMOMI keyword MEAS-SQLSTMT-WILD-CARD provides an ability to set the wild-card character used in the field run^unit when retrieving SQL Statements. For some reason HP changed the wild-card character to a space instead of an *. MOMI now uses a space by default.

- An EMS message indicating the state of the MOMI password is logged after starting MOMI.

- The alarm TMF / Long running transaction now reports the Pathway, TCP

and Term when the alarm originates from Pathway and the needed information is successfully retrieved.

- Failures encountered when retrieving information from the TMF subsystem are now retried instead of the retrieval task shutting down. A failure to communicate with the subsystem will also set TMF type of alarms to report as "Unable to access subsystem via TMFSERV".

- The NSKCOM started by MOMI and used to retrieve virtual memory information is now stopped and restarted after the initial retrieval of information. For some reason, HP allows the initial instance of NSKCOM, regardless of whom started it, to lock the swapfile configuration file while any pending swapfile deletes are processed. This automatic restart of MOMI's NSKCOM will insure that the swapfile configuration file will be unlocked after any pending operations are complete. It is still recommended that the system startup files, after all processors are loaded but prior to any other activity start and NSKCOM with an EXIT to cleanup any pending activities.

- MOMI now reports additional processor types.

- The alarm DiskFile / Open or Closed now accepts an OSS path name. Other alarms are also modified to accept OSS path names and their pop-up tool tips are updated to reflect this new capability.

- The CONFMOMI keyword ALARM-EMS-EVENT-NBR to allow the definition of the EMS event number is loaded for MOMI Alarm messages.

Bug Fixes:

- Server now imposes a delay after receiving an error on the port assigned to MOMI. Previously, a looping condition occurred if the port was not free.

- The Average Operation Time value for $RECEIVE files now reports a much better value. Previously, the value was reported too large. As this value is derived, it is still incorrect for the initial I/O's under the file. This value can be seen on the screen Processes / Process Detail under the File Entity has Open section.

- A failure starting a TMF or MEADIA server now provides the correct error text. Previously, the error text was not always loaded at certain points of failure.

- The maximum adjustment MOMI may make to the system clock, if this feature is enabled, is now capped to 1 hour. The operating system generates an error if a correction exceeds one hour.

- OSS CPU history processing now has additional logic to prevent an overflow trap when invalid history is processed. MEASURE OSS CPU information on rare occasions has invalid, usually impossibly large values, in the returned data.

- Performance is improved for internal routines that search for objects such as active alarms.

- Comp-traps are reduced on TNS/E platform.

- ProcessH may have returned an additional entry of 'junk' if 1) the process was OSS, and 2) the entire array of information returned was filled.

- The correct WAV file is not played for DiskFile / File existence when the event was "Entity is Present".

- An alarm defined with an object file name of $*.*.* no longer removes unrelated alarms when it clears.

- It is no longer possible to delete an 'undeletable' alarm (i.e. not suppose to be able to delete) if the option **All instances based on this Alarm** was selected. Generally speaking, only EMS / User defined alarms are allowed to be deleted.

Misc. Items:

- Changed the text in the alarm Tape / Tape mount and TMF/ Tape mount clear message from "...*Mounted*" to "..no longer outstanding" to reflect the possibility that the mount could have been canceled. Now add to end of the 'clear' message the name of the tape drive when a mount is no longer outstanding and it is found on a drive.

Known issues:

- On the TNS/E system, prior to H06.09.00, in CPU where the OSS Name Server operates, the MOMI CPU collector in that processor consumes progressively more CPU cycles than the other collectors. This has been traced down to obtaining OSS Name Server information via MEASURE. On TNS/E systems, the CONFMOMI keyword DISABLE-MEAS-OSSNS TRUE should be added to prevent collection of this MEASURE entity.

MOMIFTP

- Changed all NonStop references to HP NonStop.

- Added file transfer failure if Binary file not same size after a PUT was successful.

ssMOMI

- Fixed memory leak causing excessive CPU utilization of the MOMI server.

MomiEmail

- Added optional UserName and Password for local SMTP Server.

- Added display of selected SMTP email server.

SendMail

- New MOMI Helper program to allow MOMI user to send email without

'hanging' the Client.

IPCalc

- None

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Release_Package 4.22
Release_Date 2007/03/29

Item	Version
Latest O/S tested	G06.30.01 & H06.09.00
Client Version	4.22
Server Version	4.19 vproc: T0000G06___V4_19____03_28_2007
Minimum Server Version	4.06
Buffer Version	Client 21.15 Server 21.15
History database	3.00
CONFMOMI	3.06
OBYMOMI	3.03
OBYCSQL	3.02
MomiFTP.exe	1.62
ssMOMI.scr	4.11
MomiEMail.exe	1.03
IPCalc.exe	1.3.3

Oldest client version tested with server 4.06

NEW FEATURES / BUGS FIXED

MOMI Client

New Screens:

- on 'Systems:Detail' added 2 new ways to display other systems in addition to the old 'All Systems'.
  '1-4 Systems' allows you to select the 1-4 systems you want to view.
  'Systems Line' puts all systems being probed on a single chart.

New Features:

- 'Files:Enscribe:Files' now displays the Trusted flag in the column labeled 'T'.
- 'Configure:Server:Server Info 2' now displays 'CPU Limit EMS', 'TCP/IP Timeout' settings and the 'H06.04 or later' and 'H06.09 or later' flags.

Bug Fixes:

- Rewrote the User Hint loading method to speed processing when a large number (hundreds) of user hints are present.

Misc. Items:

- None

Known issues:

- None

MOMI Server

New Features:

- The server now provides the information to allow the client to jump from the alarm TMF / Transaction rate (per sec) to the screen Processes / Process Entity.

- The Alarm TMF / Transaction rate (per sec) now has the option to

Delay Alarm. Any existing alarm will initially display as Purple and indicate it must be re-saved (which updates an internal version number) in order to enable the alarm.

- The IP address of the Network Source is added to the following message: "SNTP:System time n.nnnnnn seconds ahead|behind Network Source (n.n.n.n)"

- Added the CONFMOMI keyword CPU-LIMIT-EMS to allow throttling of the MOMI server used to process requests on the screen SubSystems / Logs / EMS Msgs. See MOMI help for additional information.

- Additional checking has been added to processing messages from a client to help prevent looping (or other errors) should a foreign message (a message not from a MOMI client) be received.

- Added the CONFMOMI keyword TCPIP-TIMEOUT to determine the maximum amount of time a MOMI PC Client may be globally paused or not send in any data before the TCP/IP socket is closed. The value defaults to 10 minutes.

- The CPU types S7800B and S86100 are now recognized.

- Now provide the state of the TRUST flag for object files (this field is only available on TNS/E systems) on the screen Files / Enscribe / File.

Bug Fixes:

- The computation for the Overall System Busy percent is slightly revised to improve accuracy.

- The following Alarms now enumerate correctly (i.e. expand to the correct underlying types of processes) when a wild card is used or handle the wild card correctly:

```
Process / State running/stopped
Expand  / Line state up/down
Expand  / Path state up/down
TCP/IP  / Ping host
```

- The local time offset on the screen CPUs / CPU Info now displays correctly during Daylight Savings Time. Previously, it would be off by 1 hour. The value is for informational purposes and did not cause any other processing error.

Misc.Items:

- CPU usage during MOMI startup and network traffic during operation is reduced when handling lots (i.e. hundreds) of UserHints.

Known issues:

- SQL Statements measurements do not seem to function via the MEASURE callable procedures used by MOMI on later releases of the operating system. Case 10-070115-8974 is open with HP.

- On the TNS/E system, some minor features such as ProcessH for System code is not yet changed to support the new platform, but all other major features are in place.

- On the TNS/E system, prior to H06.09.00, in CPU where the OSS Name Server operates, the MOMI CPU collector in that processor consumes progressively more CPU cycles than the other collectors. This has been traced down to obtaining OSS Name Server information via MEASURE. On TNS/E systems, the CONFMOMI keyword DISABLE-MEAS-OSSNS TRUE should be added to prevent collection of this MEASURE entity.

MOMIFTP

- None

ssMOMI

- None

MOMIEMail

- None

IPCalc

- None

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Release_Package 4.21
Release_Date 2007/03/08

Item	Version
Latest O/S tested	G06.30.00 & H06.09.00
Client Version	4.21
Server Version	4.18 vproc: T0000G06___V4_18____03_07_2007
Minimum Server Version	4.06
Buffer Version	Client 21.14 Server 21.14
History database	3.00
CONFMOMI	3.06
OBYMOMI	3.03
OBYCSQL	3.02
MomiFTP.exe	1.62
ssMOMI.scr	4.11
MomiEMail.exe	1.03
IPCalc.exe	1.3.3

Oldest client version tested with server 4.06

NEW FEATURES / BUGS FIXED

MOMI Client

New Screens:

- None

New Features:

- If the Server was started with the CONFMOMI keyword 'SELECTION-DEFAULT-VHS', which provides a default location for VHS log files to the client, the screen 'SubSystems:Logs:VHS Logs' now has a selection in the Specify Logfile selector drop box of 'CURRENT VHS LOG FILE'. This will automatically determine the VHS log file with the latest Modified Date/Time (i.e. the current file) each time the Request button is pressed. This feature is only available if the CONFMOMI keyword mentioned above is present. (For Vikas K.)

- The 'SubSystems:Logs:EMS Msgs' config setting (NONE or filename) for the 'Distributor Filter' will now be retained until changed. (for Vikas K.)

- The 'Configure:Server:Server Info 2' screen now displays the value for the CONFMOMI keyword 'CPU-LIMIT-ALARM-DETECT'.

- The screen 'Configure:Settings:Actions' now has a section 'CAIL Actions' to Register or Un-Register MOMI's limited version of the CAIL emulator (the limited version is courtesy of CAIL). This capability is provided in the event MOMI's CAIL emulator conflicts with any other software product that also provides a CAIL emulator.

  For example, if MOMI is installed on a PC and a failure occurs installing (or running) the CAIL emulator of another software product, the user may go into the MOMI PC Client and Un-Register its version of the CAIL emulator and retry the installation (or operation) of the other software product.

Each time the MOMI PC Client is started it automatically checks for or registers the CAIL emulator. If a full featured version of the CAIL emulator is present on the PC, the full featured version is the one that MOMI will use.

Bug Fixes:

- 'SubSystems:Logs:VHS log' would not always display correctly when Reverse scrolling was on and the scroll-bar changed direction. Fixed.
- Client would sometimes crash upon startup if the number of EMS messages configured to be displayed was changed from default 500, Fixed.
- If Client is set to Auto-LogOff after period of inactivity the Client will now also not Auto-Logon when a user changes to another system.
- On the MOMI Log export delimited any CR/LF in the data was not removed causing extra line breaks on the report. Fixed.
- 'Configure:Settings:Single Screen' did not display the 'Alarms' section when a Server was configured for Alarms but the PC did not have TTS (Text-to-Speech) installed (Win2000). Fixed.

Misc. Items:

- None

Known issues:

- None

MOMI Server

New Features:

- EMS messages generated as a result Alarm messages now contain the second(or additional) line of data visible on the Alarms / Active screen.

- MOMI now issues a process STOP against its MEDIASVR server process if a file system error is encountered (normally a timeout). This change prevents the accumulation of MEDIASVR processes in the event the Tape subsystem is experiencing difficulty and MEDIASVR is unable to automatically stop.

Bug Fixes:

- The SNTP processing interprets the fractional portion of a second from the network source differently that results in a higher level of accuracy. Additionally, time adjustments now occur if the difference from the network source is greater than 0.001 seconds.

- The server processing for the screen Subsystems/Logs/VHS Log is changed to prevent the following: duplicate records that might display when new data is written to the log file, internally some binary 'junk' is removed when a process is unnamed and the last few records in the file might not display (depending on how fast they are written).

Misc.Items:

- None

Known issues:

- SQL Statements measurements do not seem to function via the MEASURE callable procedures used by MOMI on later releases of the operating system. Case 10-070115-8974 is open with HP.

- On the TNS/E system, some minor features such as ProcessH for System code is not yet changed to support the new platform, but all other major features are in place.

- On the TNS/E system, prior to H06.09.00, in CPU where the OSS Name Server operates, the MOMI CPU collector in that processor consumes progressively more CPU cycles than the other collectors. This has been traced down to obtaining OSS Name Server information via MEASURE. On TNS/E systems, the CONFMOMI keyword DISABLE-MEAS-OSSNS TRUE should be added to prevent collection of this MEASURE entity.

MOMIFTP

- None

ssMOMI

- None

MOMIEMail

- None

IPCalc

- None

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Release_Package 4.20
Release_Date 2007/02/26

Item	Version
Latest O/S tested	G06.30.00 & H06.09.00
Client Version	4.20
Server Version	4.17 vproc: T0000G06___V4_17____02_26_2007
Minimum Server Version	4.06
Buffer Version	Client 21.14 Server 21.14
History database	3.00
CONFMOMI	3.06
OBYMOMI	3.03
OBYCSQL	3.02
MomiFTP.exe	1.62
ssMOMI.scr	4.11
MomiEMail.exe	1.03
IPCalc.exe	1.3.3
Oldest client version tested with server	4.06

NEW FEATURES / BUGS FIXED

MOMI Client

New Screens:

- None

New Features:

- Ping and TraceRoute now share a common drop down list of name/addresses (for Vikas K.)
- Ping and TraceRoute now get list of TCP/IP Stacks from all TCP/IP stacks not just those connecting the client and Server. (For Vikas K.)
- Allowed Ping from PC and TraceRoute from PC to work when Client is in Mini-MOMI mode.
- On 'Alarms:Active' screen added item to right-click action menu that replays this alarms sound(if any).
- On 'SubSystems:Logs:MOMI Log' added ability to create a export script like History to allow scheduling of exporting the MOMI Log data. (for Wesley P., Erwin V., Ken K. and others).
- On 'SubSystems:Logs:MOMI Log' any HTML output will now have lines color coded to match Alarm severity. (For Erwin V.)
- On 'Configure:Server:Server Info 5' added section for BWSSG Info. BWSSG is the MOMI Super-group Helper Process.

Bug Fixes:

- On 'History:Chart 1 and Chart 2' sometime the chart would not stop scrolling when the scroll bar was centered. Fixed.
- The 'Systems:Basic' Probe Window will now correctly 'Stay On Top' when told to.
- The title used on the Windows Task bar for MOMI lost the ability to show the connected system name with version 4.19. Fixed.
- The 'Files:Disk Entity' columns for Disk Full percent and gauge would not sort correctly. Fixed.

Misc. Items:

- None

Known issues:
- None

MOMI Server

New Features:
- The advanced CONFMOMI keyword COLLECT-ALL-PROCESSES is now available to direct MOMI to report on processes started in the future. This keyword would be used for systems that 'play around' with their system time. See the MOMI help for additional information.

- The SNTP logic is revised to omit two optional fields from the NTP message. This change allows an NTP server to be a Windows Server, if the server is so enabled or is a domain controller. Additionally, the logic is revised to generate fewer requests per 'interval' and provide more information when operating in the VERBOSE mode.

- Server now provides configuration information for BWSSG.

Bug Fixes:
- The alarm Process / State running/stopped might not report if Delay Alarm was also specified. The logic is revised to now report correctly with or without the delay.

Misc.Items:
- The CONFMOMI keyword SNTP-UPDATE-INTERVAL now aligns on LCT time instead of GMT time. For example, if the interval was set to 24, or once a day, the operation would begin at 00:00 (or 12 midnight) local time.

- An expired mini-MOMI now provides a more meaningful explanation to the MOMI PC Client that the one year mini-MOMI time period has expired.

- If the CONFMOMI keyword SNTP-SERVER-ADDR is not specified and an attempt is made to generate an alarm email, a more meaningful error message is now displayed.

Known issues:
- On the TNS/E system, some minor features such as ProcessH for System code is not yet changed to support the new platform, but all other major features are in place.

- On the TNS/E system, prior to H06.09.00, in CPU where the OSS Name Server operates, the MOMI CPU collector in that processor consumes more CPU cycles than the other collectors. This has been traced down to obtaining OSS Name Server information via MEASURE. On TNS/E systems, the CONFMOMI keyword DISABLE-MEAS-OSSNS TRUE should be added to prevent collection of this MEASURE entity.

MOMIFTP

- None

ssMOMI

- None

MOMIEMail

- None

IPCalc

- None

****

Release_Package 4.19
Release_Date 2007/01/30

Item	Version
Latest O/S tested	G06.29.02 & H06.07.01
Client Version	4.19
Server Version	4.16 vproc: T0000G06___V4_16____01_30_2007
Minimum Server Version	4.06
Buffer Version	Client 21.12 Server 21.12
History database	3.00
CONFMOMI	3.06
OBYMOMI	3.03
OBYCSQL	3.02
MomiFTP.exe	1.62
ssMOMI.scr	4.11
MomiEMail.exe	1.03
IPCalc.exe	1.3.3

Oldest client version tested with server 4.06

NEW FEATURES / BUGS FIXED

MOMI Client

New Screens:

- 'Systems:Basic' systems grid now has a check box available if the user is probing(X) the system. This check box will create an window independent of the MOMI window for that system. It will contain a basic CPU display, TMF Status and alarm indicator. If a CPU is clicked the top 6 busiest processes in that cpu will display. The window is re-sizable and its location and size will be retained when MOMI restarts. The window contains 2 buttons, one to jump to the system displayed and one to return the window to its default size. (for Shawn E.)
- Added new PING screen to Systems Tab at 'Systems:PING' and new TraceRoute screen at 'Systems:TraceRoute'. This gives the ability to Ping and/or TraceRoute from the Tandem Server and/or the PC.
  NOTE: To use the PING and TraceRoute screens the procedure to "Create the Super Group helper process" in the Installation section of this file must be performed.
  NOTE: If you are using Client Access, All users except the user that started MOMI will have these features turned off in their User Settings and will have to be updated/re-saved to display these screens.

New Features:

- On the 'Configure:Settings:Actions' screen added a setting for using a HTTP Proxy Server. This Proxy Server is only used when getting the MOMI version info on the 'Configure:Reference:BlackWood Systems' page and when 'Configure:Settings:Actions' is set to automatically check for New MOMI versions and Betas. (For Erwin V.)
- on the 'History:Export Data' screen added TMF records.
- On the 'History:Chart 1 and Chart 2' added indicator showing what data base will be used when dragging the start and stop line of the chart.
- On the 'History:Chart 2' when charting by process name or process

object file name added wild-card ability (* or ?) on the process name or process object file name. (For Rod D. and Lasse L.)
- on the 'History:Export Data' screen added TMF records.
- On the 'History:Chart 1 and Chart 2' added indicator showing what data base will be used when dragging the start and stop line of the chart.
- on Alarm Detail screen that pops up when active alarm is clicked added a display of the alarm description so items like object name for process not running can be displayed. (For Paul W. and Alan H.)
- TimeZone map now displays approximate position of sun. (For Erwin V.)
- On the 'Processes:Process Detail' screen added the Process selector button [$].
- On the 'Configure:Client Access:Global Settings' screen added text to be included in the warning message if the recommended or required minimum
version message was displayed. (For Ken K.)
- on 'Overview:CPU Info' chart added High Water values for High-Pin, Low-Pin, and TLE's.
- on 'SubSystems:Expand:Diagram' the system the client is currently connected to will have a pale green background.
- on 'SubSystems:Expand:Diagram' you can now right-click on the system (anywhere but the picture) and hide that system. To show it again the 'SubSystems:Expand:Connections:Systems' Hide System column must be right-clicked.
- added more locations where User Hints will display.
- on 'History:Processes' added button for 'Mini-Reports' to allow user to get CPU cost/per IO. This will give an rough idea if the process was CPU bound or I/O bound in relation to the other processes. The calculation is cpu busy time divided by total messages sent and received. A high cost value indicates more time spent in CPU executing code and a low cost shows more time was spent in I/O. These are rough values and are only useful in relationship to each other (i.e. no value is particularly good or bad).
- On the 'Configure:Settings:Actions' screen added a setting for using a HTTP Proxy Server. This Proxy Server is only used when getting the MOMI version info on the 'Configure:Reference:BlackWood Systems' page and when 'Configure:Settings:Actions' is set to automatically check for New MOMI versions and Betas. (For Erwin V.)
- on 'Alarms:Active' screen added 2 new buttons
  1) replay last sound (1) and
  2) replay all sounds (+).
- on 'Configure:Settings:Single Screen:Alarms' added field to 'Replay sounds every xx minutes'.

Bug Fixes:
- !!!!! This affects History Scripts - check your script file names !!!!! The file name created from a History Script incorrectly had the file path as part of the name rather than saving the file in the specified location. For example, the file saved as:
'C:\Documents and Settings\BOB\Desktop\CPU for day of 20061108.txt' was saved in the
'C:\Documents and Settings\BOB\Desktop' location as:
'C__Documents and Settings_BOB_Desktop_CPU for day of 20061108.txt' instead of the correct file name of
'CPU for day of 20061108.txt' in the correct location. Fixed.
- When the 'Systems:Emulators' screen was selected the first time after the MOMI client was started it always gave the CAIL expire warning. It should have only given that message once then not again until the

expire date is getting near. Fixed.
- Importing alarms that had dependencies sometime would give an "Unexpected error..." message until the alarm was re-saved. Fixed.
- if a 'Spooler job' or 'File view file contents' or 'EMS messages' were exported via Email on a PC that did not have MAPI installed (i.e Lotus Notes) the client would crash. Fixed.
- If the Tandem FTP Server was setup to disconnect after a period of inactivity the MOMI client would hang after the Tandem disconnected and the refresh button was pressed. Now client will show user the client is no longer connected. Fixed.
- On 'SubSystems:Logs:EMS Msgs' if reversed scrolling was set the last message would not always be automatically scrolled into view. Fixed.
- Occasionally the Client would react to commands as if it was NOT logged on even if it was. Fixed.

Misc. Items:
- On 'Configure:Settings:Actions' screen removed the setting for 'Use Forced Minimize on Client'. New method for minimizing client now eliminates the need for special handling and now will work with Vista.
- on 'Alarms:Define:Alarm' for type CPU alarms on the 'Sound' selection 'User Specified Alarm Sound' and 'Speak User Specified Text' allow the filename/text to contain a '%d' that will be modified into the CPU number. (i.e. the text 'CPU %d down' will read as 'CPU 1 down' and the filename '.\cpu %d down.wav' will be used as '.\cpu 1 down.wav'.
- File and Process Name selectors now allow 90 entries instead of 20. They also will warn the user if the max length for that field is exceeded.

Known issues:
- None

MOMI Server

New Features:
- Server provides additional fields to system history.

- Server no longer checks for the existence of an excluded process name (i.e. -$pname). This is typically used on screens such as Alarms / Define / Alarms. This provides the ability to exclude a process that may or may not be present.

- A new MOMI server is introduced to perform 1) the TCP/IP function of PING (and also TraceRoute) and 2) allow the ability to set the system time. This server is named BWSSG. It is created by the user at installation and is a copy of BWMOMI object that is a) owned by a Super.Group user and b) PROGID'ed. Due to what appears to be a bug on the TNS/E system, it must be owned by SUPER.SUPER. The server is started as needed to perform the operations requiring additional security. The server is not required if MOMI operates under SUPER.SUPER. See the section on installation for additional information.

- Added new alarms:

    TCP/IP - Ping host
    Process - CPU assignment
    DiskFile - Subvolume file count

DiskFile - Empty / Not Empty

- Alarms now contain a version number invisible to users. If a new release introduces a major change to an alarm this version will be incremented. When MOMI is started, any Alarm when a incompatible version will display as purple (i.e. really red) shortly after startup. These alarms will need to be 're-saved' in the MOMI PC client on the screen Alarms/Define/Alarm in order to set any new fields and update the version number.

- The Alarm TMF / Long running transaction now allows the specification of a process name. By default, all process (i.e. $*) are included. The new specification allows for excluding processes (i.e. -$FRED). This provided the capability to exclude processes known to contain long running transactions. Any existing alarms of this type will display as purple (i.e. really red) and trigger the need to re-save them.

- Several changes were made to help the server operate on O/S versions older than D45. However, no guarantee.

- The server now provides the information necessary for the client to display in gray on the screen Files / Enscribe / Subvolume virtual files.

- Process based Alarms, if named, will display as $name (cpu,pin). The addition of cpu and pin provides for a unique key to the process in case a disk process name triggers an alarm. For example, a disk process name appears at least three times in a CPU, perhaps more.

- The OBYMOMI file may now contain:

```
                                    == only use DNS for TCP/IP
    param TCPIP^RESOLVER^ORDER DNSONLY   ==  name to addr conversions
```

  This PARAM prevents TCP/IP sockets code from accessing the HOSTS file (located by default on $SYSTEM.ZTCPIP) when a look-up via DNS fails. This PARAM may be advisable if the HOSTS file is not intended to be used and the new feature of PING and TraceRoute are actively used.

- MOMI will now start an internal server (copy of itself or BWSSG) even if it has undefined externals (only an issue on older K-Series systems).

- MOMI alarm performance is improved which translates into CPU savings for $MOMI on most systems.

- The MOMI server now provides additional information so that the client can select the proper WAV file when the "Default Sound for this Alarm" is selected and particular WAV files are available. For example, the information for a CPU / Processor down allows the client to select the proper file for the CPU in question.

- MOMI now has the ability to maintain the system time via an NTP server. See MOMI help for considerations and information on how to enable this function.

Bug Fixes:

- The server now correctly provides the information of an OSS parent. Previously, ancestor information may have been blank preventing the proper creation of a Descendants tree on the screen Processes / All Processes.

- Previously a timing window could trigger a false alarm if a wild-card was used and the resultant file name disappeared in-between the time the file was listed (i.e. from the wild-card) and information was obtained from the file name. The general internal changes needed to detect this situation and has been added and the the alarms DiskFile / Percent full & At limit of extents are corrected. Other alarms will be modified in future releases to detect this situation.

- On the screen Processes / All Processes the column Page Faults will display zero instead of 65535 if -1 is returned by the operating system. This value seems to be present if the request for information is during process initialization.

- Some Alarms may not have automatically cleared existing alarms if the entity was no longer present.

- The server no longer allows an Alarm of Process / State running/stopped to be defined with an event of Stopped and an entity name of $*. Previously, random processes would appear in an alarm of this type.

- Certain process creation errors now provide the full intended message.

- Corrected a problem were deleting of certain alarms may have caused a looping server condition.

- Corrected a problem where a file system error 13 encountered in alarm processing may have overflowed an internal buffer causing a server to crash. This required both an an error 13 and a fairly long file name.

- Corrected a problem on the Processes / Process Detail screen the backup cpu,pin field for an unnamed process may have displayed a 'junk' value instead of None. This only appeared sporadically and for very short periods of time.

- The pop-up tool tip (or Hint) for the Alarm Process / State running/stopped is revised to remove some wild cards and object file references. The pop-up tool tip is over the Event (stopped/running) now explains that certain combination are invalid such as a $* when checking for a down condition.

- A bug was corrected on the screen Spool / Loc that could have caused the field location to display random characters (or characters from a prior location).

Misc.Items:

- The CPU counters of disc-ios and cache-hits now use the 64-bit fields on newer systems rather than the older 32-bit fields. TNS/E systems could overflow the 32-bit counters which resulted in no Disk I/O or cache information on the screen CPUs / CPU Summary.

- Changed working of Alarm Process / Memory used to now read (megabytes) instead of (.1 megabytes). Functionally, the alarm works as before. Additionally, if this alarm is active it will now display the object file name.

- The amount of memory initially allocated by MOMI processes has changed. Previously, all processes made the same initial allocation. Now, different initial allocations are made based on the function of the MOMI processes. Generally, the initial memory allocated should be somewhat less. Indirectly, this change should also reduce the amount of SWAP space consumed.

- The Alarm CPU / Memory pressure now has a default value of 3.

- Some values less than one may now display with a leading zero just to the left of the decimal point (such as 0.123456). Previously, the leading zero was removed.

Known issues:

- On the TNS/E system, some minor features such as ProcessH for System code is not yet changed to support the new platform, but all other major features are in place.

- On the TNS/E system, in CPU where the OSS Name Server operates, the MOMI CPU collector in that processor consumes more CPU cycles than the other collectors. This has been traced down to obtaining OSS Name Server information via MEASURE. On TNS/E systems, the CONFMOMI keyword DISABLE-MEAS-OSSNS TRUE should be added to prevent collection of this MEASURE entity.

MOMIFTP

- None

ssMOMI

- None

MOMIEMail

- None

IPCalc

- None

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Release_Package 4.18
Release_Date 2006/10/05

Item	Version
Latest O/S tested	G06.29.01 & H06.06.00
Client Version	4.18
Server Version	4.15 vproc: T0000G06___V4_15____10_03_2006
Minimum Server Version	4.06
Buffer Version	Client 21.11 Server 21.11
History database	3.00
CONFMOMI	3.05
OBYMOMI	3.02
OBYCSQL	3.02
MomiFTP.exe	1.62
ssMOMI.scr	4.11
MomiEMail.exe	1.03
IPCalc.exe	1.3.3
Oldest client version tested with server	4.06

NEW FEATURES / BUGS FIXED

MOMI Client

New Screens:

- None

New Features:

- 'Configure:Setting:Actions' added selections for 'Auto Check for new version' and 'Auto Check for new Beta'. If checked MOMI will periodically query the BlackWood Systems web site to see if a new version of MOMI or MOMI beta is available. If a new version is found a small pop up window will alert the user.

Bug Fixes:

- Made changes so Client can work with FTPSERV included in G06.29.00, G06.29.01 and H06.06.00.

Misc. Items:

- CAIL emulator evaluation license valid until 12/30/2007 installed.

Known issues:

- None

MOMI Server

New Features:

- None

Bug Fixes:

- Corrected a problem in PGMRAY that caused the reported CPU usage to be off by one decimal position (i.e. a process running at 38.4% was displayed as running at 3.84%).

- Corrected a problem with an Alarm Monitor Times record. The flag

indicating the record was disabled was ignored. Now, a disabled Monitor Times record is treated as if the record was not defined which means the Alarm definition is always monitored.

Misc.Items:

- The CONFMOMI file now specified the keyword DISABLE-MEAS-OSSNS to turn off the collection of OSS Name Server information. TNS/E systems have a problem with MEASURE that this information consumes progressively more CPU over time. All other platforms may remove this statement.

Known issues:

- On the TNS/E system, some minor features such as ProcessH for System code is not yet changed to support the new platform, but all other major features are in place.

- On the TNS/E system, in CPU where the OSS Name Server operates, the MOMI CPU collector in that processor consumes more CPU cycles than the other collectors. This has been traced down to obtaining OSS Name Server information via MEASURE. On TNS/E systems, the CONFMOMI keyword DISABLE-MEAS-OSSNS TRUE should be added to prevent collection of this MEASURE entity.

MOMIFTP

- Made changes to work with FTPSERV included in G06.29.00, G06.29.01 and H06.06.00.

ssMOMI

- None

MOMIEMail

- None

IPCalc

- None

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Release_Package 4.17
Release_Date 2006/09/29

Item	Version
Latest O/S tested	G06.29.01 & H06.06.00
Client Version	4.17
Server Version	4.14 vproc: T0000G06___V4_14____09_29_2006
Minimum Server Version	4.06
Buffer Version	Client 21.11 Server 21.11
History database	3.00
CONFMOMI	3.04
OBYMOMI	3.02
OBYCSQL	3.02
MomiFTP.exe	1.61
ssMOMI.scr	4.11
MomiEMail.exe	1.03
IPCalc.exe	1.3.3

Oldest client version tested with server 4.06

NEW FEATURES / BUGS FIXED

MOMI Client

New Screens:

- None

New Features:

- None

Bug Fixes:

- System Overview Process Detail pop-up would not always update all fields when the pop-up was displayed and the underlying process changed. Fixed.

Misc. Items:

- None

Known issues:

- None

MOMI Server

New Features:

- None

Bug Fixes:

- If an EMS content based alarm was created with a previous version of the server, the Alarm would automatically clear. The automatic clear is a new feature of server. Now, the server will assume the default is not automatically clear the Alarm.

- If an Alarm was displayed for a process that was not performing any activity (i.e. not consuming any CPU), it was possible the Alarm would not clear if the process stopped. Now, the server properly notifies of

a process deletion in this situation.

- If an EMS content based alarm triggered on a message created by MOMI, it was possible to enter a loop generating EMS messages. Now, the server ignores all EMS messages with an SSID of BWS (which is used by MOMI).

Misc.Items:

- None

Known issues:

- On the TNS/E system, some minor features such as ProcessH for System code is not yet changed to support the new platform, but all other major features are in place.

- On the TNS/E system, in CPU where the OSS Name Server operates, the MOMI CPU collector in that processor consumes more CPU cycles than the other collectors. This has been traced down to obtaining OSS Name Server information via MEASURE. On TNS/E systems, the CONFMOMI keyword DISABLE-MEAS-OSSNS TRUE should be added to prevent collection of this MEASURE entity.

MOMIFTP

- None

ssMOMI

- None

MOMIEMail

- None

IPCalc

- None

****

Release_Package 4.16
Release_Date 2006/09/25

Item	Version
Latest O/S tested	G06.29.01 & H06.06.00
Client Version	4.16
Server Version	4.12 vproc: T0000G06___V4_12____09_22_2006
Minimum Server Version	4.06
Buffer Version	Client 21.11 Server 21.11
History database	3.00
CONFMOMI	3.03
OBYMOMI	3.02
OBYCSQL	3.02
MomiFTP.exe	1.61
ssMOMI.scr	4.11
MomiEMail.exe	1.03
IPCalc.exe	1.3.3

Oldest client version tested with server 4.06

NEW FEATURES / BUGS FIXED

MOMI Client

New Screens:

- None

New Features:

- On 'Configure:Server:Server Info 5' added server run-time parameter 'Default Work Location'.
- On 'SubSystems:Expand:Diagram' the 'Save Config All' now will save the locations based on current system so each system can have a different view of the network. Resizing logic also improved.
- on 'Configure:Server:Server Info 2' added display for run-time param of 'DISABLE-MEAS-SQLPROC'.

Bug Fixes:

- On some PC's the client could crash on startup. Resize timing protection added to prevent crash. Fixed.

Misc. Items:

- The Overview process detail pop-up has been reconfigured to change 'UserID' label to more accurate 'Process Access ID' and added label for 'Logon Name'.

Known issues:

- None

MOMI Server

New Features:

- CONFMOMI keywords (refer to the MOMI help for more information)
  DISABLE-MEAS-SQLPROC
  Determines if MOMI is allowed to operate an SQLPROC measurement. The default is now TRUE to disable this measurement. This is due

to problems with this entity under certain versions of the operating system (TNS/R and TNS/E).

Bug Fixes:
- None

Misc.Items:
- None

Known issues:
- On the TNS/E system, some minor features such as ProcessH for System code is not yet changed to support the new platform, but all other major features are in place.

- On the TNS/E system, in CPU where the OSS Name Server operates, the MOMI CPU collector in that processor consumes more CPU cycles than the other collectors. This has been traced down to obtaining OSS Name Server information via MEASURE. On TNS/E systems, the CONFMOMI keyword DISABLE-MEAS-OSSNS TRUE should be added to prevent collection of this MEASURE entity.

MOMIFTP
- None

ssMOMI
- None

MOMIEMail
- Added ability to work with large font (120 Pixels/Inch) displays.
- Added ability to use SMTP Server defined for MOMI Server.

IPCalc
- None

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Release_Package 4.15
Release_Date 2006/09/15

Item	Version
Latest O/S tested	G06.29.01 & H06.06.00
Client Version	4.15
Server Version	4.11 vproc: T0000G06___V4_11____09_15_2006
Minimum Server Version	4.06
Buffer Version	Client 21.10 Server 21.10
History database	3.00
CONFMOMI	3.03
OBYMOMI	3.02
OBYCSQL	3.02
MomiFTP.exe	1.61
ssMOMI.scr	4.11
MomiEMail.exe	1.02
IPCalc.exe	1.3.3
Oldest client version tested with server	4.06

NEW FEATURES / BUGS FIXED

MOMI Client

New Screens:

- Added 'History:Chart 2'. Same basic charting capabilities as the original Chart 1 but with number of elements per chart increased from 16 to 100 and a few new options (Stairs per element and Line Style (Solid,dots etc) per element. Processes may now also be charted based on object file name. Another new feature of this new chart is if processes are being measured (either by name or by object file name) and multiple records are found per time period (i.e. Disk processes or processes by object) the line on the chart will be the total of all records and a point will be plotted on the chart for each individual process. Both Charts 1 and 2 will be available for awhile then the original Chart 1 will be removed or converted to Chart 2 format. (for Lasse L. ,Miguel P. and Hector G.)

New Features:

- When Installing MOMI and after files are expanded MOMI will allow the user to 1) Read the Readme file, 2) Install Client then Optionally the Server(like before), or 3) Install only the Server files.
- Resizing has been changed slightly to speed up resizing and give the user easier control while drag-resizing. Now a window pops up while the Client is resizing since on some slow PC's the client previously would appear to hang.
- added ability to change number of Fixed (non-scrolling) columns in grids on the 'Tools' button pop up.
- 'Overview' and 'Processes:Top Processes' now display CPU busy percent with 2 decimal places and minimum percent busy displayed was changed from .1% to .01%.
- on 'History:Chart 1' and 'Chart 2' added ability to save and reuse Pre-defined chart configurations (for Andrew M., Jon L., and others).
- on 'SubSystems:Logs:EMS Msgs' added button for 'Mini-Reports' to allow user to get summary count of number of EMS message by Owner, SubSystem,

Event Number, Process Name or Color.
- added 'OSS arguments' (OSS command line for process start up) to 'Processes:All Processes' and 'Processes:Process Detail:OSS' screens.
- added CPU model name display to 'Expand:Connections:Systems' and 'Expand:Diagram' system pop up.
- on 'Processes:Top Processes' added to Type selector
  'NSK Processes' (only NSK Guardian Processes) and
  'OSS Processes' (only OSS Processes) and
  'NSK User Processes' (only NSK Guardian User Processes) and
  'OSS User Processes' (only OSS User Processes) and
  'Interrupt Processes' (Interrupt Processes on TNS-E systems)
  also sort indicators now only on types that are sortable.
- on 'History:CPU Detail', 'History:Process' and 'History:Export Data' added field 'SwapSpace' to display virtual memory allocated and 'MemBytes' to display memory in bytes.
- on 'Systems:FTP' changed values for 'Pri Extents', 'Sec Extents', and 'Max Extents' when transferring file from PC to Tandem and the 'File Extent Sizes' are Auto Sized. Now a large file will not automatically be created as a format 2 file unless it is too large to fit in a format 1 file.
- on 'Files:Enscribe:Files' added config limit option of 'Audited'.
- on 'Configure:Reference:Error/Codes' added ability to 'Show Error/Code' records that:
  1) exactly match values entered in the 'Error/Code/Keyword' field.
  2a) if 'System' value is "Quoted", exactly match values entered in the 'System' field.
  2b) if 'System' value is not "Quoted", contain the value entered in the 'System' field.
  3) contain the value entered in the 'Error/Code Text' field.
- on 'Overview' process pop up hint (displays when mouse is over CPU,PIN) and on 'Processes:Top Processes' grid added display of process state and if state is not runnable display the state in red. (For Vikas K.)
- on 'Files:Enscribe:Volume' added columns showing all DiskPath States. (for Vikas K.)
- on 'Processes:Process Entity' added process name locator using the button labeled with '$'.
- on 'Alarms:Define:Alarm' added process name locator using the button labeled with '$' for the two Entity Types Process and Device.
- Changed 'Client Access' defaults when Client Access is first started. Now if Client Access is turned on with no other changes the Client will work just as if it was not turned on but the Global Settings will now take effect. So you can easily activate AutoUpdate time limits and/or AutoLogoff for all users without the bother of setting up individual user profiles. (for Martin W.)
- Added ability to use the Default VHS log location set by the Server for the File Locator.

Bug Fixes:
- On 'SubSystems:Logs:EMS Msgs' if reversed scrolling was set the last message would not always be automatically scrolled into view. Fixed.
- On 'SubSystems:Expand:Diagram' the Bytes and Frames labels on the connectors would not display on a connection if one of the systems expand number was greater than 100. Fixed.
- On 'Systems:FTP' when transferring file from Tandem OSS to PC the file name was shifted to Uppercase. Now case is left as is. Fixed.
- On 'History:Chart 1' if multiple records were found for a Data Element for a single time (i.e. process busy for a disk process or processes by

object name for new Chart 2 only) the chart would attempt to plot both records AND cause the chart to look garbled. Now the chart will plot a line showing the total of the processes and a point for each individual process. This has been fixed by totally rewriting the History Chart and adding the new screen 'History:Chart 2'. Fixed.

- if 'Client Access' was enabled and the global setting for AutoUpdate Limit was set the client did not always stop the Autoupdates at the correct time. Fixed.
- 'History:Process Start/Stop' would sometimes 'get stuck' and not move forward or backward. Changed the screen so now a single Database time period is displayed per update. Fixed.

Misc. Items:

- none

Known issues:

- none

MOMI Server

New Features:

- Server performance is generally improved. In some cases it is with better/smarter logic, shorter code paths or in at the expense of additional memory.

- When an EMS content based alarm (EMS/User defined) is cleared based on the content of an EMS message, the message causing the clear is added to the MOMI log and to the MOMI email.

- The EMS context based alarm (EMS/User defined) now has an option to automatically delete the alarm after it is generated. This provides the capability to trigger an EMS based alarm and generate notifications (i.e. email, ems, MOMI log) and then automatically delete the alarm for situations where notification only is required.

- The O/S version is now reported as G06.29.01 instead of the previous G06.29 if available. As a result, MOMI now always reads the RLSEID file on start up in order to obtain this information.

- The server now returns arguments to an OSS process on the screen Processes/All Processes. Note that the underlying Guardian procedure used to retrieve this information only provides the first 80 bytes of any arguments.

- The alarm TMF / Long running transaction now allows a maximum duration of 24 hours instead of the previous 1 hour.

- Logon to MOMI now uses a single server process instead of multiple server processes per MOMI PC Client. This allows better 'cooperation' with CMON processes limiting or controlling logon where a particular user id is not directly accessible (such as Super.Super) but must be accessed via another logon.

- Percent of CPU busy resolution is generally raised from .1 to .01 on screens such as the Overview.

- Support added for new Top Processes, Interrupt processes, OSS

processes, OSS user Processes, Guardian processes and Guardian user processes. Additionally, Disk and Tape report all four possibilities of Busy%, Memory, Ready and Page Faulting.

- MOMI Alarm email now includes in the SMTP traffic 1) the date/time of the email and 2) the symbols < > to enclose email addresses. This is required by some email servers. If an email address is already surrounded by < >, they are internally removed prior to processing with the new code.

- Added following Process alarms:
  Running too long (CPU cycles)
  Running too long (wall clock)
  CPU Bound

- Added following Volume alarm:
  Volume/Virtual State up/down

- Added following Device alarms:
  Envoy - State up/down
  EnvoyACP/XF - State up/down
  CP6100 - State up/down
  ATP6100 - State up/down
  SNAX/XF - State up/down
  X.25 - State up/down

  These Device alarms peform a high-level or started/stopped type of check. They do not examine lower-level items such as PU/LU, SU or Link-Level state.

- Added following DiskFile alarm:
  Open or Closed

- The Volume/State up/down is relabeled Volume/Physical - State up/down. It previously skipped over virtual drives and still does. The new alarm for virtual drives is now available.

- Tool-tips on the screen Alarms/Define/Alarm in the section Entity Sub Type now have the capability to include more information and have been expanded in many cases.

- The screen Enscribe/File server now has the option to only search for TMF audited files.

- The DiskFile alarms At limits of extents and Percent full now have the option to only search for TMF audited files.

- Process alarms now have the object file name (a few were missing it) or display the OSS path name.

- Most Process and CPU alarms now accept multiple Entity Names along with a + (to add) or - (to exclude).

- Most Process alarms now accept an object file name or OSS path name.

- The server provides support for History / Chart 2.

- The screen Processes/All Processes when limiting by Object name now accepts a wild-card (example $data1.momi4.*).

- The server now provides the Process State for the screen Processes/Top Processes.

- Disk path state is now provided for the screen Enscribe/Volume.

- The server provides support for listing of general process names (such as all X.25 processes).

- The CONFMOMI keyword SELECTION-DEFAULT-VHS allows the client to automatically drill-down to the vol/subvol where VHS log files are located in the File Locator pop-up window. See the MOMI help for additional information.

- MOMI Process history now stores Memory used bytes. Records written previous to the installation of this version of the server will not reflect the new field.

- MOMI Process history now stores the OSS Path name in a new field which currently is a maximum of 200 bytes. Previously, only the first 47 bytes were stored. Records written previous to the installation of this version of the server will not reflect the new field.

Bug Fixes:

- An alter of an active alarm now reports the user performing the action in the MOMI log. Additionally, it was possible the previous user altering an Alarm was reported and not the current user.

- On the screen Spool/Job changing the owner of a job no longer displays a "Security Violation" even though the operation was successful.

- The underlying processing of handling object file names (or OSS path names) is changed to prevent a MOMI crash when certain OSS processes are started, primarily on the screen Processes / Last Start/Stop on a TNS/E system. A side effect of this change/fix is that older clients (prior to 4.15) will display $SYSTEM.SYSTEM.NOPROGRM for the Object file name.

- Previously, an alarm for Process/Busy percent when the criteria was "Under Percent" may not have triggered. It was first necessary for the process to generate 'some activity' in order to the alarm to be detected. Now, the Alarm processing is revised in a manner that activity is no longer required.

- A bug was corrected that under certain situations when an entity was not found in a SPI call, no error was returned.

- Access to the EVENTTX file is not attempted on Pre-S-series system. On K-Series system an error message was displayed on the Logs/EMS Msgs screen when detail was requested of an event.

- Previously, enumeration of device names could terminate prematurely if a subtype 30 process responded with an error 2. Now, the enumeration skips subtype 30 where possible and has additional error logic to handle error 2 situations.

- On the screen Logs/VHS Log is a Tedit profile (TEDPROFL) was specified, this would cause the crash of a MOMI server process due to a keypositioning error (i.e. FILE_SETKEY_). Now, additional checks are in place to insure that a keyed-sequence file is selected with a primary key of sufficient length and at the correct offset.

- Previously, it was possible that in the initial history process file two entries might have appeared for a short-duration process. The first entry would appear normal and the second entry was a very short duration. For example, if the initial history file was 30 seconds and the interval was 5 seconds, a process started at 1 second after the minute and ran for 25 seconds would cause this problem to surface.

Misc.Items:

- The MOMI log file now displays when a MOMI server is stopped externally (i.e. by something or someone other than MOMI) or stopped by MOMI.

- The server now filters out certain NULL or 'funny' values such as -1 on the screen TCP/IP/Process Status.

- The number of bytes per second default limitation has been revised somewhat upward for newer processors. See the CONFMOMI keyword TCPIP-WRITE-BYTES-SEC for additional information.

- The screen Processes/All Processes now labels the column Swap as Swap Space Guaranteed (the pop-up tool tip information was correctly describing this field). This is the amount of swap space initially allocated to a process. This value is not the total amount of swap space used by the process, but is a portion (we wish we had the total amount). Swap Space Guaranteed has been added to the MOMI process history.

- The alarm DiskFile/At limit of extents now skips SQL views (type 5&7).

- OSS path names internally maintained by MOMI are generally limited to 200 bytes. Names longer than 200 bytes have the leading portion removed and replaced by ... . Some reporting of OSS path names are still limited to 47 bytes but we are expanding this where appropriate and possible (a full OSS path is 1024 bytes so we are trying to conserve memory but still provide useful reporting).

- The Alarm Process/Looping now requires that some CPU is consumed in order to trigger the alarm. Previously, if a process had its priority reduced by the operating system and the process was suspended in that situation, the alarm still triggered. Now, if the process is suspended the alarm will clear (since effectively the problem was corrected).

- Percentages, such as CPU Busy %, are now rounded so they may reach 100% on screens such as the Overview. Previously, 99% may have been the highest value seen due to lack of rounding.

Known issues:

- On the TNS/E system, some minor features such as ProcessH for System code is not yet changed to support the new platform, but all other major features are in place.

- On the TNS/E system, in CPU where the OSS Name Server operates, the MOMI CPU collector in that processor consumes more CPU cycles than the other collectors. This has been traced down to obtaining OSS Name Server information via MEASURE. On TNS/E systems, the CONFMOMI keyword DISABLE-MEAS-OSSNS TRUE should be added to prevent collection of this MEASURE entity.

MOMIFTP

- make sure initial Vol.SubVol is used when changing from 1st to 2nd screen.

ssMOMI

- Screen Saver will now indicate if system has alarms active.

MOMIEMail

- Increased max number of attachments from 12 to 32.

IPCalc

- none

KNOWN BUGS

- none

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Release_Package 4.14
Release_Date 2006/05/26

Item	Version
Latest O/S tested	G06.28.00 & H06.05.01
Client Version	4.14
Server Version	4.10 vproc: T0000G06___V4_10____05_26_2006
Minimum Server Version	4.00
Buffer Version	Client 21.09 Server 21.09
History database	3.00
CONFMOMI	3.03
OBYMOMI	3.02
OBYCSQL	3.01
MomiFTP.exe	1.60
ssMOMI.scr	4.10
MomiEMail.exe	1.01
IPCalc.exe	1.3.3
Oldest client version tested with server	4.06

NEW FEATURES / BUGS FIXED

MOMI Client

New Screens:

- none

New Features:

- On 'SubSystems:Logs:EMS Msgs' added ability to reverse scrolling so last record is at bottom. Direction is set in Config button and default direction can be set on 'Configure:Settings:Single Screen'. (for Martin W.)
- On 'SubSystems:Logs:EMS Msgs' the detail screen displayed when you click on a message will now include the 'Cause, Effect and Recovery' information if it is available. If the system has a User-defined EVENTCX file and it contains a definition for that message it will display first then the HP-supplied record. (For Paul W., Alan H., Wesley P. and a whole bunch of people).
- On 'Alarms:Active' added new selection button 'Type Only' that the user can right-click on and set the type of alarms to display (EMS,CPU, Process,DiskFile,Spooler, etc). That button will then display only Alarms of that type(either Active or temporarily turned off).
- On the right-click action menu for performing action against a process the user now has the option of performing the action against the primary process only. Previously the user could select either both primary and backup or only the selected process pid. (for Irwin V.)

Bug Fixes:

- On 'Systems:FTP' when user selected a Local PC directory that did not exist a file transfer from the Tandem to that directory failed. Now the directory is created (if it does not already exist). Fixed.
- On 'SubSystems:Logs:EMS', 'SubSystems:Logs:VHS', 'SubSystems:Logs:MOMI' If user selected a Filter then changed to another filter without pressing 'NO Filter' first would get a resulting filter that was a combination of the two filters. In effect each filter selected was

being added to previous filters until the 'No Filter' button was pressed. Fixed.
- On 'Configure:Server:Server Info 5' the alter History File Max Extents would fail if Confirmations were turned on. Fixed.
- On 'SubSystems:Expand:Diagram' the detail popup when the cursor was over a Path connection line would not display the detail if an EXPAND-NETWORK-NAME was defined. Fixed.
- On 'History:Process Start/Stop' if a process that was stopping had a start-time of 00:00:00 the Client would crash. Fixed.

Misc. Items:
- none

Known issues:
- none

MOMI Server

New Features:
- Support added for EVENTTX and EVENTCX. See MOMI help for additional information on CONFMOMI keyword EVENTCX.

- The Alarm TMF - Long running transaction - now displays the object file name of the process if known within the Alarm Info.

- Support for stop, abend, suspend and activate of the primary of a process pair.

- Added Alarm Name and date/time plus and some reformatting of emails generated from an Alarm. Below is the previous and new layouts -

  A standard email alarm message:

  ```
  Prev-> <system>:<alarm-text>
  new -> <system> <date-of-alarm> <time-of-alarm> <Alarm-name> <alarm-
           text>
  ```

  An EMS based email alarm message:

  ```
  prev ->  <system>:<Active-Alarm-label>
           <EMS-message>
  new  ->  <system> <date-of-alarm> <time-of-alarm> <Active-Alarm-
              label> <EMS-message>
  ```

- Process and object file names are now added on some file system error conditions to the error message returned by the server.

- A message is now written to the MOMI log when a CPU collector is stopped along with any file system error code.

- Added ASCII processor types for the NS14000, NS1000 and NS5000T.

Bug Fixes:
- none

Misc.Items:

- EMS messages used for EMS based MOMI Alarms and for the screen SubSystems/Logs/EMS Msgs are now formatted in a more consistant manner from a spacing perspective. Messages with lots of seemingly extra spaces should be greatly reduced.

- Alarm processing starts about 10 seconds slower than before at MOMI startup to help prevent an integrity check failure on slower systems or when a higher priority process is walking over a MOMI Alarm processing server. The integrity check failure resulted in the MOMI Alarm processing servers to crash (they are automatically restarted by MOMI).

- The gathering of process information in the CPU collectors now prevents the collection of processes with a creation time of zero. This seems to be a temporary state when process information was returned but the process was still in a 'creating' state. This resulted in MOMI process history records with a Start Date/Time of zero. The newly created process is picked up on the next collection interval. This was observed on the TNS/E with OSS processes.

Known issues:

- On the TNS/E system, some minor features such as ProcessH for System code is not yet changed to support the new platform, but all other major features are in place.

- On the TNS/E system, in CPU where the OSS Name Server operates, the MOMI CPU collector in that processor consumes more CPU cycles than the other collectors. This has been traced down to obtaining OSS Name Server information via MEASURE. On TNS/E systems, the CONFMOMI keyword DISABLE-MEAS-OSSNS TRUE should be added to prevent collection of this MEASURE entity.

MOMIFTP

- Fixes to improve compatibility with TNS/E systems.

ssMOMI

- none

MOMIEMail

- Notify user if unable to connect to BlackWood Systems and user must use standard email instead of MomiEMail.
- Allow user to configure a local SMTP server instead of BlackWood Systems server.

IPCalc

- none

KNOWN BUGS

- none

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Release_Package 4.12
Release_Date 2006/04/26

Item	Version
Latest O/S tested	G06.28.00 & H06.05.01
Client Version	4.12
Server Version	4.09 vproc: T0000G06___V4_09____04_25_2006
Minimum Server Version	4.00
Buffer Version	Client 21.08 Server 21.08
History database	3.00
CONFMOMI	3.03
OBYMOMI	3.02
OBYCSQL	3.01
MomiFTP.exe	1.59
ssMOMI.scr	4.10
MomiEMail.exe	1.00
IPCalc.exe	1.3.3
Oldest client version tested with server	4.06

NEW FEATURES / BUGS FIXED

MOMI Client

New Screens:

- New program 'MomiEMail.exe' installed in \Extras\MomiEMail directory under the Directory where MOMI.exe is installed.
  When a user has this installed and wants to email Blackwood Systems MOMI will use MomiEMail instead of the users default email system.
  MomiEMail features:
  1) Will auto-attach the diagnostics text file.
  2) Will auto-attach any ScreenPrints generated from the MOMI 'Print Screen'/'Clipboard' button right-click menu selection 'EMail Screen Print'.
  3) Will bypass the users mail system and send directly to the Blackwood Systems mail system.
  4) Can be turned off (use the Default email system) on the 'Configure:Settings:System Wide' screen in 'System Settings'.
- 'Configure:Server:Server Info 5' screen added.
  added 'I/O Stuck Checking' display to 'Server Info 4' screen.
  'History database display' moved from 'Server Info 4' screen to 5.

New Features:

- User can right-click on the 'Print Screen'/'Clipboard' button and select 'EMail Screen Print' to create a screen print of the selected screen and create a diagnostic text file then start an EMail to BlackWood Systems auto-attaching the 2 files. This is performed by the MomiEMail.exe program.
- On 'Configure:Settings:System Wide' screen in 'System Settings' added checkbox 'Use Default EMail instead of Momi EMail' to give ability to turn off using 'MomiEMail' and use default email system.
- On 'Configure:Reference:BlackWood Systems' added MomiEMail.exe to 'Check for MOMI updates' button results.
- on 'Systems:FTP' Passive (PASV) mode now used by default, can be set by user before connecting.

- on 'Configure:Server:Server Info 2' added flags for 'Disable OSS CPU' and 'Disable OSS NameServer'.
- on 'Configure:Tools' added button to start 'IP Workshop Pro'. This TCP/IP subnet and mask calculator is provided by its author Peter Kostov and his company PEKO Software. Note: This button will not be visible if the IPCalc.exe executable is not installed on the PC. The MOMI install program will automatically install it.

Bug Fixes:

- When 'Client Access' was turned on and a user was setup to NOT display any of the Logs ('EMS Msgs','VHS Log' and 'MOMI Log') the 'EMS Msgs' would still display. Fixed.
- On previous versions if two or more alarms were detected at one time and one of the alarms had a .WAV file to play and the other had text to speak both would play at the same time. Now all alarms sounds are played sequentially. Fixed.

Misc. Items:

- Installer now adds MomiEMail.exe to \Extras\MomiEMail directory under the directory where MOMI.exe is installed.
- Installer now adds IPCalc.exe and its suppport files to \Extras\IPCalc directory under the directory where MOMI.exe is installed.

Known issues:

- none

MOMI Server

New Features:

- CONFMOMI keywords (refer to the MOMI help for more information)

  DISABLE-MEAS-OSSCPU
  Determines if MOMI is allowed to operate an OSS CPU measurement.

  DISABLE-MEAS-OSSNS
  Determines if MOMI is allowed to operate an OSS NS, or Name Server, measurement.

Bug Fixes:

- A MOMI server crash no longer occurs if a process name is entered instead of a log file name on the screen Subsystems/Logs/VHS log.

- Job numbers greater than 32,767 are displayed properly on the screen SubSystems/Spool/Job.

- EMS messages, as seen on Subsystems/Logs/EMS Msgs, could have words that "ran together" or did not have a space inbetween them. The procedure used to generate the text now inserts a space (technically at the start of each internal new line).

- The length of an EMS message used in Alarm generation was not properly computed and previously was the length of the first internal line of text. The length is now computed correctly. Note that 1) additional EMS text based alarms may generate, 2) more text will appear on the Alarms / Active screen, and 3) more text will appear in Email notifications where "Send Extra Detail" is requested.

Misc.Items:

- none

Known issues:

- On the TNS/E system, some minor features such as ProcessH for System code is not yet changed to support the new platform, but all other major features are in place.

- On the TNS/E system, in CPU where the OSS Name Server operates, the MOMI CPU collector in that processor consumes more CPU cycles than the other collectors. This has been traced down to obtaining OSS Name Server information via MEASURE. On TNS/E systems, the CONFMOMI keyword DISABLE-MEAS-OSSNS TRUE should be added to prevent collection of this MEASURE entity.

MOMIFTP

- now runs in Passive (PASV) mode

ssMOMI

- none

MOMIEMail

- initial release

IPCalc

- initial release

KNOWN BUGS

- none

****

Release_Package 4.11
Release_Date 2006/04/03

Item	Version
Latest O/S tested	G06.28.00 & H06.05.01
Client Version	4.11
Server Version	4.08 vproc: T0000G06___V4_08____03_17_2006
Minimum Server Version	4.00
Buffer Version	Client 21.07 Server 21.07
History database	3.00
CONFMOMI	3.03
OBYMOMI	3.02
OBYCSQL	3.01
MomiFTP.exe	1.58
ssMOMI.scr	4.10
Oldest client version tested with server	4.06

NEW FEATURES / BUGS FIXED

MOMI Client

New Screens:

- none

New Features:

- none

Bug Fixes:

- 'Configure:User Hints' would cause Client to crash when User hint was deleted and then another User Hint was selected - Fixed.
- On PC without soundcard installed Client would crash if Alarms tried to speak an Alarm. Work-around was to run Client with run-time param of 'NoSpeech' Fixed.

Misc. Items:

- none

Known issues:

- none

MOMI Server

New Features:

- none

Bug Fixes:

- none

Misc.Items:

- none

Known issues:

- On the TNS/E system, some minor features such as ProcessH for System code is not yet changed to support the new platform, but all other

major features are in place.

- On the TNS/E system, it has been observed that one CPU collector is consuming more CPU cycles than the other collectors. This appears to a result of an operating system call indirectly invoked by the collector when obtaining the list processes in the CPU.

MOMIFTP

- none

ssMOMI

- none

KNOWN BUGS

- none

****

Release_Package 4.10
Release_Date 2006/03/24

Item	Version
Latest O/S tested	G06.28.00 & H06.05.01
Client Version	4.10
Server Version	4.08 vproc: T0000G06___V4_08____03_17_2006
Minimum Server Version	4.00
Buffer Version	Client 21.07 Server 21.07
History database	3.00
CONFMOMI	3.03
OBYMOMI	3.02
OBYCSQL	3.01
MomiFTP.exe	1.58
ssMOMI.scr	4.10
Oldest client version tested with server	4.06

NEW FEATURES / BUGS FIXED

MOMI Client

New Screens:

- none

New Features:

- none

Bug Fixes:

- 'Systems:FTP' when talking to the Tandem in OSS mode and the button for 'up one directory' would not work. Fixed.
- 'Systems:FTP' when talking to the Tandem in OSS mode would not display the last file in the directory. Fixed.

Misc. Items:

- 'Configure:Setting:Misc. Settings:Type of Help' has new 'Web Help' type that will go to the BlackWood Web page and get the correct help.

Known issues:

- none

MOMI Server

New Features:

- none

Bug Fixes:

- none

Misc.Items:

- none

Known issues:

- On the TNS/E system, some minor features such as ProcessH for System code is not yet changed to support the new platform, but all other

major features are in place.

- On the TNS/E system, it has been observed that one CPU collector is consuming more CPU cycles than the other collectors. This appears to a result of an operating system call indirectly invoked by the collector when obtaining the list processes in the CPU.

MOMIFTP

- none

ssMOMI

- none

KNOWN BUGS

- none

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Release_Package 4.09
Release_Date 2006/03/22

Item	Version
Latest O/S tested	G06.28.00 & H06.05.01
Client Version	4.09
Server Version	4.08 vproc: T0000G06___V4_08____03_17_2006
Minimum Server Version	4.00
Buffer Version	Client 21.07 Server 21.07
History database	3.00
CONFMOMI	3.03
OBYMOMI	3.02
OBYCSQL	3.01
MomiFTP.exe	1.58
ssMOMI.scr	4.10
Oldest client version tested with server	4.06

NEW FEATURES / BUGS FIXED

MOMI Client

New Screens:

- 'Configure:Diagnostics' screen added to show any problems detected that could affect the Client display or operation. Diagnostic Info also added to File created containing Client/Server environment.

New Features:

- on 'Files:Enscribe:View File' screen added item to config menu:
  - Display Ruler (also on Configure:Setting:Single Screen:View Files)
  - Stop display when Record count is reached. (For Tom S.)
- AutoLogoff is now disabled when viewing EMS Log, VHS Log and when using an internal CAIL Emulator. (For Vikas K.)

Bug Fixes:

- On some systems the Alarm Sound system would report an error when changing systems and cause the Client to hang. Fixed.
- 'Configure:Settings:Single Screen:Expand Diagram' setting for 'Show only connected Systems' was not processing correctly on startup. Fixed.
- 'SubSystems:Expand:Diagram' had bug in popups showing ports and lines. If connected systems had lines with the same name, the lines would duplicate on the other system. So both systems would show 2 lines with the same name instead of 1. Fixed.
- Sometimes Autologon would fail but the MOMI Client would still show the user as logged on. Also sometimes an autologon was requested even if the client was configured to not perform the autologon. Fixed.

Misc. Items:

- none

Known issues:

- none

MOMI Server

New Features:
- none

Bug Fixes:
- none

Misc.Items:
- MOMI help now reflects the changes needed to support the Nonstop Integrity system. This is basically changing references of BWMOMI to BWMOMIi.

- The message generated from the Alarm TMF / Tape Mount after a tape is mounted or if the tape mount is cancelled now reads "is no longer outstanding" instead of "*Mounted*". MOMI does not know if the tape was actually mounted or if the mount request was canceled. This verbiage describes either situation.

Known issues:
- On the TNS/E system, some minor features such as ProcessH for System code is not yet changed to support the new platform, but all other major features are in place.

- On the TNS/E system, it has been observed that one CPU collector is consuming more CPU cycles than the other collectors. This appears to a result of an operating system call indirectly invoked by the collector when obtaining the list processes in the CPU.

MOMIFTP
- none

ssMOMI
- none

KNOWN BUGS
- none

****

Release_Package 4.08
Release_Date 2006/03/14

Item	Version
Latest O/S tested	G06.28.00 & H06.05.00
Client Version	4.08
Server Version	4.07 vproc: T0000G06___V4_07____03_13_2006
Minimum Server Version	4.00
Buffer Version	Client 21.07 Server 21.07
History database	3.00
CONFMOMI	3.03
OBYMOMI	3.02
OBYCSQL	3.01
MomiFTP.exe	1.58
ssMOMI.scr	4.10
Oldest client version tested with server	4.06

NEW FEATURES / BUGS FIXED

MOMI Client

Known issues:

- Predefined alarm sounds are not all available yet.

New Screens:

- none

New Features:

- 'AutoLogoff' after x minutes of inactivity (no keys pressed) added at 3 levels (1:Client 2:User(Client Access) 3:System wide(Client Access). If Client access is not turned on the only setting that will autologoff is the Client setting on the 'Configure:Settings:System wide' screen.
  If Client Access is turned on and the user has a setting for autologoff on the 'Configure:Client Access:Define' screen then that setting or the Client level(whichever occurs first) will be used.
  If Client Access is turned on and Client Access does not have a setting on the 'Configure:Client Access:Global Settings' screen then that setting or the Client level(whichever occurs first) will be used.
- on 'Files:Enscribe:View File' screen added item to config menu:
  1) 'Display Non-Printable ASCII as <###> instead of ~'
  2) 'Allow Multi-Byte Character Sets' (already there)
  3) 'Line Break when Character count is ###'
  4) 'Line Break when Characters found ??????'
  4a) 'Display Line Break Characters'
  This will allow the user to customize the File Display.(For Laura S.)
- on 'Subsystems:Logs:EMS' and 'Configure:Settings:Single Screen:LOGS EMS'
  added 'Compress'. This will replace all multiple spaces with a single space to compress the EMS Message text.
- Cleaned up display text on 'SubSystems:Logs:VHS'.

Bug Fixes:

- none

Misc. Items:

- 'BlackWood Systems' screen has been moved from 'Configure:Settings' to 'Configure:Reference'.

MOMI Server

New Features:

- On the TNS/E system, the server now returns longer fields for the primary and mirror disk drive types (i.e. product numbers) on the screen Files/Enscribe/Volume.

- The ASCII translations for many more file codes are now available for screens such as Files/Enscribe/File.

Bug Fixes:

- A larger internal buffer is now used for the screen Subsystems/Logs/EMS Msgs. Previously, the internal formatter limited output to 8 lines by 76 characters per line. Now, the formatter uses 53 lines by 76 characters per line. This will prevent extremely long messages or messages with many lines from being truncate.

- The server no longer returns a duplicate line on the screen Subsystems/Logs/VHS Log when moving 'forward' from a stopped or reverse state.

Misc.Items:

- On the TNS/E system prior to H06.05.00, the minor version number (i.e. 05) may not display. This is due to the TNS/E system not providing this information.

Known issues:

- On the TNS/E system, some minor features such as ProcessH for System code is not yet changed to support the new platform, but all other major features are in place.

- On the TNS/E system, it has been observed that one CPU collector is consuming more CPU cycles than the other collectors. This appears to a result of an operating system call indirectly invoked by the collector when obtaining the list processes in the CPU.

MOMIFTP

- none

ssMOMI

- none

KNOWN BUGS

- none

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Release_Package 4.07
Release_Date 2006/02/17

Item	Version
Latest O/S tested	G06.27.00 & H06.03.01
Client Version	4.07
Server Version	4.06 vproc: T0000G06___V4_06____02_14_2006
Minimum Server Version	4.00
Buffer Version	Client 21.06 Server 21.06
History database	3.00
CONFMOMI	3.03
OBYMOMI	3.02
OBYCSQL	3.01
MomiFTP.exe	1.58
ssMOMI.scr	4.10
Oldest client version tested with server	4.00

NEW FEATURES / BUGS FIXED

MOMI Client

Known issues:

- Predefined alarm sounds are not all available yet.

New Screens:

- Added new tab 'Configure:User Hints' to allow user to define custom user hints that will be added to the hint for values on grids and Data fields. If the value matches the hint will be added to the bottom of the hint. (for Tom S.)
  NOTE: If 'Client Access' is enabled any user already defined (except the 'Default Security User') will not be able to View/alter/Export/Import the UserHints until their profile is updated to allow the feature.
- added VHS log viewing on 'SubSystems:Logs:VHS Log'. (for Alan H.)
  NOTE: If 'Client Access' is enabled any user already defined (except the 'Default Security User') will not be able to View/Export the VHS Log until their profile is updated to allow the feature.
- Added new tab 'Configure:Settings:BlackWood Systems'
  Moved 'Contact BlackWood Systems' items from 'Actions' to new tab.
  Added button 'Check for MOMI Updates' to check if a new Release of MOMI is available and display the ReadMe and History files.
  Added button 'Forum.BlackWood-Systems.com' to go to BlackWood Support Forum.
- Added new tab 'SubSystems:Logs' then moved 'EMS Log' and 'MOMI Log' under it with the new 'VHS Log'.

New Features:

- added run-time parameter of 'nospeech' to prevent the text-to-speech system from being activated.
- on bottom of screen added button to toggle hints on/off. This allows hints to be turned off until needed. F1 function key also toggles this setting (for Tom S.)
- Grid Filters for String columns now allows double quotes around filter

value to get exact match (ie. "100,1" will get only 100,1 but not 100,100 and 100,111). (for Tom S.)
- on 'Files:DiskOpen' added 'Process Action' menu when right-clicking on 'Opener Process Name' Column. (for Vikas K.)
- on 'CPUs:CPU Info' added SysNN volume. (For Vikas K.)
- on 'Configure:Settings:System Wide' added 'Chart Background' selector to allow user to set the background on all charts. (for Andrew M.)
- on 'Overview','Processes:All Processes','Processes:Top Processes', and 'Processes:Process Entity' added jump to 'Files:DiskOpen' to right-click action menu if process is a Disk Process.
- on 'Configure:Server:Server Info 2' added new runtime param setting for SPI-IO-Timeout.
- on 'Alarms:Define:Email' added checkbox to set if emails should include additional data (if available). This will allow the entire EMS message to be sent on Alarms caused by EMS messages.
- on 'Configure:Settings:Single Page:Alarms' added selector to Pre-Load Alarms. If checked will load all alarm definitions when first connected to a system, If not checked will wait to load alarms until the first time the user selects one of the Alarm Pages for display.
- on 'Systems:FTP' added open flag to NSK file list.
- When perfoming a 'LOGON' the user now has the ability to change password within MOMI, Also when a Password has expired but is still within the 'grace period' the user will be prompted for a new password.(For Vikas K.)
- in 'Configure:Client Access' added new user 'User not Defined' if User is logged on but has not been defined in the Client access database this user settings will apply. This user is automaticaaly added the first time the 'Default User' logs on and may have its settings customized like any other user. (For Vikas K.)
- on 'History:Cpu' added 'TLE Maximum', 'TLE Current Inuse', 'TLE Configured' and 'TLE Failures'.
  NOTE: These 4 items are added at the end of the data for exporting so as not to disturb any script export automation.

Bug Fixes:
- Dramatic speedup when connecting to a system with a large number of Alarms defined. Client used to slow down to the point of being almost unusable as Alarms definitions were being loaded and the time required to load the Alarms was excessive. Fixed.
- The 'Configure:LogFile' would not always resume requests when the pointer was moved. Fixed.
- The 'Configure:Settings:Actions' autostart MOMI for single user or all users might not have worked once a new version of MOMI was installed if the MOMI.exe location changed. Fixed.
- if the Client could not connect to the MOMI Server the FTP would not work. Fixed so now even if not connected to MOMI Server the FTP screen will work.
- on 'Files:Enscribe:Cache' the 'Cache Bytes in Use' would be wrong if any of the 4 'Blocks in Use' were over 9,999. Fixed.
- FTP ASCII transfer from PC to Tandem for a large edit file could insert extra nulls in Tandem Edit File. Fixed.
- On PC with Sound but no Speach-to-Text ability the Sound File (.WAV) would not play when an alarm occured. Fixed.
- When the Client was first started and there was an Active alarm the sound would not always play the first time. Fixed.
- When VT100 emulator attempted to connect to an invalid host or port the client would crash. Now displayes an error message. Fixed.

- When attempting to connect to a system that did not have the MOMI Server running, the Client had a resource leak of 3 windows handles every attempt. Fixed.
- When an Emulator was defined with a name that already exists the client would crash. Fixed.

Misc. Items:

- none

MOMI Server

Special notes:

- Alarms for EMS based text would cause a special alarm failure message after 100 deletions on each alarm definition. This processing is now corrected, however a current version client must be used to delete an active alarm. Clients prior to this release receive an error message if they attempt to delete an active alarm.

- The ability to measure SQL Statements is now turned off by default. Please refer to the MOMI help for additional information under the CONFMOMI keyword DISABLE-MEAS-SQLSTMT. This change is just a precaution.

New Features:

- Server now operates on TNS/E systems (i.e. Integrity). Some minor features such as ProcessH for System code is not yet changed to support the new platform, but all other major features are in place.

- CONFMOMI keywords (refer to the MOMI help for more information)

  alarms-maximum-per-definition
  Specifies the maximum number of Alarms that a single definition is allowed to generate.

  io-stuck-exclude
  Specifies object file names to exclude from the determination if a process is 'stuck' in an I/O.

  priority-db-log01db
  Specifies the process priority of a MOMI server for database operations (write and delete of old data) relating to the LOG01DB file.

  priority-alarm-ems
  Specifies the process priority of a MOMI server for Alarm operations relating to EMS messages.

  priority-alarm-file
  Specifies the process priority of a MOMI server for Alarm operations relating to Disk and File.

  spi-io-timeout
  Specifies the maximum amount of time (in seconds) that MOMI waits for a single SPI I/O to complete.

- CONFMOMI advanced keywords (refer to the MOMI help for more information)

cpu-collector-noreport-timeout
Specifies the maximum amount of time (in seconds) that MOMI waits for a CPU collector process to report.

- The amount of memory consumed by the server should be reduced when a slow client is connected and it receives a burst of data.

- Internal support for the method to store UserHints.

- More detailed error messages are now created if starting an external server (TMFSERV, MEDIASRV, etc...) fails.

- Alarm emails now contain the second line of an alarm if available.

- If the DNS entry for the SMTP server used to send Alarm emails (CONFMOMI keyword ALARM-SMTP-SERVER-ADDR) refers to multiple IP addresses, each address is used in the event of a connection failure. This provides a means to specify backup SMTP servers.

- Added a new alarm based on the count of the number of jobs in NETBATCH in a class.

- Support for viewing VHS logs.

- Support for retrieving file information limited by record size.

- The guardian security string on the screen Enscribe / File now reports #### if a file has the security mechanism of OSS and *SQL if a file has the security mechanism for SQL/MX. This output is not documented but is similar to how TACL and FUP report these files.

- MOMI history now reports on TLEs. Periods of time prior to using this server will report zero in the TLE fields.

- More descriptions of file codes are added to screens such as Enscribe / File.

Bug Fixes:

- Changed internal processing that converts EMS messages to ASCII text to work-around a bug in the Guardian procedure EMSTEXT that caused some messages to not fully display (i.e. part of the message might have been missing). A side effect of this fix is that some EMS message may display with extra spaces between words. This affected the EMS Msgs screen and Alarms triggered off EMS text.

- Viewing EMS messages that were generated from an unnamed process and from a log file created on a system with a different system number no longer have a double system number (example \8.\8.02,00).

- An alarm message temporarily turned off no longer generates a log message each time the alarm is internally checked.

- Logic is changed so that the percent busy of a process is not reported greater than 100% on screens such as Overview.

- Starting a large number of process, a few hundred or several thousand, might have caused the MOMI cpu collector in that processor to be marked

as STOP or HUNG. Now, the collections will continue to report if the CPU is now swamped by the startup.

Misc.Items:

- Various changes were made to handle large number of Alarm definitions and improve performance.
- The checking for Tape mount alarms now occurs every 30 second instead of every 10 seconds by default (3 times the interval).
- The initial startup of the MOMI server may take somewhat longer, perhaps two to three minutes in total on large systems. The initial gathering of process information is slowed down slightly to help ease the load on the system.
- While changing a password, if the new password was not correctly entered twice, the message "new password is not verified" was displayed. The text "(new passwords do not match)" is added to better clarify the situation.

Known issues:

- On the TNS/E system, some minor features such as ProcessH for System code is not yet changed to support the new platform, but all other major features are in place.

- On the TNS/E system, it has been observed that one CPU collector is comsuming more CPU cycles than the other collects. This appears to a result of an operating system call indirectly invoked by the collector when obtaining the list processses in the CPU. We will open a case with HP and follow up as we obtain more information.

MOMIFTP

- Now displays 'processing' in status during transfer to show something is happening on slow connections.

ssMOMI

- new version to work with both version 3 and 4 of MOMI server.

KNOWN BUGS

- none

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Release_Package 4.06
Release_Date 2005/11/23

Item	Version
Latest O/S tested	G06.27
Client Version	4.06
Server Version	4.05 vproc: T0000G06___V4_05____11_22_2005
Minimum Server Version	4.00
Buffer Version	Client 21.05 Server 21.05
History database	3.00
CONFMOMI	3.03
OBYMOMI	3.02
OBYCSQL	3.00
MomiFTP.exe	1.56
ssMOMI.scr	1.09
Oldest client version tested with server	4.00

NEW FEATURES / BUGS FIXED

MOMI Client

Known issues:

- Predefined alarm sounds are not all available yet.

New Screens:

- none

New Features:

- a new type of CPU busy chart is available for the Overview screen. The new chart will display the Interrupt%, Send%, Overhead% and Busy%. The new chart is selected by right clicking on the 'CPU Busy' button. To set the default chart type, check the check box 'Display CPU Stack Chart' on the 'Configure:Settings:Single Screen' in the Overview section.
- 'Processes:Last Start/Stop' and 'History:Process Start/Stop' now have 2 new columns in the Stopped grid ('Start DateTime' and 'Duration').
- 'Files:Disk Entity' added columns for Disk Rate(combined read and write) to the physical drive, Request Average Time(request QTime/Requests) and Device Average Time(Device Qbusy Time/Disc Rate).
- 'Alarms:Define:Email Group' added Test button.

Bug Fixes:

- if the User that starts the Server on the Tandem changes after the 'Default Security User' was saved the new user would not have full access. Fixed.
- In Alarms, when an individual email user was deleted from a email group the group was mistakenly taken off the list of available users/groups. Fixed.
- 'Alarms:Define:Email Group' would allow anyone to add/delete email users from a Email Group if 'Client Access' was not turned on. Now only The MOMI Default Security User can make the change. Fixed.

Misc. Items:

- reconfigured 'Config:Server:Server Info' screens to add Spooler

intervals and group settings by subsystem.
- 'Systems:FTP' now clears the password once a successful logon occurs.

MOMI Server

New Features:

- The Alarm Process / Busy percent now reports the process object file name.
- Added new Alarms:
  - Spooler / Supervisor configuration - Batch Jobs
  - Spooler / Supervisor configuration - Jobs
  - Spooler / Supervisor configuration - Locations
- Added new CONFMOMI keywords in support of information collection for the Spooler. This collection currently drives the new Spooler Alarms mentioned above and will also be the basis of future enhancements.
  - spooler-io-delay
  - spooler-update-interval
  - spooler-update-interval-err
- Added new CONFMOMI keyword to determine the amount of time to allow I/Os to complete when communicating with the SMTP server for Alarms. Previously, this value was internally set to 20 seconds and is now raised to a default of 30 seconds:
  - alarm-smtp-server-timeout
- Added support for sending a test email message to an Email Group.
- The server now uses three threads, verses the previous one, when sending Alarm Emails to increase throughput (32-bit code only).
- Added fields for screen Files/Disk Entity:
  - disc_rate
  - request_ast
  - device_ast

Bug Fixes:

- Previously, an Alarm such as Process / Debug/Inspect with a "Delay for Consecutive Alarms over Time period" enabled would not always honor the consecutive delay. Now, the delay is always honored. Additionally, memory consumption for Alarms with this attribute is reduced.

Misc. Items:

- EMS messages generated by MOMI no longer have the name of the generating process placed at the beginning of the text portion of the message. This information is already collected by EMS.
- The server now slows down processing of information for the screen Processes/All Processes. The delay is intended to reduce CPU usage of the MONITOR process (pin 0 in all CPUs). High CPU usage was observed when lots of processes were running in the CPU (i.e. 2000-3000).

Known issues:

- none

MOMIFTP

- Removed password once logon is successful.

ssMOMI

- none

KNOWN BUGS

- none

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Release_Package 4.05
Release_Date 2005/11/11

Item	Version
Latest O/S tested	G06.27
Client Version	4.05
Server Version	4.04 vproc: T0000G06___V4_04____11_11_2005
Minimum Server Version	4.00
Buffer Version	Client 21.04 Server 21.04
History database	3.00
CONFMOMI	3.03
OBYMOMI	3.02
OBYCSQL	3.00
MomiFTP.exe	1.55
ssMOMI.scr	1.09
Oldest client version tested with server	4.00

NEW FEATURES / BUGS FIXED

MOMI Client

Known issues:

- Predefined alarm sounds are not all available yet.

New Screens:

- none

New Features:

- on 'Configure:Settings:Actions' added ability to import MOMI INI file. Note: after importing the user must exit the client and restart it to get the new settings.
- on 'Configure:Client Access:Define' added button to clear and check all items. (for Vikas K.)
- on 'Configure:Client Access:Define' added ability to define UserId profile with wildcards (* and/or ?). For Expample: This allows a UserID profile of APPL.* which allows any user loggong on under the APPL group to use this profile if there is not an exact match. (for Vikas K.)

Bug Fixes:

- Under some rare circumstances, if the Client lost its connection to the Tandem the Client would enter a deadly embrace hard loop and would not be accessible. The only way to recover the client was to stop the MOMI Client. Fixed.
- versions 4.03 and 4.04 had bug not allowing new users to be added to Alarm Email Group. Fixed.
- If a TCP/IP Connection timer expired (Tandem hasn't answered client in 30 seconds or more) and Restart AutoUpdate on ReConnection is set the Client would not restart the AutoUpdate. Fixed.
- 'Configure:Reference:Unit Conversion' would only use the first 4 characters entered in the conversion. Fixed.

Misc. Items:

- none

MOMI Server

New Features:

- The generation of Email in alarm processing is now performed in an Asynchronous manner.
- The Alarms for Process / Debug/Inspect and Process / Looping now display the object file name.
- The Session Time for Processes / ProcessH Entity can now display days.
- The LOG file now displays the second line of an Alarm.
- The MOMI CPU collectors and the screen Processes / All Processes no longer send a device query to subtype 30 processes that are suspended.

Bug Fixes:

- The Alarm Spooler / Device - State down/not ready now accepts an Entity Name with an optional first and second qualifier (i.e. $dev.#aa.bb).
- A small memory leak (160 bytes) was corrected in MOMI servers that open and close a file.
- The screens Files / File Entity and Processes / Process Detail File Entity now correctly display a TCP/IP v4 address when available. Note that this information is not always available from MEASURE (only OSS sockets and it appears to be OSS server sockets).

Misc. Items:

- The LOG file is now available even if history is not enabled.

Known issues:

- none

MOMIFTP

- none

ssMOMI

- none

KNOWN BUGS

- none

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Release_Package 4.04
Release_Date 2005/11/07

Item	Version
Latest O/S tested	G06.27
Client Version	4.04
Server Version	4.03 vproc: T0000G06___V4_03____11_04_2005
Minimum Server Version	4.00
Buffer Version	Client 21.03 Server 21.03
History database	3.00
CONFMOMI	3.03
OBYMOMI	3.02
OBYCSQL	3.00
MomiFTP.exe	1.55
ssMOMI.scr	1.09
Oldest client version tested with server	4.00

NEW FEATURES / BUGS FIXED

MOMI Client

Known issues:

- Predefined alarm sounds are not all available yet.
- The Alarm SAPI 'Text to Speech' will only work on Windows XP or later.
  NOTE: SAPI 5.1 can be added to Windows 2000 by downloading the
  'SAPI Development Kit for SAPI 5.1' from Microsoft.
  Its location is 'www.microsoft.com/speech/download/sdk51'
  Get the file listed as 'REDIST.: All'.

New Screens:

- none

New Features:

- none

Bug Fixes:

- if 'Configure:Client Access:Global Settings' had Client Access enabled and the Required Minimum Client version (i.e. 4.03) is set to the current client (i.e. 4.03) the Client would terminate telling the user the required Client version was not running. This prevented anyone running the client until the CNF01DB on the Tandem had been deleted. Fixed.

Misc. Items:

- none

MOMI Server

New Features:

- none

Bug Fixes:

- none

Misc. Items:

- none

Known issues:
- none

MOMIFTP
- none

ssMOMI
- none

KNOWN BUGS
- none

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Release_Package 4.03
Release_Date 2005/11/04

Item	Version
Latest O/S tested	G06.27
Client Version	4.03
Server Version	4.03 vproc: T0000G06___V4_03____11_04_2005
Minimum Server Version	4.00
Buffer Version	Client 21.03 Server 21.03
History database	3.00
CONFMOMI	3.03
OBYMOMI	3.02
OBYCSQL	3.00
MomiFTP.exe	1.55
ssMOMI.scr	1.09
Oldest client version tested with server	4.00

NEW FEATURES / BUGS FIXED

MOMI Client

Known issues:

- Predefined alarm sounds are not all available yet.
- The Alarm SAPI 'Text to Speech' will only work on Windows XP or later.
  NOTE: SAPI 5.1 can be added to Windows 2000 by downloading the
  'SAPI Development Kit for SAPI 5.1' from Microsoft.
  Its location is 'www.microsoft.com/speech/download/sdk51'
  Get the file listed as 'REDIST.: All'.

New Screens:

- none

New Features:

- Added overall CPU Busy% gauge over small CPU busy chart on top of screen (for John L.)
- on 'Systems:FTP' Right-click over the FTP Log will allow the user to export the log to a text file.
- on 'Configure:Server:Server Info 1' added following fields:
  MOMI Process Name = MOMI Server process name (default $MOMI).
  Login Name = Actual UserId or Alias used when MOMI was started.
  Security User = UserId or alias used to determine whom has the initial security for MOMI. Normally this is the same as the Login Name but it may be overwritten by CONFMOMI keyword "DEFAULT-SECURITY-USER".
- on 'History:Chart' config added 'Bold All' check to bold all lines.
- on 'History:CPU' a left-click on the cpu number will jump to the 'History:CPU Detail' screen for that CPU at that time.

Bug Fixes:

- Users were allowed to right-click into defining and altering alarms even if they were not secured to do so. Fixed.
- Hidden alarms counts did not show on 'All Alarms' and 'TempOff and Hidden' buttons. Fixed.
- If running as Mini-MOMI the 'SubSystems:Expand:Diagram' buttons would

still function. Fixed.
- 'Alarms:Define:Email Group' would not clear list of individual emails when the group was changed. Fixed.
- When jumping into 'DiskFile,Disk Entity,DiskOpen and File Entity' if the columns had been re-arranged the sort would be on the wrong column. Fixed.

Misc. Items:
- none

MOMI Server

New Features:
- The CONFMOMI keyword DEFAULT-SECURITY-USER to allow the override the default of the user id that started MOMI. See MOMI help for additional information.

Bug Fixes:
- An alarms for a Process / State running/stopped that specified a Delay Alarm now functions correctly.
- Several instances of a new process from MOMI's perspective did not always reset the internal working storage area associated with an alarm entity. This could have caused an alarm to not honor the Delay Alarm value.
- Corrected a situation that could have prevented one of the alarms with alphabetically close entity names such as $FRED and $FRED1 from appearing.
- An alarm that specified multiple Entity Names, such as DiskFile / Percent full, where a wild card was used to search a set of files but excluded particular files may have excluded all files. Now, the excluded files properly limit.

Misc. Items:
- none

Known issues:
- none

MOMIFTP

- none

ssMOMI

- none

KNOWN BUGS

- none

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```
Release_Package           4.02
Release_Date         2005/10/18

   Item                Version
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   Latest O/S tested     G06.27
   Client Version         4.02
   Server Version         4.02  vproc:  T0000G06___V4_02____10_18_2005
   Minimum Server Version   4.00
   Buffer Version         Client 21.02  Server 21.02
   History database        3.00
   CONFMOMI               3.03
   OBYMOMI                3.02
   OBYCSQL                3.00
   MomiFTP.exe             1.55
   ssMOMI.scr              1.09

   Oldest client version
    tested with server     4.00
```

NEW FEATURES / BUGS FIXED

MOMI Client

Known issues:

- Predefined alarm sounds are not all available yet.
- The Alarm SAPI 'Text to Speech' will only work on Windows XP or later.
  NOTE: SAPI 5.1 can be added to Windows 2000 by downloading the
  'SAPI Development Kit for SAPI 5.1' from Microsoft.
  Its location is 'www.microsoft.com/speech/download/sdk51'
  Get the file listed as 'REDIST.: All'.

New Screens:

- none

New Features:

- 'Alarms:Define:Export and Import' now allow Left-Click on Group header to select all Items and Right-Click to clear all items.

Bug Fixes:

- none

Misc. Items:

- none

MOMI Server

New Features:

- Delay Alarm added to Process / Debug/Inspect.
- Alarm Volume / State up/down now shows multiple disk paths down (previously only one path was shown). A disk in a revive state is still treated as down but the revive state shows on the alarm.
- Added Alarms:
  TMF / Audit Trail
  TMF / Audit Trail in overflow
  TMF / Memory Heap
- The server now reports after a failed logon if a password is expired but the grace period is still available.

- The Itanium or NS-Series is reported in Expand.
- Log messages are now always generated to audit the actions such as delete, change, disabled on alarm records (alarm, action, email, monitor times).
- Temporary turn-off of an active alarm now generated an audit to the MOMI log.
- Messages for certain screens such as Processes / Process Detail now always include a count-down value until the next update. This change, along with a client change, helps to better determine when data was obtained and when the next update is expected.
- The server now creates format 2 files on S-series (and above) systems and format 1 files on K-series systems. The extent sizes and maximum number of extents for HST01db and HST02db are altered to make the initial history file larger and the second history file smaller. Below is a table of the old and new values:

	ext old	ext new	mext old	mext new
hst01db	1200	5000	48	50
hst02db	5000	4000	50	32

- An EMS message is now generated, along with the previous MOMI log message, if the server fails on sending an alarm email message. Details of the failure are written to the MOMI log. Also, additional failure situations now generate detailed information.

Bug Fixes:

- The server now reports the user making an change of an alarm in the MOMI log messages. Previously, some situations did not report the user in the message.

Misc. Items:

- Display of the amount of memory consumed by a process such as on the screens Top Process (field Mem), All Processes (fields Mem & MemBytes) and Process Detail (field Memory Used) was previously limited to about 1/2 Gigabyte (32767 pages * 16KB per page). Now the value can reach 1 Gigabyte (65535 pages * 16KB per page).
- After starting the server, it now waits about a minute longer before responding to clients requests. This allows the server environment to "more fully" load and initialize prior to responding to clients. This indirectly fixes a client issue where if a client was connected to a MOMI server, and the MOMI server bounced, certain fields such as the drop-down boxes on the screens Subsystems / Spool / Collector were no longer loaded with available spooler and collector processes.

Known issues:

- If an alarm is temporarily turned off, disabled, then re-enabled, the temporary turn off is still in effect.

MOMIFTP

- none

ssMOMI

- none

KNOWN BUGS

- none

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Release_Package 4.01
Release_Date 2005/09/30

Item	Version
Latest O/S tested	G06.26
Client Version	4.01
Server Version	4.01 vproc: T0000G06___V4_01____09_30_2005
Minimum Server Version	4.00
Buffer Version	Client 21.01 Server 21.01
History database	3.00
CONFMOMI	3.03
OBYMOMI	3.02
OBYCSQL	3.00
MomiFTP.exe	1.54
ssMOMI.scr	1.09
Oldest client version tested with server	4.00

NEW FEATURES / BUGS FIXED

MOMI Client

Known issues:

- Predefined alarm sounds are not all available yet.
- The Alarm SAPI 'Text to Speech' will only work on Windows XP or later.
  NOTE: SAPI 5.1 can be added to Windows 2000 by downloading the
  'SAPI Development Kit for SAPI 5.1' from Microsoft.
  Its location is 'www.microsoft.com/speech/download/sdk51'
  Get the file listed as 'REDIST.: All'.

New Screens:

- 'Alarms:Define:Export' and 'Alarms:Define:Export' to allow user to import and export alarm definitions.

New Features:

- Alarms Import and Export.

Bug Fixes:

- 'Alarms:Define Alarm' if a 'check Interval' was over 18 hours the Client would crash. Fixed.
- If ,when changing systems, the newly selected system had been selected on the 'Systems:Basic' screen for Probes the 'Overview:CPU History' chart will now be up-to-date. First added in version 3.85 but did not work. (for Marc-Eric C.) Fixed.

Misc. Items:

- none

MOMI Server

New Features:

- An alarm is added for any Tape mount request.
- The alarm for TMF scratch tapes now accepts a maximum of 100.
- A "Delay Alarm" is added to DiskFile Percent Full and At limit of Extents and for TMF Tape mount.
- Additional info now provided for the "Save Config Info to File"

function in the client.

Bug Fixes:

- Previously, an alarm defined under TMF for a tape mount would catch any tape mount. Now, the alarm only triggers for a TMF tape mount.
- A TMF Tape mount would not operate if the alarm was configured before MOMI was started.

Misc. Items:

- none

Known issues:

- If an alarm is temporarily turned off, disabled, then re-enabled, the temporary turn off is still in effect.

MOMIFTP

- none

ssMOMI

- none

KNOWN BUGS

- none

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Release_Package 4.00
Release_Date 2005/09/23

Item	Version
Latest O/S tested	G06.26
Client Version	4.00
Server Version	4.00 vproc: T0000G06___V4_00____09_22_2005
Minimum Server Version	4.00
Buffer Version	Client 21.00 Server 21.00
History database	3.00
CONFMOMI	3.03
OBYMOMI	3.02
OBYCSQL	3.00
MomiFTP.exe	1.54
ssMOMI.scr	1.09
Oldest client version tested with server	4.00

NEW FEATURES / BUGS FIXED

MOMI Client

Known issues:

- Predefined alarm sounds are not all available yet.
- The Alarm SAPI 'Text to Speech' will only work on Windows XP or later.
  NOTE: SAPI 5.1 can be added to Windows 2000 by downloading the
  'SAPI Development Kit for SAPI 5.1' from Microsoft.
  Its location is 'www.microsoft.com/speech/download/sdk51'
  Get the file listed as 'REDIST.: All'.

New Screens:

- Alarms
- 'Configure:Client Access' to allow setting of Global and User-level Access to Client functions.
  NOTE: See MOMI Help for detail on using 'CLIENT ACCESS' checking.
  NOTE: The ONLY user allowed to change 'Global Settings' is the user that started the MOMI Server (i.e. the default security User). The MOMI default security User also always has the ability to set User Client Access along with any User defined to be a 'Security User' in their settings.
- 'Configure:LogFile' to allow viewing/reports on events and Alarms within the MOMI Log.

New Features:

- Alarms
- 'Client Access' restrictions.
  NOTE: See MOMI Help for detail on using 'CLIENT ACCESS' checking.
- 'History:Chart' now has two vertical lines on chart (at start and end) when the Chart is 'Paused', These lines may be 'dragged' to anywhere on the chart and will set a new start or stop time for the chart when the chart is right-clicked and the action menu 'Reload Chart with New Times' is selected.
- 'Systems:FTP' now has the ability to FTP from the local PC to a remote PC as well as to a remote Tandem NSK or OSS system.
- 'Configure:Tools' 'Convert Number Base' tool now will display the word bits (<0:7> and <8:15>) for values less than or equal to 65535. This

will help decode some Tandem error messages. (for Wesley P.)
- 'SubSystems:EMS Msgs' now has option of exporting to printer,Text File or Email(For Wesley P.).
- 'SubSystems:EMS Msgs' color-coding now allows multiple items to be coded the same color using a '|' separator. (For Darla).
- 'Configure:Reference:Show Errors' is now 'Error/Codes' and have added all known File codes.
- 'Files:Enscribe:Volumes' added column with SMF Pool Process Name if any.
- 'Files:Enscribe:Files' and 'Files:Enscribe:File Detail' added 'SMF ReLocate File' to right-click action Menu. (for Bill B.)

Bug Fixes:
- 'Files:Enscribe:File' now correctly shows the File Format (1 or 2).
- 'Files:Disk Entity' now will retain the Rated/Non-Rated setting when the display is paused and resumed.
- 'Files:File Detail' would show invalid percent full on Alt-Key-Files and Partitions that did not exist. Now shows 0% full and in RED to signal File Not found.

Misc. Items:
- 'Configure:Trace Log' has now been moved to 'Configure:Server:Info 1'.
- 'Processes:Process Detail' has had some tabs renamed to improve scaling when client is maximized on large monitors (like 1600x1200).
- Client default MOMI.INI file location changed from C:\WINDOWS to C:\Documents and Settings\<name>\Application Data\BlackWood Systems\MOMI i.e. the default user data area.
- Client RunTime param 'user' removed since now is default.
- To set Client MOMI.INI file location now requires additional RunTime param key 'inipath=' before the directory.
  i.e. c:\data\momifiles is now inipath=c:\data\momifiles or "c:\data\momi files" is now inipath="c:\data\momi files".

MOMI Server

Known issues:
- none

New Features:
- Alarms are supported.

Bug Fixes:
- none

Misc. Items:
- Several keywords for the CONFMOMI file are required to send Alarm email. See MOMI help for details:

  Alarm-smtp-server-addr
  Alarm-email-address-from

MOMIFTP

- none

ssMOMI

- none

KNOWN BUGS

- none

****

```
Release_Package           3.89
Release_Date         2005/10/06

   Item                Version
   ----                -------
   Latest O/S tested     G06.26
   Client Version         3.89
   Server Version         3.81  vproc:  T0000G06___V3_81____10_04_2005
   Minimum Server Version   3.76
   Buffer Version         Client 19.78  Server 19.78
   History database       3.00
   CONFMOMI              3.02
   OBYMOMI               3.02
   OBYCSQL               3.00
   MomiFTP.exe            1.54
   ssMOMI.scr             1.09

   Oldest client version
    tested with server     3.40
```

NEW FEATURES / BUGS FIXED

MOMI Client

New Screens:

- none

New Features:

- none

Bug Fixes:

- When changing systems, If the newly selected system had been selected on the 'Systems:Basic' screen for Probes the 'Overview:CPU History' chart will now be up-to-date. First added in version 3.85 but did not work. (for Marc-Eric C.) Fixed.
- 'Config:Settings:System Wide' allows the user to set whether or not the Client will restart any Auto Updating screens if the Connection is lost then re-established. The Default is the Auto Updating is restarted. If it is not restarted the screens will be cleared. AutoUpdate was not being restarted - Fixed.
- if user clicked 'Request' button on any of the History Pages but History was not turned on by the Server the client would crash - Fixed.

Misc. Items:

- Changed the default setting for 'Configure:System Wide' 'Disable ScreenSaver when running' from checked to not checked.
- 'Processes:Process Detail' has had some tabs renamed to improve scaling when client is maximized on large monitors (like 1600x1200).

MOMI Server

New Features:

- The server now loads a logical file name into the physical file name field if a physical name is not present. This is seen on the client screen Enscribe / File. This change provides some additional information for SMF physical files.

Bug Fixes:
- none

Misc. Items:
- Display of the amount of memory consumed by a process such as on the screens Top Process (field Mem), All Processes (fields Mem & MemBytes) and Process Detail (field Memory Used) was previously limited to about 1/2 Gigabyte (32767 pages * 16KB per page). Now the value can reach 1 Gigabyte (65535 pages * 16KB per page).

MOMIFTP
- none

ssMOMI
- none

Miscellaneous
- none

KNOWN BUGS
- none

****

Release_Package 3.90
Release_Date 2005/12/07

Item	Version
Latest O/S tested	G06.26
Client Version	3.90
Server Version	3.82 vproc: T0000G06___V3_82____12_06_2005
Minimum Server Version	3.76
Buffer Version	Client 19.78 Server 19.78
History database	3.00
CONFMOMI	3.02
OBYMOMI	3.02
OBYCSQL	3.00
MomiFTP.exe	1.56
ssMOMI.scr	1.10
Oldest client version tested with server	3.40

NEW FEATURES / BUGS FIXED

MOMI Client

New Screens:

- none

New Features:

- none

Bug Fixes:

- If a TCP/IP Connection timer expired (Tandem hasn't answered client in 30 seconds or more) and Restart AutoUpdate on ReConnection is set the Client would not restart the AutoUpdate. Fixed.
- An invalid menu would pop up if the user right-clicked on the 'BlackWood' emblem. If an item from this menu was selected the client would crash. Fixed.
- 'Configure:Reference:Unit Conversion' would only use the first 4 characters entered in the conversion. Fixed.

Misc. Items:

- none

MOMI Server

New Features:

- The MOMI CPU collectors and the screen Processes / All Processes no longer send a device query to subtype 30 processes that are suspended.

Bug Fixes:

- A small memory leak (160 bytes) was corrected in MOMI servers that open and close a file.
- The screens Files / File Entity and Processes / Process Detail File Entity now correctly display a TCP/IP v4 address when available. Note that this information is not always available from MEASURE (only OSS sockets and it appears to be OSS server sockets).

Misc. Items:

- EMS messages generated by MOMI no longer have the name of the generating process placed at the beginning of the text portion of the message. This information is already collected by EMS.
- The server now slows down processing of information for the screen Processes/All Processes. The delay is intended to reduce CPU usage of the MONITOR process (pin 0 in all CPUs). High CPU usage was observed when lots of processes were running in the CPU (i.e. 2000-3000).

MOMIFTP

- none

ssMOMI

- changed ini file locator to work with MOMI versions 3 and 4 buffers.

Miscellaneous

- none

KNOWN BUGS

- none

****

Release_Package 3.88
Release_Date 2005/09/06

Item	Version
Latest O/S tested	G06.26
Client Version	3.88
Server Version	3.80 vproc: T0000G06___V3_80____09_06_2005
Minimum Server Version	3.76
Buffer Version	Client 19.78 Server 19.78
History database	3.00
CONFMOMI	3.02
OBYMOMI	3.02
OBYCSQL	3.00
MomiFTP.exe	1.54
ssMOMI.scr	1.09
Oldest client version tested with server	3.40

NEW FEATURES / BUGS FIXED

MOMI Client

New Screens:

- none

New Features:

- none

Bug Fixes:

- 'Files:Enscribe:File' now correctly shows the File Format (1 or 2).
- 'Files:Disk Entity' now will retain the Rated/Non-Rated setting when the display is paused and resumed.
- Under some circumstances a Buffer overflow occurred in the MsgCtrl structure. This did not cause client problems but would cause a message from the client to the Tandem to be larger than needed. Fixed.
- On All 'History' screens the History Database used MIGHT not be the Database selected if it was not the First Database. Fixed.
- 'Overview' and some 'Process screens'. If the user had set the configure setting to NOT require confirmations the user was not able to alter process priority from the right-click menu. Fixed.
- 'Systems:Emulator' would not create an valid 'External' emulator if the client was installed on the PC in a location with a space in the path. Fixed.

Misc. Items:

- none

MOMI Server

New Features:

- none

Bug Fixes:

- The server has even more protection against invalid data in the Measure OSS CPU entity. This previously caused a crash when processing the field FS-cache-dirty-qtime.

- The server now loads the field "Last Error" on the screen Subsystem/Spool/Print.
- The screens Files/Enscribe/Volume and Files/Enscribe/Cache no longer processes full file name entries. They now only look at the volume portion of any file name entered.

Misc. Items:
- none

MOMIFTP
- none

ssMOMI
- none

Miscellaneous
- none

KNOWN BUGS
- none

****

```
Release_Package           3.87
Release_Date         2005/07/19

   Item                Version
   ----                -------
   Latest O/S tested     G06.26
   Client Version         3.87
   Server Version         3.79  vproc:  T0000G06___V3_79____06_28_2005
   Minimum Server Version   3.76
   Buffer Version         Client 19.78  Server 19.78
   History database        3.00
  CONFMOMI                3.02
   OBYMOMI                3.02
   OBYCSQL                3.00
   MomiFTP.exe             1.54
   ssMOMI.scr              1.09

   Oldest client version
    tested with server     3.40
```

NEW FEATURES / BUGS FIXED

MOMI Client

New Screens:

- none

New Features:

- none

Bug Fixes:

- Grid Displays with multiple filters could sometimes cause last item on grid to be duplicated. Fixed.
- Client crash when changing into 'Configure:Server' screens under some circumstances has been fixed.
- History Export of OSS CPU and OSS Name Servers could fail to retrieve any data, even if data was found. Fixed.

Misc. Items:

- none

MOMI Server

New Features:

- none

Bug Fixes:

- none

Misc. Items:

- none

MOMIFTP

- none

ssMOMI

- none

Miscellaneous

- none

KNOWN BUGS

- none

****

```
Release_Package           3.86
Release_Date         2005/06/29

   Item                Version
   ----                -------
   Latest O/S tested     G06.26
   Client Version         3.86
   Server Version         3.79  vproc:  T0000G06___V3_79____06_28_2005
   Minimum Server Version   3.76
   Buffer Version         Client 19.78  Server 19.78
   History database        3.00
   CONFMOMI               3.02
   OBYMOMI                3.02
   OBYCSQL                3.00
   MomiFTP.exe             1.54
   ssMOMI.scr              1.09

   Oldest client version
    tested with server     3.40
```

NEW FEATURES / BUGS FIXED

MOMI Client

New Screens:

- none

New Features:

- none

Bug Fixes:

- 'SubSystems:EMS Msgs' would hide the pop up window 'EMS Message Detail' when new record was displayed. Fixed.
- Under some circumstances when a grid was filtering on more than 1 column at a time, one or more of the filters might fail. Fixed.

Misc. Items:

- 'Configure:Server:Server Info 2:Flags' reconfigured to allow hiding of 'Advanced User Flags'.

MOMI Server

New Features:

- CONFMOMI keyword NOCAIL added.

Bug Fixes:

- none

Misc. Items:

- none

MOMIFTP

- none

ssMOMI

- none

Miscellaneous

- none

KNOWN BUGS

- none

****

Release_Package 3.85
Release_Date 2005/06/22

Item	Version
Latest O/S tested	G06.26
Client Version	3.85
Server Version	3.78 vproc: T0000G06___V3_78____04_29_2005
Minimum Server Version	3.76
Buffer Version	Client 19.77 Server 19.77
History database	3.00
CONFMOMI	3.02
OBYMOMI	3.02
OBYCSQL	3.00
MomiFTP.exe	1.54
ssMOMI.scr	1.09
Oldest client version tested with server	3.40

NEW FEATURES / BUGS FIXED

MOMI Client

New Screens:

- none

New Features:

- Added Client runtime param of 'NoCail'. This will prevent the CAIL emulator from being loaded or displayed. (For Eric B.)
- Added ability to filter EMS messages by Emphasis and Action-Required flags. (For Dan S.)
- Added CountDown Timer tool to 'Configure:Tools'. Multiple events may be saved and selected.
- Added Bandwidth Conversion tool to 'Configure:Tools'.
- on 'History:Chart' Configure screen The user can now change the chart options after the chart has been requested by clicking the 'Unlock' button then changing the options and re-clicking the Request button (for Jon L.)
- on 'SubSystems:TCP/IP:Process Status' added Mini-Reports to provide quick counts for local and foreign ports in use. (For Chuck B.)
- If ,when changing systems, the newly selected system had been selected on the 'Systems:Basic' screen for Probes the 'Overview:CPU History' chart will now be up-to-date. (for Marc-Eric C.)
- on 'Configure:Settings:System Wide' now have the ability to set the number of milliseconds before a hint is displayed and how long it will remain displayed. (For Tom S.)
- on 'Files:View Files' and 'SubSystems:Spooler:View Job' search text added drop box with search text history.
- on 'Processes:Process Detail' Config options now have ability to set what Measure Entities are 'Auto-Requested'. Settings also in 'Configure:Settings:Single Screen' where they may be saved.

Bug Fixes:

- Font Resizing now works correctly with MOMI maximized on a tall monitor (i.e. monitor higher than it is wide). This change some monitors might cause default fonts to appear smaller.

- on 'Systems:FTP' a Host Name that referenced another Host Name (i.e. an Alias) now resolves correctly. Previously a DNS Alias referenced would not connect.

Misc. Items:

- Changed EMS 'Color Highlights' check box to a drop box and moved into the EMS Config options. Now has options for:
  1) Color Highlights with Labels (same as before)
  2) No Color Highlights or Labels (same as before)
  3) Color Highlights without Labels (New option) (For Rod D.)

  This change also affected the 'Configure:Settings:Single Screen'
- Moved 'ASCII/EBCDIC Chart' from 'Configure:Tools' to 'Configure:Reference' page and enhanced chart.
- Restructured the 'Configure:Settings:Single Screen' page.

MOMI Server

New Features:

- none

Bug Fixes:

- none

Misc. Items:

- The computational logic for CPU busy values, as displayed on the Overview screen and a few others, will no longer display values over 100%. The data gathering logic is altered so that even if 1) a higher priority process prevented execution or 2) delays are encountered in gathering data, the CPU entity values are no longer effected. Previously, CPU busy values in excess of 100% 'indirectly' indicated that a higher priority process was walking over or prevented the timely gathering of data by MOMI. It is still required that in order to report on a timely basis, MOMI still must have sufficient CPU cycles available to process over most workloads on the system.

MOMIFTP

- A Host Name that referenced another Host Name (i.e. an Alias) now resolves correctly. Previously a DNS Alias referenced would not connect.

ssMOMI

- none

Miscellaneous

- none

KNOWN BUGS

- none

****

Release_Package	3.84
Release_Date	2005/01/11

Item	Version
Latest O/S tested	G06.24
Client Version	3.84
Server Version	3.77 vproc: T0000G06___V3_77____01_10_2005
Minimum Server Version	3.76
Buffer Version	Client 19.77 Server 19.77
History database	3.00
CONFMOMI	3.02
OBYMOMI	3.02
OBYCSQL	3.00
MomiFTP.exe	1.53
ssMOMI.scr	1.09
Oldest client version tested with server	3.40

NEW FEATURES / BUGS FIXED

MOMI Client

New Screens:

- none

New Features:

- 'Files:Enscribe:Volumes' now has columns for 'Capacity','Free Space', and 'Largest Free Fragment' in pages as well as MegaBytes.
- 'Files:Enscribe:Cache' now has AutoUpdate capability.
- 'Files:Enscribe:Cache' will now update the detail popup when the grid is updated.
- 'Files:Enscribe:Disk Entity' will now update the detail popup when the grid is updated.
- Added 'Volume/SubVol/File' locator to more of the Files:Enscribe screens

Bug Fixes:

- none

Misc. Items:

- none

MOMI Server

New Features:

- Provides the Enscribe / Volume screen with new fields.

Bug Fixes:

- In development, it was discovered that processing after certain SPI operations could trigger a memory overwrite causing a MOMI server to ABEND. This has been corrected.
- Previously, clicking on a $vol.subvol on the Enscribe / SubVolume screen which jumps to the Enscribe / File screen resulted in a file system error 13. This was due to the previous tightening of valid file syntax. Now, the screen accepts this input.

Misc. Items:

- The Enscribe / Volume screen now reports megabytes as 1,000,000 bytes per megabyte versus the previous 1,048,576 bytes per megabyte. This aligns our computation with "DSAP $*,short".

MOMIFTP

- none

ssMOMI

- none

Miscellaneous

- The MOMI help files are now 'more compatible' with Windows XP SP2.

KNOWN BUGS

- none

****

```
Release_Package           3.83
Release_Date         2004/12/23

   Item                Version
   ----                -------
   Latest O/S tested     G06.24
   Client Version         3.83
   Server Version         3.76  vproc:  T0000G06___V3_76____12_23_2004
   Minimum Server Version   3.76
   Buffer Version         Client 19.76  Server 19.76
   History database       3.00
   CONFMOMI              3.02
   OBYMOMI               3.02
   OBYCSQL               3.00
   MomiFTP.exe            1.53
   ssMOMI.scr             1.09

   Oldest client version
    tested with server     3.40
```

NEW FEATURES / BUGS FIXED

MOMI Client

New Screens:

- none

New Features:

- 'Files:Enscribe:File Detail:Alternate Key Files and Partitions' have right-click action menus allowing setting Max Extents, Allocating and Deallocating Extents.

Bug Fixes:

- 'Configure:Status:Server Info 4' if the user tried to alter the Max Extents and the was client configured to display action confirmations the Confirm window would not display and the action would never be performed. Fixed.

Misc. Items:

- none

MOMI Server

New Features:

- The server provides the maximum extents and extents currently allocated for the Enscribe / File Detail screen for partitions and alternate key files.

Bug Fixes:

- A small (192 bytes) memory leak was corrected in the MOMI master collector. Generally, the leak occurred each time a Processes / Process Detail was started.
- Previously, it was possible that by entering certain combinations of invalid process name or cpu,pin formats to trigger a measurement of DiskOpen with a $*. Validation checking is strengthed to prevent this situation.

Misc. Items:

- The strengthen validiation checking will prevent on certain screens the usage of $vol.sub when the file portion was an implied *. Now, the full file name template must be entered (such as $data1.proddb.*).

MOMIFTP

- none

ssMOMI

- none

KNOWN BUGS

- none

****

```
Release_Package           3.82
Release_Date         2004/12/15

   Item                Version
   ----                -------
   Latest O/S tested     G06.24
   Client Version         3.82
   Server Version         3.75  vproc:  T0000G06___V3_75____12_14_2004
   Minimum Server Version   3.75
   Buffer Version         Client 19.75  Server 19.75
   History database        3.00
   CONFMOMI               3.02
   OBYMOMI                3.02
   OBYCSQL                3.00
   MomiFTP.exe             1.53
   ssMOMI.scr              1.09

   Oldest client version
    tested with server     3.40
```

NEW FEATURES / BUGS FIXED

MOMI Client

New Screens:

- 'Configure:Status:Server Info' restructured and added pages to display new values from the MOMI Server.

New Features:

- 'Processes:All Processes:Tree' now has option for GMOM tree display.

Bug Fixes:

- if AutoUpdate was checked on either 'All Processes' or 'Process Entity' pages and 'Process Detail' was active the screens being AutoUpdated would sometimes lose context and start returning only the process being viewed in the 'Process Detail' screen. Fixed.
- if Client was 'Paused' then a different screen was selected then the Client was 'Resumed' the selected screen might not automaticaaly start updating. Fixed.

Misc. Items:

- The client relies on several new messages and fields present in this version of the MOMI server. A warning message is displayed if the client connects to a MOMI server with a version less than the Minimum Server Version documented above.
- 'Files:Enscribe:Files and File Detail' the right-click action to alter the Max Extents and to allocate and deallocate extents on a file with multiple partitions now only makes the requested action against the partition selected and does not try to do all partitions. Previously it would alter all partitions if the file selected was the primary partition but would fail if the file was a secondary partition with an error 72.

MOMI Server

New Features:

- Added new CONFMOMI keywords auto-update-limit and auto-update-user-nolimit to determine the amount of time a client

should continue to automatically update a manual or demand request. See MOMI help for more information.

Bug Fixes:

- The server now has more extensive protection against invalid data in the Measure OSS CPU entity. This previously caused a crash when processing the field FS-cache-dirty-qtime.
- An older PC MOMI client would display .$pname on the EMS Msgs screen. Now, the older client will display \system.$pname while a newer client will display [\system.]$pname which the system is only displayed if the process is on a remote node.

Misc. Items:

- none

MOMIFTP

- none

ssMOMI

- none

KNOWN BUGS

- none

****

Release_Package 3.81
Release_Date 2004/11/15

Item	Version
Latest O/S tested	G06.24
Client Version	3.81
Server Version	3.74 vproc: T0000G06___V3_74____11_15_2004
Minimum Server Version	3.74
Buffer Version	Client 19.74 Server 19.74
History database	3.00
CONFMOMI	3.02
OBYMOMI	3.01
OBYCSQL	3.00
MomiFTP.exe	1.53
ssMOMI.scr	1.09

NEW FEATURES / BUGS FIXED

MOMI Client

New Screens:

- none

New Features:

- 'Files:Enscribe:File Detail:Partitions' - now displays percent full for the partitions (for Jayson M.).
- 'Files:Enscribe:File Detail:Alt Key Files' - now displays percent full for the Alternate Key File (for Jayson M.).

Bug Fixes:

- 'Files:Enscribe:File Detail:Alternate Keys' - now displays fields: Null Value, flags for 'Do Not Index Nulls', 'Key must be unique' and 'do not automatically update' and 'Insertion order for duplicate keys'
- 'Files:Enscribe:File Detail:Partitions' - now correctly displays binary Partition keys.
- When Logging on if the 'User ID' or 'Password' was longer than 39 characters the client would crash. Fixed.

Misc. Items:

- 'Systems:Emulators' - the cursor will automatically move into the emulator when changing pages instead of requiring a mouse click.
- 'History:Chart:Configure' now prevents user from selecting elements to chart out of order. i.e. can no longer set D-0, D-1 and D-3 without setting D-2. Element Tabs now contain green '+' if active or red '-' if not active yet.

MOMI Server

New Features:

- Server provides the new information for the Files/Enscribe/File Detail screen.
- The amount of time before information is returned (the initial MEASURE interval) for screens such as Files/Disk Entity & DiskFile Entity may now be altered with the CONFMOMI keywords IIT-NORMAL-STARTING, IIT-NORMAL-INTERVAL-INCREMENT and IIT-NORMAL-MAXIMUM. See MOMI help for more information.
- An OSS Path name may now be used on the Processes / All Process screen

under Config Options / Object name.

Bug Fixes:
- none

Misc. Items:
- Due to a bug in Guardian, which resulted in a CPU halt, the server will not allow the screen Files/Enscribe/Locks to function. The message "Feature not available..." is displayed. We hope to reactivate this feature after further investigation and consultation with the HP GCSC.

MOMIFTP
- none

ssMOMI
- none

KNOWN BUGS
- none

****

Release_Package 3.80
Release_Date 2004/11/02

Item	Version
Latest O/S tested	G06.24
Client Version	3.80
Server Version	3.73 vproc: T0000G06___V3_73____11_01_2004
Minimum Server Version	3.73
Buffer Version	Client 19.73 Server 19.73
History database	3.00
CONFMOMI	3.02
OBYMOMI	3.01
OBYCSQL	3.00
MomiFTP.exe	1.53
ssMOMI.scr	1.09

NEW FEATURES / BUGS FIXED

MOMI Client

New Screens:

- 'Files:Enscribe:Locks' displays File and Record Locks.

New Features:

- Main Screen 'Print Screen' button now has right-click to pop up a moveable freeform memo that can be used to make notes on the page before printing. Note that the notes are not saved and are available only while the note is visible. This is useful to note why you printed the screen.
- 'Processes:Process Detail' - added right-click process action menu to Ancestor name.
- 'SubSystems:EMS Msgs' - added right-click process action menu to Process Name in message detail pop up and Process Name Column on grid.
- 'Configure:Settings:System Wide' - added Export Delimiter character setting to allow user to export tab-delimited files with a delimiter other than Tab (like the Pipe character '|').

Bug Fixes:

- none

Misc. Items:

- All numbers are now in the format '12,345.67' even if the PC is setup with the thousand separator something other than ',' and the decimal separator something other than '.' (i.e. French Canada setup used ' ' and ',' for output of '12 345,67').
- 'Processes:All Processes' - re-structured the Tree output to display better with long OSS process object names.
- 'Processes:Top Processes' and 'Configure:Tools:Ascii/EBCDIC Chart' now display standard sort indicator.
- 'Processes:Last Stop/Start' - now has switch view button to switch between vertical and horizontal views.
- 'Configure:Settings:Single Screen:Tab Style' removed Flat-Button style.
- 'Processes:Top Processes' - Added StuckonIO,GMOM and JobID columns and Selector type to show only process possibly stuck on an I/O.
- 'Processes:Last Start/Stop' , 'Processes:All Processes', 'History:Last Start/Stop' and 'History:Export Data' - Added StuckonIO,

Login Name,GMOM and JobID.
- 'Overview' process pop up window now shows GMOM and JobID.

MOMI Server

New Features:

- The local system qualifier is now removed on the Subsystems / EMS Msgs screen. Unnamed process are now displayed in the format cc,ppppp instead of $:cc:ppppp:ssssss.
- Support for the new screen Files / Enscribe / Locks.
- Support added for determining if a process is possibly stuck in an I/O state. See the new CONFMOMI param IO-STUCK-INTERVAL in the MOMI help for more information.
- MOMI no longer references the file $SYSTEM.SYSNN.RLSEID if run on G06.24 or later. The Guardian procedure for returning the minor O/S release number functions on this release and forward.
- Support for a new message to support History / Process screen.
- Support added to obtain and store in history the process attributes of GMOM process name and Job ID.
- Support for a new message to support Processes / All Processes screen.
- Support for new messages to support Processes / Last Start/Stop screen.
- The server now updates process history every period when a process is Stuck in an I/O, Suspended or in Inspect.

Bug Fixes:

- If an invalid process name on the Processes / ProcessH Entity screen, a cryptic error message was displayed. Now, the correct error message is displayed.
- A local system qualifier is now removed on the History / Chart screen. Previously, a qualifier would prevent the display of data.
- The fields MOM and GMOM on the Processes / All Processes screen now display with remote system qualifiers. Previously, the system qualifiers were not displayed.
- A computation for computing operations per second is now more accurate when the values 'fit' within 64-bit mathematical operations. Previously, while the mathematical expression was correct, the precision was not taken out as far as it could.
- If reading history, for example the History / Process screen, and the client is moving forward in time and reaches the end of file (i.e. just past the most recently written history information) and then scrolls backwards in time, the second to the last group of records was returned. Now, the server will correct return the last group of records.

Misc. Items:

- none

MOMIFTP

- none

ssMOMI

- if running as an executable program instead of as a screensaver ssMOMI will now prevent screensaver from starting while it is running.

KNOWN BUGS

- none

****

Release_Package	3.79
Release_Date	2004/09/29

Item	Version
Latest O/S tested	G06.23
Client Version	3.79
Server Version	3.72 vproc: T0000G06___V3_72____09_25_2004
Minimum Server Version	3.55
Buffer Version	Client 19.73 Server 19.72
History database	3.00
CONFMOMI	3.01
OBYMOMI	3.01
OBYCSQL	3.00
MomiFTP.exe	1.53
ssMOMI.scr	1.08

NEW FEATURES / BUGS FIXED

MOMI Client

New Screens:

- none

New Features:

- none

Bug Fixes:

- The 'Change Systems' delay introduced in version 3.78 has been reduced.

Misc. Items:

- if MOMI Client has crashed and created a MOMI.LOG crash file on the PC upon the client startup the age of that crash file is checked and if it is over 2 weeks old it will be deleted. This prevents the crash file from continuing to get bigger.

MOMI Server

New Features:

- none

Bug Fixes:

- none

Misc. Items:

- none

MOMIFTP

- none

ssMOMI

- none

KNOWN BUGS

- none

****

Release_Package 3.78
Release_Date 2004/09/25

Item	Version
Latest O/S tested	G06.23
Client Version	3.78
Server Version	3.72 vproc: T0000G06___V3_72____09_25_2004
Minimum Server Version	3.55
Buffer Version	Client 19.73 Server 19.72
History database	3.00
CONFMOMI	3.01
OBYMOMI	3.01
OBYCSQL	3.00
MomiFTP.exe	1.53
ssMOMI.scr	1.08

NEW FEATURES / BUGS FIXED

MOMI Client

New Screens:

- 'Systems:Emulators' added. This screen will allow the user to define up to 32 Emulator sessions. This Emulator is provided courtesy of CAIL and is a limited-function version of the CAIL CTT/Suite product and is NOT a paid feature of MOMI. It may be eliminated from future MOMI versions with no prior warning.

  The 'CAIL Lite' Emulator is limited in that:

  1) screen colors may not be changed.
  1) screen fonts may not be changed.
  2) number of rows and columns cannot be changed.
  3) PCFILE, IXF and FTP are not available.
  4) Secure Sessions are not available.

  To obtain a full featured emulator the 'CAIL Lite' user should contact CAIL about CTT/Suite for additional capabilities to improve information access. If the user upgrades to the full featured version (or already has it installed on their PC) the MOMI client will automatically upgrade the clients used within MOMI.
- 'Systems:FTP' added. This screen will allow the user to FTP between the PC and the Tandem. The Tandem may be viewed in either a NSK(Guardian) or OSS view.

New Features:

- 'History:Chart' added 'Stop Date and Time' to chart config. When the 'Stop Time' is set the chart will display all records between the 'Start Time' and 'Stop Time' on a single Chart. (For Vikas K.)
- 'Configure:Settings:Misc.Settings' added 'Printer Font Selection' to set the font used when exporting to printers(except for Grids that now have their own individual printer font settings). (For Taesik B.)
- To all grids with the 'Tools' feature added new tab on Tools called 'View' that allows the user to customize what font and font size is used for that displaying the grid. The Font used for printing the Grid can also be set. These settings can be saved.
- 'Process:Process Detail' Added GMOM and JOBID to page 3 of the Process entity info. (for NetBatch jobs etc).
- 'History:Process Start/Stop' now has login name displayed.
- The MOMI version number will be included in the 'MOMI.LOG' crash file.

Bug Fixes:

- Under some circumstances when a user changed systems while the Client was busy processing the Client would crash. The fix for this causes the Client to not change systems until it is safe to do so. This might mean that changing systems will take longer than before. Fixed.
- Under some circumstances when a user did a global pause on MOMI (the 'Pause...' button at the top of the screen) some screens would stop updating. Bug was introduced in version 3.70. Fixed.
- Exporting data to the PC would sometimes cause the Client to crash if MOMI was not able to write to the PC. (sharing/lock/ etc violations). The client now will display a message saying the export failed but will no longer crash. Fixed.
- When a 'Systems:Detail' screen shows a node had lost a CPU and was displaying red it would not return to normal after CPU came back up.

Misc. Items:

- none

MOMI Server

New Features:

- Additional processor types such as the S88000 and S78000 will now have their name displayed instead of "New". The S7800 is also now correctly displayed (documentation previously indicated a different subtype for this CPU).
- Actions such as Logon and process actions such as stop, abend and alter priority now take place at a process priority of 2 less $MOMI (default 168) instead of the batch priority which defaults to 90. The keyword PRIORITY-PA in the CONFMOMI file is used to change the default. This change helps to insure that these actions, which are short in duration, are preformed in a timely manner on busy systems.

Bug Fixes:

- On a system that used the full eight characters of the Expand name (i.e. \abcdefg) and the system had been running for a while, several months, servers started by $MOMI did not always stop. This has been corrected.
- An Expand node not accessible with $MOMI was started is now correctly marked as "accessible" when the node returns to the network.

Misc. Items:

- Previously, issuing a stop on a process without proper security resulted in the error message "Cannot stop until stopmode 0". Now the error message reads "Insufficient privilege". This matches what TACL displays.

MOMIFTP

- none

ssMOMI

- none

KNOWN BUGS

- none

****

Release_Package 3.77
Release_Date 2004/06/25

Item	Version	
Latest O/S tested	G06.23	
Client Version	3.77	
Server Version	3.71	vproc: T0000G06___V3_71____06_21_2004
Buffer Version	19.71	
History database	3.00	
CONFMOMI	3.01	
OBYMOMI	3.01	
OBYCSQL	3.00	
MomiFTP.exe	1.53	
ssMOMI.scr	1.08	

NEW FEATURES / BUGS FIXED

MOMI Client

New Screens:

- none

New Features:

- none

Bug Fixes:

- 'Processes:Process Detail' would not always resize correctly if the screen was toggled to display mostly files. Fixed.
- TimeZones were not correctly displaying GMT. Fixed.

Misc. Items:

- none

MOMI Server

New Features:

- none

Bug Fixes:

- none

Misc. Items:

- none

MOMIFTP

- none

ssMOMI

- none

KNOWN BUGS

- none

****

Release_Package 3.76
Release_Date 2004/06/21

Item	Version	
Latest O/S tested	G06.22	
Client Version	3.76	
Server Version	3.71	vproc: T0000G06___V3_71____06_21_2004
Buffer Version	19.71	
History database	3.00	
CONFMOMI	3.01	
OBYMOMI	3.01	
OBYCSQL	3.00	
MomiFTP.exe	1.53	
ssMOMI.scr	1.08	

NEW FEATURES / BUGS FIXED

MOMI Client

New Screens:

- none

New Features:

- on 'Configure:Setting:Single Screen' and 'Files:Enscribe:View File' added configuration option to allow multi-byte character sets to be displayed on viewing a file. If it is not allowing multi-byte chars they will be replaced on the display with the ~ character. Multi-byte display setting can be saved on the Config screen.
- 'TimeZone Map' added base time selector or either local PC or connected Tandem time. On newer versions of Guardian MOMI will now reflect 'time zone offset' of '+/-hh:mm' instead of '+/-hh' on 'CPUs:CPU Info:Local Time Offset'. This also corrects a bug on the TimeZone map if the Tandem system had an offset with partial hours (i.e. Adelaide,Australia is '+09:30'.

Bug Fixes:

- 'Files:SQL/MP:Table Detail' would not find partitions. Fixed.
- various screens would not display correct 'rated/non-rated' value when global 'non-rated as default' was set. fixed.
- 'Configure:Settings:Single Screen:Process Detail' would allow the user to change the setting while the request was being made. This caused the data to not display correctly. Changed so now while the data is being requested the values can not be changed just like on the 'Process Detail' screen itself.

Misc. Items:

- none

MOMI Server

New Features:

- The server now reports the Time Zone offset in hours and minutes versus the previous hours only.

Bug Fixes:

- The server now uses a more exacting algorithm to determine delays.

This in intended to cause the MOMI CPU collectors to dump history in the accurate period on S86000 processors. The symptom of this issue is viewing history of all CPU in the client would see 'drop-outs' or zero value points of time.
- The Files / Enscribe / File Opener screen could stop gathering data when a down comm line was entered. Now, an error 66 is ignored so that the routine will skip past that line.
- The server now properly reports an Expand subsystem with no paths and no lines to the client. Previously, the client would continue to display 'gathering data'.

Misc. Items:
- none

MOMIFTP
- none

ssMOMI
- added ability to run screen saver as program that will not stop when screen is clicked. Display will now have a 'X'-button to stop.
  1) Make copy of ssMOMI.scr into directory other than 'C:\windows'.
  2) Rename copy of ssMOMI.scr to ssMOMI.exe
  3) Use runtime param of '/c AsEXE' to start program first setting INI file location.
  4) Use runtime param of 'AsEXE' to start program using predefined INI.

KNOWN BUGS
- none

****

Release_Package 3.75
Release_Date 2004/05/28

Item	Version	
Latest O/S tested	G06.22	
Client Version	3.75	
Server Version	3.70	vproc: T0000G06___V3_70____05_13_2004
Buffer Version	19.70	
History database	3.00	
CONFMOMI	3.01	
OBYMOMI	3.01	
OBYCSQL	3.00	
MomiFTP.exe	1.53	
ssMOMI.scr	1.07	

NEW FEATURES / BUGS FIXED

MOMI Client

New Screens:

- 'SubSystems:Expand:Connections' replaces 'SubSystems:Expand:Diagram:Detail' screen. Also restructured and added more columns.

New Features:

- all 'SubSystems:TCP/IP' screens now have left/right-click menus to jump between screens. (for Hector G.)
- on 'Configure:settings:Actions' added 'Use Forced Minimize on Client' button to be used when some third-party programs incorrectly minimize all other programs and this gets MOMI 'out of sync' with windows and the minimize button no longer works. This does cause some 'jumping around' of the screen during minimize.

Bug Fixes:

- On very slow PCs sometime the Expand info would not always display correctly. This has been corrected.
- all Grids now hide the Tool and sort/filter panel when the user changes screens.
- 'Files:SQL/MP:Table Detail' Clear button now works correctly.

Misc. Items:

- none

MOMI Server

New Features:

- none

Bug Fixes:

- none

Misc. Items:

- none

MOMIFTP

- none

ssMOMI

- none

KNOWN BUGS

- none

****

Release_Package 3.72
Release_Date 2004/05/18

Item	Version	
Latest O/S tested	G06.22	
Client Version	3.72	
Server Version	3.70	vproc: T0000G06___V3_70____05_13_2004
Buffer Version	19.70	
History database	3.00	
CONFMOMI	3.01	
OBYMOMI	3.01	
OBYCSQL	3.00	
MomiFTP.exe	1.53	
ssMOMI.scr	1.07	

NEW FEATURES / BUGS FIXED

MOMI Client

New Screens:

- none

New Features:

- none

Bug Fixes:

- On very slow PCs sometime the Expand diagram would not display the Systems. This has been corrected.
- On very slow PCs sometime the History Config buttons would not be enabled after the changing systems. This has been corrected.
- If 'Configure:Settings:System Wide' had 'Non-Rated as default' checked the client would crash on startup. or if 'Non-Rated as default' was changed the client would crash. Sorry - bad testing on my part.

Misc. Items:

- none

MOMI Server

New Features:

- none

Bug Fixes:

- none

Misc. Items:

- none

MOMIFTP

- none

ssMOMI

- none

KNOWN BUGS

- none

****

Release_Package 3.71
Release_Date 2004/05/17

Item	Version	
Latest O/S tested	G06.22	
Client Version	3.71	
Server Version	3.70	vproc: T0000G06___V3_70____05_13_2004
Buffer Version	19.70	
History database	3.00	
CONFMOMI	3.01	
OBYMOMI	3.01	
OBYCSQL	3.00	
MomiFTP.exe	1.53	
ssMOMI.scr	1.07	

NEW FEATURES / BUGS FIXED

MOMI Client

New Screens:

- none

New Features:

- none

Bug Fixes:

- changed logic when changing pages to prevent client crash on very slow slow PC's.

Misc. Items:

- none

MOMI Server

New Features:

- none

Bug Fixes:

- none

Misc. Items:

- none

MOMIFTP

- none

ssMOMI

- none

KNOWN BUGS

- none

****

Release_Package 3.70
Release_Date 2004/05/14

Item	Version	
Latest O/S tested	G06.22	
Client Version	3.70	
Server Version	3.70	vproc: T0000G06___V3_70____05_13_2004
Buffer Version	19.70	
History database	3.00	
CONFMOMI	3.01	
OBYMOMI	3.01	
OBYCSQL	3.00	
MomiFTP.exe	1.53	
ssMOMI.scr	1.07	

NEW FEATURES / BUGS FIXED

MOMI Client

New Screens:

- none

New Features:

- Faster Startup. Client should take less than 1/2 time of previous version. The trade-off is that certain screens will have a very short delay the first time that screen is accessed but will be display instantly after that.
- 'History:Chart' menu when line is Right-clicked now includes jump to 'History:CPU' and 'History:Process' as well as 'History:CPU Detail'.

Bug Fixes:

- New logic to minimize correctly if another program sends a minimize command to MOMI client.
- 'Files:Disk Entity' could cause the client to crash with a Divide-by-zero error if the System had 72G disks and the OS version (approx G06.16) of Measure did not correctly identify the disk capacity. Fixed.

Misc. Items:

- none

MOMI Server

New Features:

- The current status of TMF as reported on the client Overview screen now reports the percentage of audit trail used of both the Master (MAT) and Auxiliary (AUXnn) audit trail (if present). The audit trail reported is the one with the highest percentage of usage. Additionally, the TMF state when an audit trail cannot roll over is now reported.

Bug Fixes:

- none

Misc. Items:

- none

MOMIFTP

- New logic to minimize correctly if another program sends a minimize command to MOMIFTP.

ssMOMI

- none

KNOWN BUGS

- none

****

Release_Package 3.67
Release_Date 2004/04/28

Item	Version
Latest O/S tested	G06.22
Client Version	3.67
Server Version	3.61 vproc: T0000G06___V3_61____04_28_2004
Buffer Version	19.54
History database	3.00
CONFMOMI	3.01
OBYMOMI	3.01
OBYCSQL	3.00
MomiFTP.exe	1.52
ssMOMI.scr	1.07

NEW FEATURES / BUGS FIXED

MOMI Client

New Screens:

- none

New Features:

- 'Config:Single Screen' added on 'Process:Process Detail Screen' section the ability to set default for 'Display All records' and 'Continue on Error'.
- 'History:Chart' added display of chart name(if any) and database interval used.

Bug Fixes:

- 'Processes:Process Detail' Pause now works for Simplified view.
- 'File Locator' would only get file code 845 once the 'EMS Msgs' 'File Locator' had been used. - Fixed.

Misc. Items:

- 'SubSystems:EMS Msgs' changed 'AutoSize' button to 'Clear' button to clear the list and reset the config options. (for Hector G.)

MOMI Server

New Features:

- none

Bug Fixes:

- History collection was not working in lock-step in the MOMI cpu collectors. This would show up as duplicate history CPU records in the HST01db file. The server is now corrected and initial lock-stepping is working. Systems with heavy page-faulting or other processes walking over MOMI (i.e. running at a higher priority) can still cause this issue. We are continuing to working on additional changes to handle this situation.

Misc. Items:

- none

MOMIFTP

-none

ssMOMI

- none

KNOWN BUGS

- none

****

Release_Package 3.65
Release_Date 2004/04/16

Item	Version	
Latest O/S tested	G06.22	
Client Version	3.65	
Server Version	3.60	vproc: T0000G06___V3_60____02_17_2004
Buffer Version	19.53	
History database	3.00	
CONFMOMI	3.01	
OBYMOMI	3.01	
OBYCSQL	3.00	
MomiFTP.exe	1.52	
ssMOMI.scr	1.07	

NEW FEATURES / BUGS FIXED

MOMI Client

New Screens:

- none

New Features:

- 'Config:Settings:Misc Settings' now allows the user to change the default CPU line colors for CPU Charts such as 'Overview:CPU Hist' and 'History:Chart'. (for Dick S.)
- Connect Time now added to hint on System Selector.
- Added run-time param 'LOG' to be used for debugging customer problems that are not reproducible except at the customer site.
- 'Config:Settings:System Wide' now allows the user to set whether or not the Client will restart any Auto Updating screens if the Connection is lost then re-established. The Default is the Auto Updating is restarted. If it is not restarted the screens will be cleared.

Bug Fixes:

- Made changes to Socket Timeout logic to prevent unneeded Timeouts from occurring when the client is busy performing some work.
- Made changes to Socket and Display code to prevent occasional client crash during system change and client shutdown.

Misc. Items:

- 'Files:SQL/MP:Usages' and 'SubSystems:TCP/IP:Process Status' Grids converted to Database to allow large number of entries.

MOMI Server

New Features:

- none

Bug Fixes:

- none

Misc. Items:

- none

MOMIFTP

-none

ssMOMI

- none

KNOWN BUGS

- none

****

Release_Package 3.63
Release_Date 2004/03/17

Item	Version	
Latest O/S tested	G06.22	
Client Version	3.63	
Server Version	3.60	vproc: T0000G06___V3_60____02_17_2004
Buffer Version	19.53	
History database	3.00	
CONFMOMI	3.01	
OBYMOMI	3.01	
OBYCSQL	3.00	
MomiFTP.exe	1.52	
ssMOMI.scr	1.07	

NEW FEATURES / BUGS FIXED

MOMI Client

New Screens:

- none

New Features:

- 'History:Export' for CPU added 'CPU Queue Time' to non-rated exports and 'CPU Queue Length' to rated exports. Note: item is added to end of items exported list(for Kevin C.).
- On Grid-Tools added the ability to export the Grid data to the Clipboard as well as the Printer(for Mark J.).
- added a run-time parameter of 'user' to put the INI's etc. in the Users application data area. i.e. (c:\Documents and Settings\<user>\Application Data\BlackWood Systems)
- 'History:Chart' added selector on Config Panel to toggle chart between 'Stairs' and 'Line' display mode.

Bug Fixes:

- changes made to prevent client crashing upon shutdown.
- Replaced up/down sort indicators on grids with new indicators that do not alter column width. This will prevent certain grid screens from flashing when the data was updated.
- Fixed bug causing Grid Tool and/or Sort/Filter displays to be disrupted during scrolling the grid.
- Fix to some screens with Grids that if no data was found the Config button was not re-enabled like when data was found.

Misc. Items:

- 'Files:Disk Entity' changed Left-click action to drill-down to 'Files:DiskFile Entity' instead of displaying the Disk Entity Detail. The Disk Entity Detail is now a right-click action item.

MOMI Server

New Features:

- none

Bug Fixes:

- none

Misc. Items:
- none

MOMIFTP
-none

ssMOMI
- none

KNOWN BUGS
- none

****

Release_Package 3.62
Release_Date 2004/02/17

Item	Version
Latest O/S tested	G06.22
Client Version	3.61
Server Version	3.60 vproc: T0000G06___V3_60____02_17_2004
Buffer Version	19.53
History database	3.00
CONFMOMI	3.01
OBYMOMI	3.01
OBYCSQL	3.00
MomiFTP.exe	1.52
ssMOMI.scr	1.07

NEW FEATURES / BUGS FIXED

MOMI Client

New Screens:
- none

New Features:
- none

Bug Fixes:
- none

Misc. Items:
- none

MOMI Server

New Features:
- none

Bug Fixes:
- If MOMI was started prior to MEASURE, or if MEASURE was stopped and restarted after MOMI was started, a MOMI server process would create a save file. This was due to an internal self-check.

- MOMI was crashing on a system that returned an invalid value for an OSSCPU counter FS_cache_dirty_qtime. The counter in question, and several other 64-bit counters now have a raw validity check. If the value is outside of the validity range, the counter is set to zero.

- Partition partial keys were not displayed correctly on the client screen Files / Enscribe / File Detail if the sum of the length of the volume names resulted in a odd byte length. The server now bumps the length to an even value and the partial key values are correctly presented.

Misc. Items:

- none

MOMIFTP

- none

ssMOMI

- none

KNOWN BUGS

- none

****

Release_Package 3.61
Release_Date 2004/02/11

Item	Version	
Latest O/S tested	G06.22	
Client Version	3.61	
Server Version	3.59	vproc: T0000G06___V3_59____02_11_2004
Buffer Version	19.53	
History database	3.00	
CONFMOMI	3.01	
OBYMOMI	3.01	
OBYCSQL	3.00	
MomiFTP.exe	1.52	
ssMOMI.scr	1.07	

NEW FEATURES / BUGS FIXED

MOMI Client

New Screens:

- none

New Features:

- added ability to optionally not export grid header(column descriptions) when exporting grid data to a tab-delimited file.

Bug Fixes:

- Certain screens had a small small memory leak when auto-update was turned on. Fixed.
- 'Files:Enscribe:File Detail' corrected bug causing client crash when right-click action menu item 'rename file' was selected.
- Scrolling by Mouse Scroll button sometimes would cause a Grid display to duplicate a column. Thanks to Ken K. for his help on this one.
- 'History:Process' when looking for a process over a long period of time without finding the process could not be stopped by hitting the Clear button as it should. Fixed.
- 'Files:Enscribe:File' if a File Rename was performed and no SubVolume was entered and MOMI was installed on the same Volume the file would be renamed to the SubVolume MOMI was installed on - Fixed.

Misc. Items:

- none

MOMI Server

New Features:

- none

Bug Fixes:

- Several problems were corrected relating the to Processes/All Processes screen when a process was in the terminating state. An incorrect ancestor, MOMI and GMOM could be displayed.

Misc. Items:

- none

MOMIFTP

- none

ssMOMI

- changed initial name of selected system from address to system name.
- prevented ssMOMI Icon from showing in Taskbar.

KNOWN BUGS

- On a large network the Expand diagram may flash - we are working on an improved Expand Diagram display.

****

Release_Package 3.60
Release_Date 2004/01/23

Item	Version	
Latest O/S tested	G06.21	
Client Version	3.60	
Server Version	3.58	vproc: T0000G06___V3_58____01_19_2004
Buffer Version	19.53	
History database	3.00	
CONFMOMI	3.01	
OBYMOMI	3.01	
OBYCSQL	3.00	
MomiFTP.exe	1.52	
ssMOMI.scr	1.06	

NEW FEATURES / BUGS FIXED

MOMI Client

New Screens:

- none

New Features:

- none

Bug Fixes:

- Selecting multiple items on the 'Spooler:Job' and 'Enscribe:Files' Grid will now enable the 'Perform All' button on the confirm display. It previously was not enabled. Fixed.

Misc. Items:

- none

MOMI Server

New Features:

- none

Bug Fixes:

- The 16-bit version of the server code improperly used some compiler allocated memory which could cause the server to crash. This was discovered in development and was not associated with any customer problem reports.

- An internal control structure was not properly allocated in the server publish/subscribe routines which could cause data to overwrite into subsequent fields. This was discovered in development and was not associated with any customer problem reports.

Misc. Items:

- none

MOMIFTP

- Added BlackWood emblem to first screen.

ssMOMI

- none

KNOWN BUGS

- none

****

Release_Package 3.59
Release_Date 2004/01/15

Item	Version	
Latest O/S tested	G06.21	
Client Version	3.59	
Server Version	3.57	vproc: T0000G06___V3_57____01_08_2004
Buffer Version	19.53	
History database	3.00	
CONFMOMI	3.01	
OBYMOMI	3.01	
OBYCSQL	3.00	
MomiFTP.exe	1.52	
ssMOMI.scr	1.06	

NEW FEATURES / BUGS FIXED

MOMI Client

New Screens:

- none

New Features:

- none

Bug Fixes:

- Selecting multiple items on the 'Spooler:Job' and 'Enscribe:Files' Grid will now enable the 'Perform All' button on the confirm display. It previously was not enabled. Fixed.

Misc. Items:

- none

MOMI Server

New Features:

- none

Bug Fixes:

- none

Misc. Items:

- none

MOMIFTP - version 1.52

- Added BlackWood emblem to first screen.

ssMOMI - version 1.06

- none

KNOWN BUGS

- none

****

Release_Package 3.58
Release_Date 2004/01/09

Item	Version	
Latest O/S tested	G06.21	
Client Version	3.58	
Server Version	3.57	vproc: T0000G06___V3_57____01_07_2004
Buffer Version	19.53	
History database	3.00	
CONFMOMI	3.01	
OBYMOMI	3.01	
OBYCSQL	3.00	
MomiFTP.exe	1.51	
ssMOMI.scr	1.06	

NEW FEATURES / BUGS FIXED

MOMI Client

New Screens:

- none

New Features:

- none

Bug Fixes:

- Moving columns on grids with underlying Database could cause client to crash - now fixed.
- Bug causing initial system defined to not automatically connect has now been fixed.
- Bug not correctly saving Grid Columns Hidden and Exported has been fixed.

Misc. Items:

- none

MOMI Server

New Features:

- Minor performance enhancements.

Bug Fixes:

- The client screen Files/Enscribe/Files now allows wild card in the volume name. For example $data?.history.file1. A previous enhancement to allow multiple file names on this screen used too tight a validate of the entry.

Misc. Items:

- The amount of time a MOMI server is allowed to remain idle before it and/or its resources are released has been increased from 2 minutes to 3 minutes.
- The server CONFMOMI keyword CLIENT-REP now defaults to FALSE instead of TRUE. This is an internal optimization transparent to the user. This change will help reduce cpu utilization on fast Ethernet connections. See Help for additional information.

MOMIFTP - version 1.51

- none

ssMOMI - version 1.06
- none

KNOWN BUGS
- none

****

Release_Package 3.57
Release_Date 2003/12/30

Item	Version	
Latest O/S tested	G06.21	
Client Version	3.57	
Server Version	3.56	vproc: T0000G06___V3_56____12_30_2003
Buffer Version	19.53	
History database	3.00	
CONFMOMI	3.01	
OBYMOMI	3.01	
OBYCSQL	3.00	
MomiFTP.exe	1.51	
ssMOMI.scr	1.06	

NEW FEATURES / BUGS FIXED

MOMI Client

New Screens:

- none

New Features:

- Added new Filter type of DateTime to all grids.

Bug Fixes:

- none

Misc. Items:

- none

MOMI Server

New Features:

- The buffering at the TCP/IP socket level used to send data from the Tandem to the MOMI PC client has been increased. On newer systems the buffer is approximately 260,000 bytes and on older systems the buffer is approximately 32,767 bytes. The buffering determination is automatic.

Bug Fixes:

- Previously, it was possible a MOMI server would stop if a message from an unexpected source was received. This would be seen from a client with a command in progress with the message "Resources have been released (Reissue request)".
- An recent enhancement to allow multiple files names on the Files/Enscribe/Files screen has been corrected to allow the entry of negative, or file names starting with a dash ("-"), to restrict the files display. This feature now works correctly.

Misc. Items:

- Internal changes have been made to help support a future increase the I/O buffer size between the client and server to 57,000 bytes.

MOMIFTP - version 1.51

- none

ssMOMI - version 1.06
- none

KNOWN BUGS

- on certain Grids utilizing a underlying DB, moving certain columns can cause the Client to crash when the data on the grid is refreshed. Grids affected are: Process Entity, File Entity, Disk Open Entity, DiskFile Entity, and Disk Entity. To Prevent the crashes do not move columns on these grids and if they always crash you have probably saved the columns in a different order so to fix that go into the gridtool and click the 'Restore Original Order' button.
  This BUG will be fixed in the next version of the Client.

- bringing up a client for the first time causes it to display the Define Systems screen. after a system is configured, the client may not automatically connect. this is indicated by the red LED in the lower left hand corner of the screen. simply exit the client and go back into it should this situation occur.
  This BUG will be fixed in the next version of the Client.

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Release_Package 3.56
Release_Date 2003/12/22

Item	Version	
Latest O/S tested	G06.21	
Client Version	3.56	
Server Version	3.55	vproc: T0000G06___V3_55____12_19_2003
Buffer Version	19.53	
History database	3.00	
CONFMOMI	3.01	
OBYMOMI	3.01	
OBYCSQL	3.00	
MomiFTP.exe	1.51	
ssMOMI.scr	1.06	

NEW FEATURES / BUGS FIXED

MOMI Client

New Screens:

- none

New Features:

- 'SubSystem:Expand:Diagram' now allows the user to hide systems they do not want to have displayed. To hide a system the user can either right-click on the system picture then check 'Hide this system' or click on the Detail button and in the 'System States' grid right-click on the 'Hide System' column and select 'Hide System' from the Action Menu. To Re-display a system that has been hidden the user must go into the 'System States' grid and select 'Show System' from the Action Menu. (for Duane P.)

Bug Fixes:

- 'Files:Enscribe:Files' - If a user in a version 3.50-3.54 has gone into the Grid Tools and saved any of the following 'Hide Columns', 'Export Columns' or 'Column Order' when they attempt to start a later version the client would crash. This has been fixed. If the situation causing the problem (Grid versions saved in INI file not matching grid version running) a dialog will notify the user at startup that his previous settings are lost.

Misc. Items:

- none

MOMI Server

New Features:

- none

Bug Fixes:

- none

Misc. Items:

- none

MOMIFTP - version 1.51

- none

ssMOMI - version 1.06
- none

****

Release_Package 3.55
Release_Date 2003/12/19

Item	Version	
Latest O/S tested	G06.21	
Client Version	3.55	
Server Version	3.55	vproc: T0000G06___V3_55____12_19_2003
Buffer Version	19.53	
History database	3.00	
CONFMOMI	3.01	
OBYMOMI	3.01	
OBYCSQL	3.00	
MomiFTP.exe	1.51	
ssMOMI.scr	1.06	

NEW FEATURES / BUGS FIXED

MOMI Client

New Screens:

- none

New Features:

- 'Processes:All Processes' added Auto-update button. (for Chiwen C.)
- 'Files:Enscribe:Files' changed Filename selector to include a button that will display a filename include/exclude selector screen allowing the user to set/get up to 20 selections that are then inserted into the List of Filenames. (for Chiwen C.)
- 'Config:Settings:System Wide' added entry for 'Special String Export Character' to fix problem with Exporting Grid data to a Tab-Delimited-File if the Users Character set was a multi-byte set such as Korean or Chinese. If a multi-byte character set was selected the default 'HardSpace' character used to prevent some fields to numbers by Excel or Access would fail and the output for that field would have the first character of the field replaced with a invalid character (usually a '?'). The User may now set what character will be placed in front of the field to trick Excel/Access. The selections are HardSpace, UnderScore or any user defined character.

Bug Fixes:

- 'Files:Enscribe:Files' and 'SubSystems:Spool:Job' made changes to allow selecting('X') items scrolled off page. Previously only items on the screen were selectable.

Misc. Items:

- Obtaining 'Files:Enscribe:SubVolumes' is now much faster and more efficient requiring much less data traffic from the Tandem to the PC.

MOMI Server

New Features:

- Support for new Files/Enscribe/Subvols processing where the server now returns subvolume information. Temporary files are collectively grouped as $vol.#* when displayed.
- Several internal changes will now allow select commands to work across Expand to retrieve information on other systems. Example screens in the client are the Files/Enscribe/Volumes, Subvolumes, Files and Cache

screens. Other commands where MEASURE is involved do not support "remote" data gathering. While we don't intentionally restrict Expand access, the internal changes now better support it where possible.

Bug Fixes:

- An entry in various fields of a file name such as "FRED" would result in the name expanding out to $vol.subvol.FRED where $vol.subvol is the installation location of MOMI. Now, default filling of file names with no longer occurs. Note that in some cases the user must further qualify file names to prevent error 13 messages.
- The screen Files/DiskOpen Entity displays the opener process name for a file. However, MEASURE does not provide an opener process name but only an openers cpu,pin. MOMI determines the process name by looking it up at the time of display. Previously, it was possible the process name displayed was incorrect if the process stopped and another restarted in the same cpu,pin. A check is added that if the process creation time is greater than the end of the measurement window, the 'looked up' process name will no longer be displayed.

Misc. Items:

- The message "Bad process name specified" is replaced with "File System Error (nn) - <descriptive text>".

MOMIFTP - version 1.51

- none

ssMOMI - version 1.06

- none

****

Release_Package 3.54
Release_Date 2003/12/04

Item	Version	
Latest O/S tested	G06.21	
Client Version	3.54	
Server Version	3.54	vproc: T0000G06___V3_54____12_04_2003
Buffer Version	19.52	
History database	3.00	
CONFMOMI	3.01	
OBYMOMI	3.01	
OBYCSQL	3.00	
MomiFTP.exe	1.51	
ssMOMI.scr	1.06	

NEW FEATURES / BUGS FIXED

MOMI Client

New Screens:

- none

New Features:

- On 'Internal Momi Stats' added button to send a 'Test Fatal Msg' to help with internal testing. This will send a message that the MOMI Server will see as a fatal error that it will return to the Client. The Client will then pause the screen and break the socket connection. To Reconnect the user need only press the 'Resume...' button
- on 'Files:Enscribe:Files' added ability to rename files to the drop-down action menu.
- added MOMI.exe run-time parameter of 'same' to set MOMI.INI location to same location as the MOMI.exe.

Bug Fixes:

- Problem with Expand Diagrams updating after a new system was added or deleted has now been fixed.
- Problem with using the Mouse Scroll-wheel not working correctly on high-capacity MomiGrids using underlying databases(i.e. Files) has now been fixed.
- if some non-True Type fonts (like 'System') were selected then under some circumstances the Client would go into a hard-loop using 100% of the PC's CPU power. Fixed.
- 'History:Process Start/Stop' did not always find the correct records when the Forward/Backward buttons were used. Fixed.
- 'History:Process Start/Stop' while searching for records, if the Clear button was pressed the searching would stop for 'Start' records but not 'Stop' records. Also the Request button was not reset. Fixed.
- 'Config:Settings:Misc. Settings' the Change Font and Adjust Font Size had no effect on the new 'MomiGrid' style grids. Fixed.
- 'Files:Enscribe:File Detail' if a SQL/MP table was viewed the resulting Partitions,Alternate Keys, and Alternate Key Files could return invalid information. Now only Enscribe files will display those three items.
- Under some circumstances the Auto-Logon would fail. Fixed.

Misc. Items:

- none

MOMI Server

New Features:

- An indicator is now returned for the client to determine the file type on the screen Files/Enscribe/File Detail.
- If the client logs on and the password is then changed, which causes a logon failure during command processing, the server now indicates this as fatal to the client.
- Added support for renaming a file.
- Support added for how the client now searches for process history start/stop records.

Bug Fixes:

- The date on the Subsystems/EMS Msgs screen was displaying in GMT and not LCT. This could cause the message date to appear "in the future".
- The server would not always record that a client successfully logged on. The error message "User not logged on" was returned in response to a sensitive command. This was seen primarily on slow communication links and not fast in-house LANs.

Misc. Items:

- none

MOMIFTP - version 1.51

- moved cursor into 1st location at startup.
- buttons are now visible under Windows NT 4.0 with large fonts.

ssMOMI - version 1.06

- none

****

Release_Package 3.53
Release_Date 2003/11/19

Item	Version	
Latest O/S tested	G06.21	
Client Version	3.53	
Server Version	3.53	vproc: T0000G06___V3_53____11_19_2003
Buffer Version	19.51	
History database	3.00	
CONFMOMI	3.01	
OBYMOMI	3.01	
OBYCSQL	3.00	
MomiFTP.exe	1.50	
ssMOMI.scr	1.06	

NEW FEATURES / BUGS FIXED

MOMI Client

New Screens:

- none

New Features:

- none

Bug Fixes:

- If Operating System PC was using was NT 4.00, Client would incorrectly detect the OS version as WIN95 and stop itself. Fixed.
- If Momi did not have Create/Read/Write access to the location of its MOMI.INI file the client would crash. Now will display message at startup if unable to fully access the MOMI.INI file letting the user know of the problem then stop the client immediately.

Misc. Items:

- none

MOMI Server

New Features:

- none

Bug Fixes:

- If the client was running while $MOMI was restarted (or started), the Expand screens $NCP and $ZEXP would display 'junk' or other data for the first minute, then the correct data would display. Now, no data is displayed until it has actually been retrieved from the Expand subsystem.

Misc. Items:

- none

MOMIFTP - version 1.50

- new 'Wizard-style ' version.

ssMOMI - version 1.06

- none

****

Release_Package 3.52
Release_Date 2003/11/14

Item	Version	
Latest O/S tested	G06.21	
Client Version	3.52	
Server Version	3.52	vproc: T0000G06___V3_52____11_14_2003
Buffer Version	19.51	
History database	3.00	
CONFMOMI	3.01	
OBYMOMI	3.01	
OBYCSQL	3.00	
MomiFTP.exe	1.09	
ssMOMI.scr	1.06	

NEW FEATURES / BUGS FIXED

MOMI Client

New Screens:

- Moved several items from 'Configure:Settings:Misc. Settings' to new screen 'Configure:Settings:Actions' to better signify actions independent of the 'Save Configuration' button.
- Replaced 'Configure:Reference:File System Errors' screen with new 'Configure:Reference:Error Lookup' screen. 'Error Lookup' contains many types of errors other than File System as well as the ability for users to enter their own errors and/or keywords. The system supplied errors are in the 'ErrorCodes.mom' file and when a user has added errors they are stored in a file called 'CustErrors.mom'. 'ErrorCodes.mom' will be placed in the same directory as 'MOMI.EXE'. 'CustErrors.mom' will be placed in the same directory as the 'MOMI.INI' and 'Calendar.mom'.

New Features:

- on 'SubSystems:Expand:Diagram' added a 'None' button to not put any text on connection lines. (for Paul G.)

Bug Fixes:

- If 'Systems:Detail' had bug that under some circumstances would not display CPU busy information. Fixed.
- In 'Configure:Settings:Actions' it was possible to set both 'Auto-Start MOMI' settings at once. Fixed.

Misc. Items:

- Changed registry settings for 'Auto-Start MOMI' from registry key of 'MOMI' to new key of the program directory. This will allow users to have multiple versions of MOMI running and each one to have the ability to auto-start. Also added display of the registry entries currently set for both types (for Ken K.)

MOMI Server

New Features:

- Error message text added for the case of trying to turn on/off a $NCP message and the user did not have the proper security (A subsystem error -22 was displayed previously).

Bug Fixes:

- Unnamed processes running low pin (< 255) were not displaying a file name on the screen Files / File Entity or on the Process Detail screen.
  The unnamed process would display correctly for high pins (> 255).
  The underlying code has been enhanced to display the low pin.

Misc. Items:
- none

MOMIFTP - version 1.09
- repositioned Tandem files to directory under MomiFTP.exe.

ssMOMI - version 1.06
- none

****

Release_Package 3.51
Release_Date 2003/11/11

Item	Version	
Latest O/S tested	G06.21	
Client Version	3.51	
Server Version	3.51	vproc: T0000G06___V3_51____11_10_2003
Buffer Version	19.51	
History database	3.00	
CONFMOMI	3.01	
OBYMOMI	3.01	
OBYCSQL	3.00	
MomiFTP.exe	1.08	
ssMOMI.scr	1.06	

NEW FEATURES / BUGS FIXED

NOTE: This version of the Client will NO LONGER run on Windows 95, Windows 98 and Windows ME. We kept that ability as long as we could but as new functionality was added we finally reached a point where we must have a 'Professional O/S' to support it. We are sorry for any inconvenience this might cause.

NOTE: For the Popup information on the 'SubSystems:Expand:Diagram' to display when the mouse is over or clicked on the 'Connections' line between systems, the PC must be configured with at least 24 bit color.

MOMI Client

New Screens:

- none

New Features:

- none

Bug Fixes:

- If 'Configure:Settings:System Wide' setting for 'Non-Rated as Default' was checked and the Configuration was saved, the next time the client was started it would crash. The client could then crash every time it was started until the user goes into the MOMI.INI file with NOTEPAD and removes the line 'NonRated=TRUE'. Fixed.
- In 'SubSystems:Spool:View Job' if user positioned the mouse cursor past the end of text on a line or below the last line of data then used the mouse scroll-wheel to scroll, the client would crash. Fixed.
- If user used 'File Locator' to select files and the file was already on the 'drop-down' list it was added again. Fixed.
- In 'SubSystems:EMS Msgs:Config' if user selected a Distributor Filter the Start date/time was set to the Filters Create time. Fixed.

Misc. Items:

- none

MOMI Server

New Features:

- Updates to Expand entities now starts on multiples of the interval time. In other words, if nodes in a network all have the same system time, updates to Expand as viewed on the client will now generally

occur at the same time.
- Based on processor type, the CONFMOMI param tcpip-write-bytes-sec now has a variable default value.
- The value returned for TMF transactions per second on the Client Main Overview screen now reduces decimal precision when the value exceeds 999.99 (so more whole digits fit on the PC client field).
- In the event the MOMI Expand server is stopped or fails, the PC clients are disconnected so they may automatically "resync" their data.

Bug Fixes:
- The stack allocated for the Expand server has been increased. This may prevent a strange server crash only seen in development.
- Several cases where Expand Stats Path displayed the unsigned equivalent of -1d values are now corrected (Ken K.)
- A failure in obtaining the initial configuration of Expand would not be updated to the PC Client. Now, the initial update will occur and additional error information is provided.

Misc. Items:
- none

MOMIFTP - version 1.08
- none

ssMOMI - version 1.06
- none

****

Release_Package 3.50
Release_Date 2003/10/31

Item	Version	
Latest O/S tested	G06.21	
Client Version	3.50	
Server Version	3.50	vproc: T0000G06___V3_50____10_29_2003
Buffer Version	19.50	
History database	3.00	
CONFMOMI	3.01	
OBYMOMI	3.00	
OBYCSQL	3.00	
MomiFTP.exe	1.08	
ssMOMI.scr	1.06	

NEW FEATURES / BUGS FIXED

NOTE: This version of the Client will NO LONGER run on Windows 95, Windows 98 and Windows ME. We kept that ability as long as we could but as new functionality was added we finally reached a point where we must have a 'Professional O/S' to support it. We are sorry for any inconvenience this might cause.

MOMI Client

New Screens:

- Added new Tab 'SubSystems:Expand' and following SubTabs:
  - 'SubSystems:Expand:Diagram' shows diagram of all known systems and allows diagram customization and shows System State,Path State/Stats and Line States/Stats.
  - 'SubSystems:Expand:Overview' shows State of Expand System for current system and all known System, Paths and Lines down/not accessible.
  - 'SubSystems:Expand:Paths:Detail' shows all Path Info,Status and Stats for a single Path.
  - 'SubSystems:Expand:Paths:Info' shows Info for all Paths on System.
  - 'SubSystems:Expand:Paths:Status' shows Status for all Paths on System.
  - 'SubSystems:Expand:Paths:Stats' shows Stats for all Paths on System.
  - 'SubSystems:Expand:Lines:Detail' shows all Line Info,Status and Stats for a single Line.
  - 'SubSystems:Expand:Lines:Info' shows Info for all Lines on System.
  - 'SubSystems:Expand:Lines:Status' shows Status for all Lines on System.
  - 'SubSystems:Expand:Lines:Stats' shows Stats for all Lines on System.
  - 'SubSystems:Expand:$NCP' shows $NCP Info,Process
  - 'SubSystems:Expand:$ZEXP' shows $NCP Stats,Process

- on 'Processes:Process Detail' and 'Configure:Settings:Single Screen'
  Added a option to display a simplified-view of the Process Detail. The simplified-view is more like the old (pre-3.3x) version process detail screen for users that do not want the full features of the current screen. This option is only settable before the request is started, once the records are being collected it cannot be changed. The simplified-view only displays the File Entity records for files the process has open. (for Julie J.)

- Added new screen 'SubSystems:OSS:Name Server Charts' with 10 different Charts of OSS Name Server information.

New Features:

- New Totally re-written HTML based Help.
- On 'Configure:Settings:Misc. Settings' added new selection 'Type of Help' to allow user to choose Style of Help used.
  - New Optional downloadable Help systems (download from web site).
    - 'Flash' for Flash-style HTML help for PCs with Flash installed.
    - 'Windows' for Windows-style CHM help.
- Most Screens with a 'Grid' view of the data have been replaced with a new standard 'MomiGrid'. Some of the features of the new grid are:
  - Sorted columns now display up or down arrow sort indicator.
  - Filtered columns are now high-lighted and the hint shows the current active filter on the column.
  - A Tools button on the lower-left corner of the grid with options:
    - Export to Tab-delimited File.
    - Export to HTML page.
    - Print Grid.
    - Hide Columns that are of no use to you (Saved).
    - Set which columns are Exported/Printed (Saved).
    - Save the column order or restore the column order (Saved).
    - The (Saved) items are retained and reused when MOMI is restarted.
- On 'Configure:Settings:Single Screen' added ability to request all selected Systems be 'Probed' simultaneously instead of sequentially. The old Client would update 1 system every 5 seconds(Screen Refresh Rate) in a round-robin fashion. The new setting allows all selected systems to be updated at one time. Note: This increases the data transmitted every 5 seconds and should not be used if the Client is connected to the Servers via a low-speed connection. (for Vikas K.)
- On 'Configure:Settings:System Wide' added 'Virtual Mem In-Use' Color Triggers to Change Color of Overview Screen button 'Mem Info' when Virtual Memory runs low.
- On 'Overview' made color of Chart buttons change when Trigger values are reached on:
  - CPU Busy (overall system CPU busy)
  - TMF Rate (TMF Audit Trail full)
  - Mem Info (Virtual Memory running low).
- On 'Files:DiskFile Entity' added ability to right-click on the filename to jump to 'Files:Enscribe:File Opener' for that file.
- On 'Processes:Last Start/Stop' added to Process Started grid a left-click to jump to Process Detail for that process and a right-click to bring up a menu allowing jumps to Process Detail, ProcessH entity and PgmRay.
- on 'Files:Enscribe:File Detail' added right-click action menu on FileName.
- on 'Files:Enscribe:File' added config to allow limit by file full%.
- on 'SubSystems:Spooler:Spool' added right-click action menu on Process.
- on 'SubSystems:TCP/IP:Process Info' added right-click action menu on Process.
- on 'History:Export Data' added ability to export history data as HTML table as well as Tab-delimited file. HTML is also available on export scripts. (for Vikas K.).
- on 'History:Export Data' added ability to select which items in the History record are exported. Also added this ability for the Export Scripts.

- on 'CPUs:CPU Summary' added Left-click on any 'I/Os / Second' display to jump to 'Files:Disk Entity' for disks owned by that CPU.
- on 'Processes:Process Detail' / 'Processes:Process Entity' / 'Files:Disk Entity' / 'Files:DiskFile Entity' / 'Files:DiskOpen Entity' / 'Files:File Entity' / 'Files:SQL/MP:Statement' added Config button to allow user to request All records (even Zero value or no activity records) or only records with activity. The default is only records with activity are returned. This option is only settable before the request is started, once the records are being collected it cannot be changed.
- On 'Configure:Status:Server Info 1' added three (3) new fields: 'Interval' displays the Momi Collection interval 'Expand Priority' displays the Expand Collector processes priority. 'Disable SQL stmts' displays the state of the flag to disable SQL statement Measurements.
- On 'Processes:Process Detail' added field displaying Process Type. G for Guardian, O for OSS or ? for unknown. Also if Process is OSS the Object field will now display the shortened OSS object PathName (once it is received) and may be clicked to see the full PathName.
- On 'History:Processes' config added the ability to check for existence of process name starting at start Date/Time then display all processes at the first time the process exists on the system. (for Jesse G.)
- On 'SubSystems:EMS Msgs' config panel added ability to specify a compiled EMS Filter for Pre-Filtering EMS messages before they are sent to the MOMI Client. (for Vikas K.)
- On 'Files:Enscribe:Cache' added 'Cache Bytes in use' field.

Bug Fixes:

- none

Misc. Items:

- If PC is running WinXP will now display in XP display format.
- Renamed screen 'SubSystems:OSS:Charts' to 'SubSystems:OSS:CPU Charts' to allow for new Name Server Charts.

MOMI Server

New Features:

- Support for Expand.
- Many improvements throughout the program, in supporting libraries and at process startup to improve performance.
- Additional device types/subtypes have been added.
- Format 2 history files many now be used (note that MOMI still creates format 1 files).
- Support for returning zero records to many screens (previously most records with no values were always suppressed).
- Added entries for file codes.
- Processh will now support OSS processes. Note that measuring OSS processes system code is not yet supported.
- Various changes have been made to better support reporting of OSS processes.
- Only one copy of NSKCOM is now started. Previously, one NSKCOM was started per processor.
- The Process Entity screen now reports CPU percent busy as a relation to the measurement window time instead of the process window time. This way short lived processes do not display with extremely high cpu percent busy.
- The INTERVAL that MOMI captures process busy may now be set in

CONFMOMI and also has a new low threshold of 5 seconds versus the previous 10 seconds.
- SQL Statement measurements may be disabled in the CONFMOMI with the param DISABLE-MEAS-SQLSTMT true | false.
- The history consolidation server now has a cpu limit of 4% versus the previous 5%.
- BWMOMI now performs TCP/IP I/O directly and no longer uses the services of BWMTCP.
- A new EMS message from the client is supported. It provides the ability to support a distributor filter.
- The average CPU queue value will now appear with a moving decimal point to better fit the available screen space. The values can have the following format nn.nn, nnn.n and nnnn.

Bug Fixes:
- TCP/IP version 6 displayed some junk on the Process Info screen. Now the information will display correctly. Note that in a future release we hope to improve this support.
- Several internal tests failed in 16-bit MOMI code. These have all been corrected.
- Fixed an abend in 16-bit MOMI code in support of the Process Detail screen.
- I/O to unnamed processes now show the cpu,pin correctly in the MEASURE file entity. An undocumented method to determine the pin in 16-bit field is used.
- The Top Processes when selecting Tape Only for the Busiest cpu always displayed cpu 0. Now the busiest cpu is displayed.
- Many values previously output as signed (without the sign) are now output as unsigned to correctly match their usage.
- An internal buffer was increases to allow more disk/file names to be specified on the Disk Entity, DiskFile Entity, DiskOpen Entity and File Entity screens. Previously the text was limited to 100 bytes and is raised to 400 bytes (this could cut names off in midstream).
- A process in the "creation state" is now basically ignored by MOMI in the cpu collectors. Changes in G06.21 seem to cause erroneous data to appear in this transient condition. This could cause the process to be shown as starting twice in the same second. The "creation state" is short lived and MOMI will pick the process up basically on the next pass through the cpu.
- MOMI could have difficultly starting when run around priority 195. It appears that MEASURE would not always be ready. Now, a delay is inserted after the master measurement is started and before the first access of that measurement. Note that the default MOMI priority of 170 did not appear to have this issue.

Misc. Items:
- none

MOMIFTP - version 1.08
- added support for all files codes (needed code 845).

ssMOMI - version 1.06
- none

****

Release_Package 3.40
Release_Date 2003/10/08

Item	Version
Latest O/S tested	G06.20
Client Version	3.40
Server Version	3.37 vproc: T0000G06___V3_37____06_11_2003
Buffer Version	19.35
History database	3.00
CONFMOMI	3.01
OBYMOMI	3.00
OBYCSQL	3.00
MomiFTP.exe	1.07
ssMOMI.scr	1.06

ITUG Version with password good until Nov 30, 2003

NEW FEATURES / BUGS FIXED

MOMI Client

New Screens:
- none

New Features:
- none

Bug Fixes:
- On 'History:Chart' fixed bug causing Client to crash if user right-clicked on a chart line then selected 'Copy To Clipboard'.

Misc. Items:
- Several small display corrections.

MOMI Server

New Features:
- none

Bug Fixes:
- none

Misc. Items:
- none

MOMIFTP - version 1.07

- When Connected to a system the 'Connect' button will now be disabled until the connection is broken. This will prevent multiple connects.

ssMOMI - version 1.06

- fixed bug causing occasional crash when screensaver settings were being set.

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Release_Package 3.39
Release_Date 2003/06/27

Item	Version	
Latest O/S tested	G06.19	
Client Version	3.39	
Server Version	3.37	vproc: T0000G06___V3_37____06_11_2003
Buffer Version	19.35	
History database	3.00	
CONFMOMI	3.01	
OBYMOMI	3.00	
OBYCSQL	3.00	
MomiFTP.exe	1.07	
ssMOMI.scr	1.05	

MOMI Client

New Screens:

- none

New Features:

- none

Bug Fixes:

- fixed bug preventing 'Export' button on some screens from working.
- fixed bug causing some 'History' screens to change to 1st database when using the 'forward' or 'back' arrow.

Misc. Items:

- none

MOMI Server

New Features:

- none

Bug Fixes:

- none

Misc. Items:

- none

MOMIFTP

- none

ssMOMI

- none

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Release_Package 3.38
Release_Date 2003/06/19

Item	Version
Latest O/S tested	G06.19
Client Version	3.38
Server Version	3.37 vproc: T0000G06___V3_37____06_11_2003
Buffer Version	19.35
History database	3.00
CONFMOMI	3.01
OBYMOMI	3.00
OBYCSQL	3.00
MomiFTP.exe	1.07
ssMOMI.scr	1.05

MOMI Client

New Screens:

- none

New Features:

- On 'Configure:Settings:System Wide' added checkbox to set 'Non-Rated' as the default on all pages that allow the display of rated or non-rated values. (for Julie J.)

Bug Fixes:

- fixed 'Configure:Define Systems' bug that allowed the user to change a system name to one that was already defined, or change the name to nothing. Now an error message will be displayed if a system name is already defined or is empty.
- Under some circumstances it was possible to get the cursor stuck on 'Hourglass'. The cursor is now reset every time a page is changed.

Misc. Items:

- none

MOMI Server

New Features:

- none

Bug Fixes:

- none

Misc. Items:

- none

MOMIFTP

- none

ssMOMI

- none

****

Release_Package 3.37
Release_Date 2003/06/11

Item	Version	
Latest O/S tested	G06.19	
Client Version	3.36	
Server Version	3.37	vproc: T0000G06___V3_37____06_11_2003
Buffer Version	19.35	
History database	3.00	
CONFMOMI	3.01	
OBYMOMI	3.00	
OBYCSQL	3.00	
MomiFTP.exe	1.07	
ssMOMI.scr	1.05	

MOMI Client

New Screens:

- none

New Features:

- none

Bug Fixes:

- none

Misc. Items:

- none

MOMI Server

New Features:

- none

Bug Fixes:

- The screen Files:Enscribe:Cache caused and EMS message to be generated if the system had virtual disk. Now, this screen bypassed virtual disk.
- The screen Files:Enscribe:Cache the field Elapsed Stats Time was converted from GMT to LCT before display. The field appears to be already in LCT. Now, the server leaves the value unchanged.

Misc. Items:

- none

MOMIFTP

- none

ssMOMI

- none

****

Release_Package 3.36
Release_Date 2003/06/10

Item	Version	
Latest O/S tested	G06.19	
Client Version	3.36	
Server Version	3.36	vproc: T0000G06___V3_36____06_10_2003
Buffer Version	19.35	
History database	3.00	
CONFMOMI	3.01	
OBYMOMI	3.00	
OBYCSQL	3.00	
MomiFTP.exe	1.07	
ssMOMI.scr	1.05	

MOMI Client

New Screens:

- none

New Features:

- On 'CPUs:CPU Summary' changed the 'Avg CPU Queue' and 'Avg Mem Queue' to display average queue Length per second.

Bug Fixes:

- On 'Configure:Status:Server Info 1' the 'Collector Master Priority', the 'D47 or later flag' and the 'G06.12 or later flag' were not being cleared when the system was changed. (Fixed)

Misc. Items:

- none

MOMI Server

New Features:

- Added output of higher resolution Average CPU Queue and Avg Mem Queue.

Bug Fixes:

- The server did not return values on K systems on the Process Detail screen for the fields sent-bytes, returned-bytes, received-bytes and reply-bytes. The fields referenced were 64-bit only set on S Series systems. Now, the server will use the older 32-bit fields if the 64-bit fields are not set.

Misc. Items:

- none

MOMIFTP

- When Connected the Connect button is now inactive to prevent 'connecting' without first disconnecting.

ssMOMI

- Changed BlackWood Systems Bitmap and recompile to get new library.

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Release_Package 3.35
Release_Date 2003/06/09

Item	Version	
Latest O/S tested	G06.19	
Client Version	3.35	
Server Version	3.35	vproc: T0000G06___V3_35____06_09_2003
Buffer Version	19.34	
History database	3.00	
CONFMOMI	3.01	
OBYMOMI	3.00	
OBYCSQL	3.00	
MomiFTP.exe	1.06	
ssMOMI.scr	1.04	

MOMI Client

New Screens:

- none

New Features:

- on 'Processes:All Processes' added column of Page Faults to show total page faults since program started.
- on 'Configure:Status:Server Info 1' added new fields:
  - Collector Master Priority
  - D47 or later flag
  - G06.12 or later flag
- to Server Config Info output file added a 3 fields added above plus some internal Memory values(XMemPool) to assist in problem diagnosis.
- on 'Configure:Setting:Misc.Settings' added display of Client Crash Log file location and button to delete old log file.

Bug Fixes:

- On 'Systems:Detail' when the jump-to-system button was pressed for the current system nothing happened. Now the screen will change to the 'Overview' screen the same as it does when changing systems.

Misc. Items:

- minor cosmetic changes.

MOMI Server

New Features:

- Support to report page faults on Process:All Processes screen.
- Support for additional server configuration flags and status under Configure:Status:Server Info n.
- MOMI will now recover if the underlying master measurement (DCPUS) is externally stopped providing the MEASURE file is closed by the external 'stopper'.

Bug Fixes:

- A small memory leak was corrected in the main $MOMI when a server stopped.
- A potentially large memory leak was corrected in the main $MOMI when a client disconnected and outstanding work was still being returned. This problem would primarily show up with remote (i.e. slow)

connections and not on local high-speed connections.
- If an error occurred when retrieving Spooler Job information, a MOMI server could abend as the underlying file was not properly closed and removed from cache. Now, the file is removed from the cache of open files.
- It was possible that two history dumps could occur just after MOMI is started. Now, history will not be dumped until one full history interval has passed. This correction may be visible to users as the initial history dump after starting MOMI may take longer.
- The internal Publish/Subscribe facility had several problems corrected dealing with a small memory leak and file open leak.

Misc. Items:
- none

MOMIFTP
- none

ssMOMI
- none

****

Release_Package 3.34
Release_Date 2003/06/02

Item	Version	
Latest O/S tested	G06.19	
Client Version	3.34	
Server Version	3.34	vproc: T0000G06___V3_34____06_02_2003
Buffer Version	19.33	
History database	3.00	
CONFMOMI	3.01	
OBYMOMI	3.00	
OBYCSQL	3.00	
MomiFTP.exe	1.06	
ssMOMI.scr	1.04	

MOMI Client

New Screens:

- none

New Features:

- On 'System Overview:CPU Info' chart added Comp Traps per second per CPU. when the user Left-clicks the Comp Traps chart it will jump to the Process Entity Screen for that CPU so you can see what processes are causing the Comp Traps.
- On all history screens with a forward/backward button added a display to show when the first/last time has been passed and no more records are available.

Bug Fixes:

- On 'Files:Enscribe:Files' page allocating extents now displays the proper file name on the confirmation button. (Ken K.)

Misc. Items:

- Several small display changes for screen re-sizing.

MOMI Server

New Features:

- Comp Traps are now reported in the CPU entity.
- Support for the Process Detail screen now uses the LISTACTIVE feature of MEASURE for reporting the process entity information using the master measurement number for MOMI. The 'static' information for the process entity is displayed immediately and the first update displayed after 10 seconds and updated every 10 seconds. The file, diskopen and other information on the bottom portion of the screen now report update initially after 10 seconds incrementing by 5 seconds up to 30 seconds.
- The stop logic of servers started by MOMI was revised in support of the usages of LISTACTIVE and the master measurement number.

Bug Fixes:

- History was not able to report an OSS Name Server. The data was present but the search logic did not correctly work with the process name.
- Corrected some possible divide by zero situations with the output of

the Process entity (a few other entities also).

Misc. Items:

- none

MOMIFTP

- none

ssMOMI

- none

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Release_Package 3.33
Release_Date 2003/05/27

Item	Version	
Latest O/S tested	G06.19	
Client Version	3.33	
Server Version	3.33	vproc: T0000G06___V3_33____05_27_2003
Buffer Version	19.32	
History database	3.00	
CONFMOMI	3.01	
OBYMOMI	3.00	
OBYCSQL	3.00	
MomiFTP.exe	1.06	
ssMOMI.scr	1.04	

MOMI Client

New Screens:

- none

New Features:

- On 'SubSystems:Spooler:Jobs:Job Copy' added ability to limit pages copied. Can now limit by starting and stopping page number or offsets like 'F+10' or 'L-25'. (for Paul G.)
- On 'Processes:All Processes' added column 'L/H' to show if process is Low Pin or High Pin. (for Vikas K.)
- On 'Processes:PgmRay' added ability to Right-click on PgmRay screens and send info to Clipboard.

Bug Fixes:

- If the Client is ever saved off the visible screen, the next time it is started it will be re-positioned to make it visible.
- TMF rates on the CPU History chart were incorrectly initialized to 2 instead of 0 at startup.

Misc. Items:

- Client Startup and Resizing has been improved and sped up.
- Added new Display if Client ever crashes. This display includes the Clients program Call stack and other items useful for debugging. If it is ever displayed it also will create a LOG file called MOMI.LOG in the MOMI subdirectory. This LOG is also now included in the System Info text file created in the Config screen. The MOMI.LOG file can be safely deleted at any time.

MOMI Server

New Features:

- The processing of $RECEIVE messages is now tighter and data not recognized will either be ignored or rejected.
- MOMI will now only start one MEASUREMENT per system when started, versus one MEASUREMENT per cpu. Additionally, SQLPROC is now added into the 'master' measurement (preparing for future use).
- The screen Files:Enscribe:File Opener will display opens on a virtual disk if a specific virtual volume is specified.
- The server supports the ability to specify a page range when coping a job.

- An internal enhancement now supports file reused or the ability to open a process once in a server process and share that open among different commands. The screen Processes:Pgmray and altering a Spool job now use this facility.

Bug Fixes:

- If MEASURE was stopped after MOMI had successfully started and begun collecting data, further information from the collectors was not received. The cpu collectors now report and handle MEASURE stopping correctly.
- The screen Files:Enscribe:File Opener would display an error if all openers were displayed (i.e. wildcard) and a virtual disk was present on the system. Now, the virtual disk is ignored.
- The cpu collectors could crash if OSS was taken down or the OSS Name servers were otherwise affected (i.e. stop/start). The coding issue has been corrected.

Misc. Items:

- none

MOMIFTP

- none

ssMOMI

- none

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Release_Package 3.32
Release_Date 2003/04/18

Item	Version	
Latest O/S tested	G06.19	
Client Version	3.32	
Server Version	3.32	vproc: T0000G06___V3_32____04_18_2003
Buffer Version	19.31	
History database	3.00	
CONFMOMI	3.01	
OBYMOMI	3.00	
OBYCSQL	3.00	
MomiFTP.exe	1.06	
ssMOMI.scr	1.04	

MOMI Client

New Screens:

- none

New Features:

- The Optional Screens for OSS is now displayed by default, to not display go into the 'Configure:Settings:Single Screen' and uncheck it.
- Added to History Export Scripts the ability to export the Previous Week , This Week , Previous Month , This Month.(For Vikas K.)
- Added Config button to 'SubSystems:Spool:View Job'.
  Added ability to limit page numbers viewed.
  Also moved 'Font Size adjustment' for Job Display and 'Display lines with Control/Setmodes' onto new Config button.
  Also added to Right-click action menu new item 'Display Job ...' that will change to the 'View Job' screen load the job info, then display the Config panel to allow setting page limits.

Bug Fixes:

- Fixed bug on 'SubSystems:SQL/MP:Table Detail' that would not display the program Usages unless there were table partitions present.
- Fixed bug that removed the incorrect system name from the Drop-down list of systems when a system was deleted from the 'Configure:Define Systems' screen. (good catch Ken K.)

Misc. Items:

- none

MOMI Server

New Features:

- The server will now start an additional process in the same cpu as $MOMI. This is setting up for a future change where we will reduce the number of measurements started by $MOMI.
- Display of a spooler job can now set a page range.
- Certain server processes will now stop themselves faster when the main $MOMI process is stopped.

Bug Fixes:

- Certain server processes would not be auto-restarted if they stopped,

abended or encountered a cpu failure. These processes will now be auto restarted.

Misc. Items:

- none

MOMIFTP

- none

ssMOMI

- none

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Release_Package 3.31
Release_Date 2003/04/14

Item	Version
Latest O/S tested	G06.19
Client Version	3.31
Server Version	3.31 vproc: T0000G06___V3_31____04_14_2003
Buffer Version	19.30
History database	3.00
CONFMOMI	3.01
OBYMOMI	3.00
OBYCSQL	3.00
MomiFTP.exe	1.06
ssMOMI.scr	1.03

MOMI Client

New Screens:

- none

New Features:

- On 'Config:Settings:Single Screen' added check box to 'Optional screens' section for 'SubSystems:OSS' Screens so users not using OSS can hide them. (for Vikas K.)
- On 'Config:Settings:Single Screen' added check box to 'SubSystems:OSS:VT100 screens' section so users can force the VT100 emulator to disconnect when the MOMI Client changes systems. (for Vikas K.)
- on 'SubSystems:OSS:VT100' changed host name from edit box to a drop down list that remembers previous hosts. (for Vikas K.)
- on 'Files:Enscribe:Volumes' added column for Device Type. Total Volume capacity will not 'double' count the Virtual disks and the disk for that pool.
- on 'Files:Enscribe:Files' added columns for Pages Allocated , Extents Deallocatable and Physical FileName.
  Pages Allocated will give an indication on a virtual disk of the amount of space utilized by that virtual disk.
  Extents Deallocatable shows how many extents may be deallocated.
  Physical FileName will display the actual physical filename of a file located on a virtual disk.
  Added Right-click action menu to deallocate all available extents.
- on 'Files:SQL/MP:Statement' and 'Processes:Process Detail:SQL Statements' added column 'Time/Call' that displays the amount of time per call.

Bug Fixes:

- Fixed bug causing MOMI Client to crash when using a Stop-Time on the EMS Messages screen when the date within the EMS messages was not formatted correctly on the Tandem. A mis-formatted date will no longer cause a crash and will display the date as the Tandem sent it. Also stop time previously stopped at given minute now stops at second.
- Fixed bug preventing some of the 'Files:Enscribe:Files' right-click drop down action menu items from working.
- Fixed bug: When Right-Click on Process name and selecting 'display History Process Screen' it would not correctly load the History chart config to get the info.

Misc. Items:

- none

MOMI Server

New Features:

- The server now computes the busy percent for SQL Statement using the window time as seen by the server rather than the delta time in the MEASURE entity itself. The result is the SQL Statement busy time is a percentage of the total time so all the statements should add up to 100% or less.

- Virtual disk on the Files:Enscribe:Volumes screen will now display the total free space of the underlying drives that make up the pool defined for the virtual disk. MOMI will now obtain and compute this data using SPI calls. Previously, values were either not displayed or reflected 100% due to the standard O/S call not returning much data for a virtual disk.

- The screen Files:Enscribe:Files will now display physical SMF files. Physical SMF files have a system generated "funny" name. Previously, these files were skipped.

- The screen Files:Enscribe:Files will now display the physical file name for an SMF file, pages allocated and pages deallocatable.

Bug Fixes:

- OSS CPU information will now only display if the OSS CPU entity is available. Previously, it would display (all zeros) even on non-OSS systems.

- Certain file system error messages would not display if the error was unknown to MOMI. The generic display of the error code now appears.

- EMS messages now have the date/time of the event loaded directly from the binary timestamp of the EMS event rather than using the date/time as provided for the EMSTEXT procedure. On one of our customers system, the date was not formatted with a 4 digit year as expected which caused strange output in the client. The direct formatted by the server corrects and will prevent this situation.

- File alters will now set a 64-bit keys election on D47 and alter systems to allow file extents to be deallocated on format 2 files. Previously, certain alter commands such as allocate extents would fail without this election if the file was unstructured and format 2.

Misc. Items:

- none

MOMIFTP

- none

ssMOMI

- none

****

Release_Package 3.30
Release_Date 2003/03/28

Item	Version	
Latest O/S tested	G06.19	
Client Version	3.30	
Server Version	3.30	vproc: T0000G06___V3_30____03_28_2003
Buffer Version	19.30	
History database	3.00	
CONFMOMI	3.01	
OBYMOMI	3.00	
OBYCSQL	3.00	
MomiFTP.exe	1.06	
ssMOMI.scr	1.03	

MOMI Client

New Screens:

- 'Files:Disk Entity' showing the Measure Disk Entity data.
- 'Files:SQL/MP:SQL STATEMENTS' showing the Measure SQL Statements data.
- 'Process:Process Detail' is a totally new screen replacing the old 'Process:Process Entity' screen.
- 'Process:Process Entity' showing the Measure Process Entity data.
- 'SubSystems:OSS:CPU Info' showing OSS CPU counters.
- 'SubSystems:OSS:Name Servers' showing OSS Name Server data.
- 'SubSystems:OSS:Charts' showing OSS CPU charts.
- 'SubSystems:OSS:VT100' contains a very basic VT100 emulator.
- 'History:CPU' showing all cpu info at given time.
- 'History:Processes' showing all processes info at time.
- 'History:OSS CPU' showing all oss cpu info at given time.
- 'History:OSS Name Server' showing all oss name servers info at time.

New Features:

- on all DropDown Lists added Right-click to bring up menu to clear list.
- on 'SubSystem:Spooler:Job' added option to Copy Job command allowing original job to be deleted after the copy is successfully created, in effect a 'Move' command. (For Paul G.)
- on 'SubSystem:Spooler:Job' added button to Copy Job command to view Collector information such as Percent full and State. (For Paul G.)
- on 'Process:All Processes' added button 'Tree' to display the processes listed on the grid to display as a hierarchical tree of processes by various keys such as descendants,priority,userID,object,login name and home terminal.
- on 'System Overview chart selection' added new Mem Chart to display Virtual, Physical, Locked memory charts and Miscellaneous memory items chart.
- on 'CPU Info' chart added 6 new buttons to show the Message PrePush information (old expedited messages) and moved 5 memory-type charts PageFault,Memory Pressure,Unsponsored Memory,Free Memory,Memory Queue to new Memory Chart.
- on 'Config:Status:History DBs' added File Full gauge.
- on 'EMS Message detail' changed Clipboard copy from text output to screen print output.
- on 'Enscribe:Volume / SubVolume / File' added Export buttons.
- on 'Save Config Info to File' added contents of MOMI.INI file to help

with problem resolution.
- on 'Files:Enscribe:Volume' added Logical Device number.
- on 'File:Enscribe:Cache:Cache Detail' added ability to left-click on the header for a block size and jump to that Disk showing files that have that block size.
- on 'Filter/Sort selections' added additional validation logic and sped up processing and reduced memory use.
- on 'Files:SQL/MP:Partitions' added Left-click jump from Filename to 'Table Detail' for that partition (For Ken K.)
- on 'Files:DiskFile / DiskOpen / File Entity' changed Filename selector to include a button that will display a filename include/exclude selector screen allowing the user to set/get up to 20 selections that are then inserted into the List of Filenames. (for Vikas K.)
- on 'Files:SQL/MP:Table Detail' added right-click action menu to jump to Table, File, Partition, or Indexes screen for that base table from any catalog. (for Vikas K.)
- on 'Files:SQL/MP:File' added right-click action menu to jump to 'Table Detail', 'Partition', 'Indexes', 'Uses' and 'Used By' screen for that file from any catalog. (for Vikas K.)
- on 'System Overview', 'Top Processes', and 'All Processes' added right-click action menu item to when the process is a disk to allow jumping to the 'Disk Entity' screen for that disk.
- on 'Config:Server Info 2' display for the History Database added the Max Extents and Extents Allocated. Added the ability to right-click on Max Extents and change them.
- on 'Config:Setting:System Wide' added check box to choose between pressing a button to display the page help or displaying the help when the mouse is over the '?' button. (For Vikas K.)
- on 'SubSystems:Spool:View Job' and 'File:Enscribe:ViewFile' added Up/Down Buttons to allow user to adjust Font Size of display.
- on 'CPUs:CPU Info' added Memory Page Size.
- on 'SubSystems:EMS Msgs:Config' added File Selector button (...) to allow user to select EMS-style (code 843) Collector files.
- on 'Config:Define Systems' added Right-Click in Logical Name column to allow user to change any systems logical name.
- Upgraded 'Files:DiskFile Entity / DiskOpen Entity / File Entity' to new style screen like 'Disk Entity'.
- New process for obtaining Spooler Names, Spooler Collectors and TCP/IP processes at startup reduces Client Startup overhead on the Server.
- on 'Files:Enscribe:Files' added config button to allow user to limit files displayed by File Code, Roll Forward needed, Broken Files and Corrupt Files.
- on 'History:Export Data' added button to 'Create Export Script'. An export script will allow export automation. To automate an export:
  1) Create, Test and Save a Script
  2) run MOMI as you normally do but add a runtime parameter 'script=<name>' where <name> is the script name saved.
  3) The MOMI client will start, execute the script then stop itself.

  i.e. d:\pgms\momi\MOMI.exe d:\data\momi script=fred
  runs MOMI from "d:\pgms\momi\MOMI.exe"
  sets INI locations to "d:\data\momi"
  executes script "fred"
  finally stops the MOMI client

  The script may also be used for common manual exports by selecting the correct script and pressing 'Execute Script'. (for Vikas K.)
- on 'Config:Settings:Misc.Settings' added ability to export MOMI.INI

file. (for Duane P.)

Bug Fixes:

- Fixed bug causing 'Range Check Error' on slow connection if History was requested before all History Databases had been loaded from the Tandem.
- Bug Fix: when right-click on any chart background would copy the History Chart to clipboard instead of the chart clicked. Now clicked chart will be saved.
- Allowed lower case username for Logons for Aliases (Good catch Scott U.)
- Changed Date to reflect selected system date not local pc date.
- Change Time Zone Local time to PC time not selected system Date & Time.
- Right-Click in EMS detail screen to set EMS colors not working. Fixed.

Misc. Items:

- Converted to use new common MomiSocket object for all TCP/IP communications.
- Sped up all Sorting and Filtering and reduced memory usage for sorts.

MOMI Server

New Features:

a) The server is now aware of the version of MEASURE and features available. This allows measurements to include more OSS counters on newer systems.

b) MEASURE data files now have the format for cpu collectors of DCPUnn (where nn is the cpu number) and for all other measurements of Dxxyyyy (where xx is an incrementing number and yyyy is the server process name).

c) Login name is added to the process history.

d) Cpu types of S7600 & S7800 will now be displayed.

e) History consolidation performance has been improved.

f) Virtual memory is now available by using NSKCOM. One NSKCOM process is run per processor. Note that MOMI must have execute access to this object.

g) Previously, on a K series MOMI could report D45 as the major release when the operating system was actually D48. This is due to a bug (or feature) that the kernel was not kept up-to-date with this value. The logic for obtaining the operating system release will now use the RLSEID file on older K series to get a better picture of the major O/S release version (for Duane P.).

h) More usage of built in functions to help reduce cpu usage.

i) Generation of History output has reduced cpu usage.

j) Display of SQL/MP catalogs now performs a simple query of each catalog to insure that the referenced catalog does indeed exist and is accessible. An error is displayed in the client if an error occurs.

k) Unnamed MOM and GMOM processes are now displayed on the Processes:All Process screen. Unnamed ancestors are displayed as cc,ppppp rather than $:c:p:s.

l) Added support for OSS CPU and Name Server.

m) Many previous 'hard' delays to allow a MEASURE file to close now actually check for the file to be closed. This will result in speedup of some operations and will prevent timing issues on heavily loaded systems.

n) The method of transferring data from the MOMI CPU collectors to the

main $MOMI has been completely rewritten and enhanced to use message blocking, large message sizes (up to 57K where supported) and use as few messages as needed. Larger systems in particular will see performance improvements.

o) New messages are provided to allow the client to obtain initial "name" information without the need to start MOMI servers. Effectively, when a client is started, fewer MOMI server processes are created.

p) Several search parameters are now available on the Files:Enscribe:Files screen to search for files that are broken or corrupt. This logic uses tight loops in the MOMI server to obtain the information with very high performance.

q) The screen File:File Entity will now accept \sys.$?.?.?, where ? is any valid file name. This will allow the Measure File Entity to select files going across to a different system. (Jesse G.)

r) The process history now collects the JOB-ID.

s) Various Spooler and File system errors will now display descriptive text in the client.

Bug Fixes:

a) A bug was fixed in the 16-bit version so that is always obtains the current version of the O/S. The 32-bit native was not affected.

b) A bug was fixed in the 16-bit version that certain extremely large numeric values may have caused a trap. The 32-bit native was not affected.

c) A ProcessH measurement for both user code and system code did not include the system library (it only specified the system code). Additionally, a code space identifier is now returned.

d) A small memory leak was corrected in the servers started by MOMI (the servers would stop eventually so the leak was difficult to see).

e) If a cpu collector was externally stopped, it would not be marked as such. The logic is corrected and the collector will be automatically restarted after a minute or so.

Misc. Items:

a) When a cpu collector does not report for several minutes, it is marked in the client as "HUNG". $MOMI will stop this collector and restart it after a minute or so. Previously, a HUNG collector was told to reset after the first data transmission after the HUNG state.

b) MOMI uses currently undocumented spooler procedures PRINTREAD1 & PRINTINFO1 in support of 32-bit page numbers. This will cause undefined externals on older systems. MOMI reverts to the older procedures on these systems. The Undefined externals will log only once and may be ignored.

MOMIFTP

a) A 'QUOTE GUARDIAN' command is sent to the FTP Server on the Tandem to force systems with OSS set as the default to use the Guardian interface for the transfer. (for Daniel F.)

ssMOMI

a) Converted to use common MomiSocket object for all TCP/IP communications.

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Release Version 3.10
Release_Date 2003/03/13

Item	Version	
Latest O/S tested	G06.17	
Client Version	3.21	
Server Version	3.21	vproc: T0000G06___V3_21____11_20_2002
Buffer Version	19.11	
History database	3.00	
CONFMOMI	3.01	
OBYMOMI	3.00	
OBYCSQL	3.00	
ssMOMI.scr	1.03	
MomiFTP.exe	1.05	

Note: Version with password for BITUG (British Isles Tandem Users Group.

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Release Version 3.09
Release_Date 2002/11/25

Item	Version	
Latest O/S tested	G06.17	
Client Version	3.21	
Server Version	3.21	vproc: T0000G06___V3_21____11_20_2002
Buffer Version	19.11	
History database	3.00	
CONFMOMI	3.01	
OBYMOMI	3.00	
OBYCSQL	3.00	
ssMOMI.scr	1.03	
MomiFTP.exe	1.05	

MOMI Client

a) Fixed bug causing Client to crash if Files : Enscribe : SubVolume was displayed for a SubVolume containing a Format2 File (Big File).
b) Added Total File Size display to Files : SQL/MP : File screen.

MOMI Server

none

MOMIFTP

a) Made change to prevent pressing the 'Put Files on Tandem' button multiple times.

ssMOMI

none

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Release Version 3.08
Release_Date 2002/11/20

Item	Version	
Latest O/S tested	G06.17	
Client Version	3.20	
Server Version	3.21	vproc: T0000G06___V3_21____11_20_2002
Buffer Version	19.11	
History database	3.00	
CONFMOMI	3.01	
OBYMOMI	3.00	
OBYCSQL	3.00	
ssMOMI.scr	1.03	
MomiFTP.exe	1.04	

MOMI Client

a) Fixed bug cutting the last character off of each line in the File / Enscribe / View File screen if the file was not a edit-type file.
b) Fixed bug causing columns to resize incorrectly when using a filter on Spooler and TCP/IP screens.

MOMI Server

a) Error messages returned to the client could have had formatting characters present for certain message types. These are corrected.
b) Spooler devices, if using remote process names, displayed with spaces instead of "."'s. The device names are now correctly displayed.
c) The screen Subsystems / TCP/IP Subnet would cause a crash if an an invalid subnet mask was found. The logic in question was the generation of the CIDR field. Invalid subnets are now displayed with a CIDR of spaces and no crash will occur.
d) The screen Files / DiskOpen Entity could display the local system instead of a remote system in the Opener Name field. The correct system is now displayed.

MOMIFTP

a) Added check to make sure MOMIFTP.exe is able to find the 2 config files (PCFiles and TanFiles) needed to perform the FTP to the Tandem. If they are not found, an error message will display and the program will not allow the user to connect to the Tandem Server.

ssMOMI

a) Added Top Processes to screen saver.

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Release Version 3.07
Release_Date 2002/11/11

Item	Version	
Latest O/S tested	G06.17	
Client Version	3.19	
Server Version	3.20	vproc: T0000G06___V3_20____11_08_2002
Buffer Version	19.11	
History database	3.00	
CONFMOMI	3.01	
OBYMOMI	3.00	
OBYCSQL	3.00	
ssMOMI.scr	1.02	
MomiFTP.exe	1.03	

a) Added Print List Button for ProcessH entity (for Larry K.)
b) Fixed bug preventing setting EMS Color to purple.
c) Added EMS Filter 'Include if all present' to current 'include if any present' and 'exclude if any present' (for Gary P.)
d) Changed EMS Filter limits from 10 includes/10 excludes to unlimited number for all three filter types (for Harald E.).
e) Added 6 new EMS hilight colors (bright versions of current colors) for a total of 12 hilight colors (for Harald E. and Gary P.)
f) Changed Lunch Selector to hide selections (for Judy F.)
g) A bug was fixed in the server that would cause it to perform constant read operations against the HST03DB or HST04DB history files when they were started from scratch (i.e. empty). A restart of MOMI would correct the situation.
h) The server now stops reading the history files when the client requests History / Chart for an item, such as a process name, that is not present in the file and then pushes the clear button or selects a new item to search. Previously, the server did not check with the client from time-to-time to insure the search was still active.
i) The server formatting of some file system errors had mask, or formatting, characters present. This have been removed.
j) The server now allows search for a blank ancestor on the Processes / All Processes screen.
k) The server now uses a different structure when retrieving a Spooler collector status. This allows total units and units allocated to exceed the size of signed 16-bit value.

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Release Version 3.06
Release_Date 2002/10/23

Item	Version	
Latest O/S tested	G06.17	
Client Version	3.18	
Server Version	3.19	vproc: T0000G06___V3_19____10_21_2002
Buffer Version	19.10	
History database	3.00	
CONFMOMI	3.01	
OBYMOMI	3.00	
OBYCSQL	3.00	
ssMOMI.scr	1.02	
MomiFTP.exe	1.03	

a) Added Notification on 'Systems : Detail' screen if problem on system.
   - CPU Down / CPU Hung / Measure Down will display problem and set display to Red Box and Lettering.
b) Added Color Triggers Yellow/Red for both Volume and File Full percent.
c) Added Screen Help. Moving mouse over small '?' box beside help button will display help for the current screen. The help will provide a general description of the function of the screen and describe the left and right mouse button clicks active for the screen.
d) The SQL/MP screens File and Index now display the 'actual' or current number of index levels. The index levels in the SQL catalogs are only updated with an Update Statistics. This allows a comparison of what the catalogs have recorded versus the real value.
e) The server has a memory leak corrected for several of the SQL/MP screens.
f) The client and server will now report in the "Save Config Info To File" the MEASURE version, MEASURE release and user id $MOMI is running under.
g) The server will ignore the +4060 (table or view missing) warning and +/-6008 (update statistics is needed) warning or error.
h) MOMIFTP had small cosmetic changes.

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Release Version 3.05
Release_Date 2002/10/14

Item	Version	
Latest O/S tested	G06.17	
Client Version	3.17	
Server Version	3.18	vproc: T0000G06___V3_18____10_14_2002
Buffer Version	19.09	
History database	3.00	
CONFMOMI	3.01	
OBYMOMI	3.00	
OBYCSQL	3.00	
ssMOMI.scr	1.02	
MomiFTP.exe	1.02	

a) Fixed Bug in File Volume Sort on Percent Full.
b) Fixed Bug with CPU Busy on Overview Screen if smoothing was active.
c) Fixed Bug that prevented display of Overview Screen's Overall System CPU Busy.
d) Added Left-click jump from Files:SQL/MP:Tables to Table Detail.
e) Server now starts on non-G06.17 systems. A change in the MEASURE interface structures cause MOMI to generate a 3251 error messages. We have opened a problem ticket with HP/Compaq/Tandem.
f) Note that changes to support G06.17 prevent MOMI from starting if MEASURE is not running. Previously, MOMI could be started first and MEASURE second (we did not recommend it, but it could be done). We hope to restore this capability in a future release.

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Release Version 3.04
Release_Date 2002/10/11

Item	Version	
Latest O/S tested	G06.17	
Client Version	3.16	
Server Version	3.17	vproc: T0000G06___V3_17____10_11_2002
Buffer Version	19.09	
History database	3.00	
CONFMOMI	3.01	
OBYMOMI	3.00	
OBYCSQL	3.00	
ssMOMI.scr	1.02	
MomiFTP.exe	1.02	

a) Added New screens under Files tab:
- Enscribe: sub screens display Enscribe file info
  - Volume : Display Volume info including Percent Full
  - SubVolume : Display SubVolume info including total size of files in SubVolume and number of files in SubVolume
  - Files : Display File info including Percent Full
  - File Detail : Display all details about file including any Partition and Alternate Key Files info
  - File Opener : Display File Openers
  - View File : Display any File (any file type but edit will display '~' in place of non-printables). Note: May get a more sophisticated non-edit view later).
  - Cache : Display Volume Cache Stats (with popup for details)
- SQL/MP: sub screens display SQL/MP info
  - Catalog : Displays All System and User Catalogs
  - Base Table : Displays Base Table info
  - Table : Displays Table info
  - File : Displays File info
  - Partition : Displays Partition info
  - Index : Displays Index info
  - Table Detail: Displays Base Table,Table,Partitions,Indexes, and Usages info for a single Base Table
  - Program : Displays Program info
  - Usage : Displays Usage info (all Usages, Used by or Uses)

b) Enscribe:Files screen has right-click menu with the following commands:
- View File Details
- View File Contents
- View File Openers
- Purge File
- Purge File Data
- Set File Security
- Set File Owner
- Set File Code
- Set File Max Extents
- Set File Audited on/off
- Set File License on/off
- Set File ProgId on/off
- Set File Audit Compress on/off
- Set File Buffered Writes on/off
- Set File Verify Writes on/off

- Set File Serial Writes on/off
- Set File Clear-on-Purge on/off
- Set File Refresh EOF on/off
- Reset File Broken Flag (single or all partitions)
- Allocate Extents

c) Added new screen in Config References that performs unit conversions.

d) Added 2 new screens under the 'Systems' Tab

Basic - old System list moved to the Basic tab. This screen is used to select what systems are monitored and provide a basic look.

Detail - This new screen will display only the systems selected on the Basic screen to be monitored (for Paul G.). It displays an expanded cpu busy chart showing each CPU on the system busy (if system is version 3 or above). A left-click on a cpu bar will display the 6 busiest processes on that cpu. A left-click on the system name button will jump to that system.

e) Added new subtab 'Priority Charts' on CPU tab.

- Added 2 new screens under CPU Priority subtabs , the 4 charts on the 2 screens are various representations of CPU utilization by process priority.
  - 'Charts 1' has 2 charts
    - 'CPU Percent Busy per Priority':
      This chart was moved from the 'System Overview' screen. It displays what percent of a cpu is used by each process priority (1-255). A Left-click on a line will display stats about processes below, at and above that priority.
    - 'CPU Busy with Processes Priority <pri> and above:
      This is a new chart allowing the user to set the important 'Production' priority of their system then see how busy the CPUs are at that priority and above. This will allow the user to ignore lower priority processes that are not effecting the 'production' application because the MWE (Mixed Workload Environment) is protecting the higher-priority processes. A left click on a bar will display a breakdown of the chart results.
  - 'Charts 2' has 2 charts that show the same data in either a 3 or 2 dimensional chart. They both display the percent of each CPU consumed by processes at a set process priority and below.

f) Added new function on Config Screen to allow user to Auto-Start MOMI when either you log on to the PC or when anyone logs on(for Vikas K.). If the 'any user' log on Auto-Start is selected the User must have 'Administrator' rights(if applicable) or the save will fail with a security failure.

g) Server supports new screens for client version 3.16. Part of this new support is the requirement that MOMI be SQL/MP compiled. See the server install documents for details on this extra step.

h) Server supports a file name format of $*.subvol.file for the client DiskFile, DiskOpen and File entity screens. In addition, up to 20 file names may be specified versus the previous limit of 10.

i) Server now always provides a response back to the client in the event a message type was not recognized. Previous, certain unknown message types would not be displayed in the client. (basically this would only occur if a newer version of the client was running against an older version of the server.

j) Server now properly returns multiple spooler plus object file names for the client configuration screens. The problem only affected

information client screens.

k) Server now insures that at least one disk file extents can be allocated for each history file. Previously, if the server created a history file and no disk extents could be allocated, dumping of history into the file could cause a looping condition in the history consolidation server (a low priority process). A file that cannot allocate at least one disk extent will not be enabled for processing.

l) Server will properly function under G06.17 with the MEASURE file entity. Previously, this entity would not display due to growth of the record size in this release of the O/S. Additionally, the logic for dealing with different size MEASURE records in various O/S releases has been revised to help provide better future transparency to growth in the MEASURE data records.

m) Due to the changes to support G06.17, initial MOMI startup will take between 15-20 seconds longer than previous releases. Note that this is only the initial startup period affected. An EMS message is logged to $0 if problems are detected during the initial startup period.

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Release Version 3.03
Release_Date 2002/08/20

Item	Version	
Latest O/S tested	G06.16	
Client Version	3.15	
Server Version	3.16	vproc: T0000G06___V3_16____08_20_2002
Buffer Version	19.08	
History database	3.00	
CONFMOMI	3.01	
OBYMOMI	3.00	
ssMOMI.scr	1.02	
MomiFTP.exe	1.01	

a) Fixed bug causing incorrect filtering on a column that had been moved.
b) Screen Saver has bug fixed that did not remove old cpu's when changing from system with large number of cpu's to system with smaller number. Also, the background Tandem symbols were removed.
c) The Server now correctly sets the process file security field on the All Processes screen.
d) Server has several minor optimizations for general communication with the client and for processing EMS messages.

****

Release Version 3.02
Release_Date 2002/08/09

Item	Version	
Latest O/S tested	G06.16	
Client Version	3.14	
Server Version	3.15	vproc: T0000G06___V3_15____08_08_2002
Buffer Version	19.07	
History database	3.00	
CONFMOMI	3.01	
OBYMOMI	3.00	
ssMOMI.scr	1.01	
MomiFTP.exe	1.01	

a) All Charts now bring up pop up menu to select 'Copy Chart to Clipboard' when mouse is right-clicked.
b) TMF Chart now has gauge showing percent of TMF audit in use. Config now has ability to set when TMF audit gauge changes from Green to Yellow to Red. The System Overview TMF State field will also have its color set.
c) History Chart now has 3 buttons for scaling of the chart:
   1) Set Chart Max to 100 - chart scales from 0 to 100
   2) Set Chart Max to AutoSize - chart scales from 0 to maximum value
   3) Set Chart to Best Fit - chart scales from minimum to maximum
d) The Gray EMS Message color has been changed to a purple to make it show up better on most windows color schemes (for Jeremy G.)
e) The Print Screen button can now be set by a right-click to either send-to-printer or copy-to-clipboard. If no printer is installed only copy-to-clipboard is available.
f) Hints changed to balloon-type hints.
g) The MOMI screen saver now uses the Registry instead of INI file to prevent security problems on some PCs.
h) The MOMI FTP has many changes to improve the usability and security of the program. (for Ken K.)
i) When the server displayed TCP/IP routes and subnets, this could result in an abend of the MOMI server process. This has been corrected along with a memory leak. Along the way we discovered a flaw in the SPI interface for TCP/IP that may result in not all routes being displayed if a large number are defined. We are reporting this to Tandem.
j) The server param PRIORITY-MOMI was added.
k) The server now reports the $RECEIVE response time on the Process Entity screen in a variable format up to days. Previously, it was limited to 99.999 seconds. Now the format is [dddd [hh:[mm:]]][ss.mmm].
l) When two or more users selected the same DiskFile, DiskOpen, File or ProcessH Entities, the clients would get blank screens. Internally, the Server attempted to optimize these by sharing the measurements. Changes in the MOMI 3.xx series does not support this. The problem is corrected. The Server will now configure a separate measurement for each.

****

Release Version 3.01
Release_Date 2002/07/31

Item	Version	
Client Version	3.13	
Server Version	3.12	vproc: T0000G06___V3_12____07_31_2002
Buffer Version	19.06	
History database	3.00	
CONFMOMI	3.01	
OBYMOMI	3.00	
Latest O/S tested	G06.16	

a) Client will now correctly perform the AutoLogon function for all systems.
b) On CPU History chart, TMF will correctly scale the right axis labels.
c) Client now consumes fewer PC cpu cycles on the View Spooler Job download from the Tandem.
d) The server was not performing scheduled deletion on records in the HST02DB, HST03DB and HST04DB files based on the params HSTxxDB-HISTORY-DUMP (where xx is 02,03,04). Automatic deletion was occurring when the file filled.
e) Previously, two separate servers were used to delete records and consolidate data from one history file into another. Now only one server is used. Additionally, this server is limited by default to a cpu busy of 5%. The new param CPU-LIMIT-HSTXXDB-CONSOL is used to alter this value.
f) If the params HSTxxDB-HISTORY-DUMP (where xx is 02,03,04) were given the value of zero, the MOMI server could crash. Now, a value of zero has the effect of turning dumping off.
g) A timing window existed in the startup of MOMI CPU collectors that some or all of the TCP/IP and Spooler processes would not display in the client. This could occur if the system had a large number of processes per cpu, was short on memory, MOMI was running at a low priority, higher priority processes were slowing down the MOMI cpu collector or combinations thereof. The collection and startup protocol has been revised to correct this problem.

```
********************************************************************************
Item              Version
----              -------
Release_Date     2002/07/19
Server Version         3.11  vproc: T0000G06___V3_11____07_19_2002
Client Version         3.12
Buffer Version        19.05
History database       3.00
CONFMOMI              3.01
OBYMOMI               3.00
Latest O/S tested    G06.16
```

a) Client will now display debugging information correctly when operating in miniMOMI mode.

b) Server now will now function with a password on a system with a zero byte length system serial number. In this situation, the system serial number was in an error condition.

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Item	Version
Release_Date	2002/07/18
Server Version	3.10 vproc: T0000G06___V3_10____07_17_2002
Client Version	3.11
Buffer Version	19.05
History database	3.00
CONFMOMI	3.01
OBYMOMI	3.00
Latest O/S tested	G06.16

a) Added Right-Click on background of any chart to send copy of chart to Clipboard also removed Clipboard button on History Chart.(for Vikas K.)
b) More small size and spacing adjustments for Large/Small Fonts.
c) Added ability to send Trace Log to a text file.
d) Added hints whenever Left or Right Mouse Clicks are active to show what the click will do.
e) Server reports additional configuration information to the client.
f) Server reported process memory used in the client history chart 10 times greater than it really was (decimal point was off by one).
g) Server now reports TCP/IP ports correctly when querying PTCP/IP over a 100 Mb Ethernet card. Previously, the SPI responses were in an order not expected. This affected output on the client TCP/IP Process Status Screen.

****

Item	Version
Release_Date	2002/07/10
Server Version	3.09 vproc: T0000G06___V3_09____07_10_2002
Client Version	3.10
Buffer Version	19.04
History database	3.00
CONFMOMI	3.01
OBYMOMI	3.00
Latest O/S tested	G06.16

a) Major change in the Configuration pages by adding new sub pages.
   - Status = Client and Server Config information
     - Server Info = MOMI Server / Client basic info
     - TCP/IP Info = MOMI Server TCP/IP info
     - History Info = MOMI Server History Databases info
     - Spooler Info = MOMI Server Spooler/SpoolerPlus locations
   - Settings = Client User Options
     - System Wide = Settings affecting entire client
     - Single Screen = Settings affecting single pages
     - Misc. Settings = Less used settings affecting entire client
   - Define Systems = Page used to add new systems
   - Trace Log = Display of messages between client and Server
   - Tools = Page of useful tools
     - Calculator
     - Stopwatch
     - Ascii / Ebcdic conversion chart
     - Number base conversion tool (2/8/10/16)
   - Reference = Pages of reference material
     - File System Errors = File System and SQL errors as of G06.16
     - 6530 Codes = 6530 terminal control and escape sequences

b) On all Configuration/Server Info pages a 'Export Info to File' button has been added to dump all Server/Client and PC configuration to a text file. This text file can be sent to BlackWood to help diagnose problems.

c) Fixed Bug in History Export for System Info that prevented the 'Limit by days or hours' from working correctly.

d) Server supports returning configuration information to the client.

e) Server incorrectly tried to obtain PFS information for the Process Entity screen when running on an O/S earlier than D48. This could cause the screen to fail. Now, the PFS information is not obtained and simply displayed as zero.

f) The server did not clear the TMF state field (Overview screen in client) after loading a new state. This would leave text from the previous message.

g) The server now displays the percentage of used TMF audit capacity in the TMF state field. Additionally, it will also display if TMF is using audit trail overflow.

h) Several server parameters (not the normally used ones) in the CONFMOMI file were modified or had documentation corrected. Please review the document "Tandem CONFMOMI settings.txt".

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Item	Version
Release_Date	2002/06/28
Server Version	3.08 vproc: T0000G06___V3_08____06_28_2002
Client Version	3.08
Buffer Version	19.03
History database	3.00
CONFMOMI	3.01
OBYMOMI	3.00
Latest O/S tested	G06.16

a) Allowed Export Time limits to be until midnight.
b) Improved Win9x performance by reducing resources required.
   Checkbox on Config to reduce Win9x resources has been re-enabled.
   This Checkbox should only be checked if running Win95/Win98/WinME.
c) Server has changed the method to calculate 'Time CPU Last Loaded' to
   improve accuracy.
d) Some work done to improve the look under Large and Extra-Large Fonts.

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Item	Version
Release_Date	2002/06/24
Server Version	3.07 vproc: T0000G06___V3_07____06_21_2002
Client Version	3.07
Buffer Version	19.02
History database	3.00
CONFMOMI	3.01
OBYMOMI	3.00
Latest O/S tested	G06.16

a) Resize ability restored.
b) Changed default font from 'MS SANS SERIF' to 'VERDANA' because true type fonts resize better.
c) Added button on History Chart to send Copy of Chart to Clipboard. (for Vikas K.)
d) History Export can be limited to selected days of week and times of day (for Vikas K.)
e) The client Autologon logic has been corrected.
f) Server did not process history for the System entity (TMF rate) on the history files (any file other than HST01db).
g) Server now removes 'junk' multicast records in TCP/IP status.
h) If a cpu collector is stopped or abended, the server now returns a new state displayed as "STOP" in the client. The collector will be automatically restarted after a few minutes.
i) A cpu under extremely heavy memory pressure would returns errors in response to process queries. This could cause the data MOMI has about each cpus to be reported as just started. Internally, the error would reports all processes as stopped and the processes were 'rediscovered'. Also, this could cause duplicate spooler and TCP/IP processes to be reported. Additional error checking has been added to prevent this situation.
j) Server now reports to client the following fields in history correctly (instead of zero); cpu, memory_pressure; cpu, processes_created; cpu, processes_deleted; process, memory_current_megabytes.
k) Server performance for history consolidation has been greatly improved.
l) Server now identifies cpu types of S7400, S76000 and S86000.
m) ProcessH now functions under recent releases of O/S.
n) The server was not using the correct priority for EMS servers.
o) A new parameter in CONFMOMI of Fname-spooler-plus is now used to identify a Spooler Plus explicitly to MOMI. Note that previously MOMI automatically identified a spooler from a spooler plus.

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Item	Version
Release_Date	2002/06/15
Server Version	3.04 vproc: T0000G06___V3_04____05_29_2002
Client Version	3.06
Buffer Version	19.00
History database	3.00
CONFMOMI	3.00
OBYMOMI	3.00
Latest O/S tested	G06.15

NOTE: This is a major release with many new features

a) Client now written in Delphi 6.0.

b) All Dates are standardized in yyyy/mm/dd format.

c) Added Overall System Busy chart at top of Overview screens CPU Busy Chart (For Don L.)

d) Added a 'Use Filter' button on the 'EMS Filter Define' panel. This will allow the user to define a filter then immediately test it without saving the filter.

e) Total re-write of the History Chart and History Detail screens for added efficiency and useability.

f) The Client now has all 'name' entry fields replaced with a listbox that will retain the last 'n' number of entries for that field. The number of entries can be set in the Config screen from 3-20. The entries are retained. (for Jan P.)

g) Added PCB info into CPU History. (for Vikas K.)

h) Added System Entity into History for TMF Rate. (for Vikas K.)

i) Added new History Process Start/Stop page to display what processes started and stopped within the history database (For Don L.)

j) Added New History page dedicated to History Export.

k) History Export data may now be dumped in either System LCT or GMT time.

l) Modified EMS logic:
   - Messages are now brought into memory very fast and efficiently then put onto the screen at a controlled speed.
   - added EMS scroll speed slide bar to allow real-time adjusting of the scroll speed.

m) Added check box on Config screen to allow user to activate/deactivate freeing of Windows 95/98/ME resources. If a user is not using one of these Operating Systems they can uncheck this box and gain some performance improvements.

n) Added new PgmRay screen into Processes Tab. PgmRay is a interface into BlackWood System programs only(such as BWMOMI and BWMTCP). It cannot be used to view any other programs. If you do not want to view this tab it can be turned off in the Config Misc. setting screen.
   Note: PgmRay should not harm any 'well written' program if you mistakenly use PgmRay on it, but just to make sure never PgmRay any program unless you are sure it is compatible.
   Note: PgmRay will send a message to any program it is monitoring with a qualified opener (i.e. $MOMI.#PGMRAY) and any 'well written' program that does not recognize the qualifier should discard the messages.

o) Added optional display of process detail when cursor is over cpu,pin on System Overview's Top Process list. This can be turned on/off on the Config Screen on the System Config section.

p) Added ability to display Process Last Start/Stop and History Last Start/Stop with either a vertical or horizonal split.

q) Added item on Right-Click menu for 'System Overview' process name and 'Process - Top Processes' process name to allow history charting of the selected Process.
r) Added item on Right-Click menu for 'System Overview' process name and 'Process - Top Processes' process name to allow actions to be performed against the selected process. Added Ability to stop,abend, activate,suspend and alter the priority of processes (Note: only works if the user is logged on and has the correct security to perform the action).
s) Added New Time Zone pop up window to display basic time zone info around the world(For Don L.). It is displayed by clicking on the system time in the top right corner of the MOMI screen. A basic time zone list is built into MOMI but if the file TimeZone.mom is installed in same location as the Calendar.mom and MOMI.ini file it will replace the built-in list, this will allow you to add new locations.
A default TimeZone.mom is included as a starting point for your own custom time zone list (Use NotePad to edit TimeZone.mom).
Note: These time zones are not guaranteed to be accurate and do not take into account Daylight Savings times. (maybe later)
t) Added Connection Timeout value to determine how long to wait for a response from the Tandem before resetting the Socket. The default is 30 seconds but it may be changed to up to 120 seconds if the user has a very slow connection (i.e. slow dialup).
u) Added user id of process to Top Processes screen.
v) Added Top Processes selection criteria of Suspended Processes only.
w) Added Records-used, records-accessed, and disk-reads to files on Process Entity screen.
x) Added 'Export to tab-delimited file' to the All Processes screen.
y) Server will mark a cpu as HUNG if it does not report regularly. This can occur if a higher priority process prevents a MOMI collector from executing timely. The collector will report "normally" once the condition corrects.
z) Many values now report in a "per second rate" instead of a 10-second window rate. ServerNet I/O, write and read counts are examples.
aa) MOMI now configures a MEASURE for all processes. This provides additional counter information.
ab) TCP/IP threads are now allocated dynamically. The CONFMOMI param TCPIP-THREADS still defines a maximum but now has a default value of 100.
ac) Filter-by-ObjectName now works on All Processes screen.
ad) Font for PgmRay screen set to correct fixed font.
ae) Client startup logic has been altered to prevent initial crash on certain PC's.
af) Server will no longer generate ABENDS if an invalid history file name, such as non-existent volume, is specified.
ag) Server will now self-correct if the MEASURE subsystem is taken down and restarted. Previously, MOMI had to be restarted.
ah) Server logic for cpu down/up has been revised to delay the startup of a collector when a failed cpu is restarted.
ai) Fixed bug preventing update of Top Processes screen after switching to Top Processes via clicking on the Overview CPU chart.
aj) Server would return "Process not running" on certain formats of disk file names. This has been corrected.
ak) Server now sets the opener system for the DiskFile Entity.
al) Server will now tolerate and display correct information for certain release levels of TCP/IP where the SPI interface was incorrectly expanded.

am) Server now returns a field SQL operation time for the DiskOpen Entity.
an) Server now alters down the number of extents for the MEASURE datafiles created when MOMI starts (Dnn where nn is the cpu number). This will reduce the amount of disk space consumed over time. Note that a MEASURE error 45 may sometimes be generated in $0. This error can be ignored.
ao) The Server helper program BWMTCP could loop in the event TCP/IP was stopped. This problem was corrected. Additionally, several performance enhancements were made.
ap) The Server could have returned the same job repeatedly when a large number of jobs were present.
aq) The Server now deletes history file items by date when a full file condition occurs. The causes all history items to delete out evenly.
ar) The Server now changes the owner of a job without displaying an error. The server was trying to obtain info about a job it no longer owned.
as) The server now leaves a job in a hold state when altering an attribute that requires the job to be placed in a hold state. Previously, the job would be started after the alter operation. Additionally, copying a job in a hold state results in the job copy also being in a hold state.

****

Item	Version
Release_Date	03/28/2002
Server Version	2.11 date in vproc 01/15/2002
Client Version	2.14
Buffer Version	16.20
History database	1.00
CONFMOMI	1.00
OBYMOMI	2.01
Latest O/S tested	G06.15

a) Forced screen to System Overview when System being monitored changes.

****

```
Release_Date    03/01/2002
Server Version       2.11  date in vproc 01/15/2002
Client Version       2.12
Buffer Version      16.20
History database     1.00
CONFMOMI            1.00
OBYMOMI             2.01
Latest O/S tested   G06.14
```

a) Fixed bug in Spooler View job when Print Job was pressed any leading spaces on a line of data were not printed.

b) Fixed bug in EMS message 'Clipboard Copy' that would put unprintable characters at the start of the line for some editors.

c) Server now passes through "unchanged" unprintable characters in the "View Job" request with the exception of nulls. This allows foreign characters sets to appear in the client. Previously, all non-printable characters were converted to "~".

d) Server now clears a CPU's counters if no report is available for 3 or more measurement intervals (approximately 30 seconds). Previously, a CPU collector that was stuck or not reporting did not clearly show up in the client. Note: if this event should occur, MOMI will need to be stopped and restarted. The need to restart has been eliminated in a later release.

e) Server creates fewer helper processes for when scrolling forward and backward through history.

f) Server could create save files under certain conditions of viewing history and the client had logged on to an ID that did not have access to the MOMI history file. This is corrected.

g) Server adds to output of the diskfile entity SQL inserts, updates, deletes and ending rows. Previously, the server did not load these fields. Note that only later IPMs for MEASURE and DP2 are both required to make these fields available.

****

Item	Version
Server Version	2.07 date 08/15/2001
Client Version	2.07
Buffer Version	16.19
History database	1.00
CONFMOMI	1.00
OBYMOMI	2.00
Latest O/S tested	G06.13

a) Made change to reduce Windows Resources used by the client. This should make it work better on Win9x/ME PCs.
b) Changed layout of Config screens to allow Auto-Logon setting and to start organizing the pages into a more logical layout.
c) Added ability to Auto-Logon when changing systems. If the config is set to allow Auto-Logon and the User has previously successfully logged onto the new system MOMI will automatically issue the Logon Request. Note: This is only until the MOMI client is restarted (at which time the user will have to manually logon again).(for Rob G.)
d) Fixed bug in multiple Spooler job requests where even though the actions were performed the Job screen did not always display the changes unless the user manually refreshed the list.
e) Added Confirm Disable checkbox in the Config screen. This will prevent the confirmation screen from displaying and all actions will be immediate with no last chance to cancel.
(currently used for the Spooler Actions)
f) Fixed bug causing Spooler Job UnLink to not work correctly.
g) Added History Detail screen under Main History tab. User may enter date/time and cpu of history wanted or right-click on a cpu chart in a history chart and the cpu and list of processes at that time will display.
h) Server supports the new features of spooler copy job, history cpu, history process, change job report-name, change job form-name, change job copies and change job selection priority.
i) Server bug corrected that a user id without a password was overwriting memory. In addition, a memory leak with passwords was corrected.
j) Server has various performance improvements.
k) Server documentation indicated ticks (') around the params for fname-spooler-n. This is incorrect and was removed.
l) Server reported some unnamed processes as backups. This is corrected.
m) Server process history did not store the pin completely and omitted the last digit. The full cpu/pin is now stored. History generated after this server version is installed will be correct.
n) Server now expands and allows the user to input for history display a cpu pin without leading zeros.
o) Server has a bug fixed that prevented a cpu collector from restarting after a cpu failure. The client would continue to report the cpu as down even after it was restarted. Also affected were other servers created by $MOMI. These are corrected.
p) Server now remembers the system configuration when first started and will report any cpu not responding as down. If a system is reduced in size online, it is necessary to restart $MOMI to acknowledge the smaller system as "correct".
q) Server previously would not create a backup if -2 was specified as the backup cpu (indicates automatic selection), the system was an S

series and $MOMI was running in the highest cpu of the system and it was not cpu 7 or 15. This is corrected.

r) Server now reports ancestors of unnamed processes.

s) Server was not reporting invalid message numbers correctly to the client. This could occur if a client of a later release than the server requested a service not supported. This situation is now handled and reported correctly.

t) Server could generate an error 11 on the history file if the file was full and data was being deleted to make room for additional history. This is corrected.

u) Server could authenticate a logon but later usage would be rejected by $CMON. The Guardian procedure user_authenticate did not communicate with $CMON if only verifying a logon. MOMI server now performs a "full" logon when a user logs on which causes communication with $CMON.

v) Server would generate bad messages to a client which disconnected but had issued a history request for an item that was not found in the database and auto-update (internally generated) was requested. This is corrected.

****
Server Version 2.05 date 07/16/2001
Client Version 2.04
Buffer Version 16.18

a) Fixed small memory leak in server.
b) add following functions to Spooler Jobs screen:
   - Right click now allows Changing Owner.
   - Right click now allows Linking and unlinking a job to a Batch ID.
   - user can now select multiple jobs that the Right-click action will
     be performed against. (for Jeff R.)
c) added drill-down for CPU Info charts where appropriate:(for Mark J.))
   - Process Created and Deleted   -> Last Start Stop screen
   - Disk IOs/Sec and Cache Hits/Sec -> Top Process Screen, Selected CPU,
       Disk only, and sorted by 'Busy percent'.
   - Dispatch Rate and CPU Queue   -> Top Process Screen, Selected CPU,
       All processes, and sorted by 'on the Ready List'.
   - Free Memory and Memory Queue   -> Top Process Screen, Selected CPU,
       All processes, and sorted by 'Memory used'.
   - Page Faults and Memory Pressure -> Top Process Screen, Selected CPU,
       All processes, and sorted by 'Page Faulting'.
   - other charts currently have no drill-down capability.
d) added new fields to TCP/IP Route grid:
   - CDIR (Classless Domain Internet Routing)
   - Subnet Mask in Hex and Decimal
   - Metric (hops to destination)

****
Server Version 2.04 date 07/02/2001
Client Version 2.03
Buffer Version 16.17

a) Added Hand Pointer cursors indication L , R or LR to display which mouse buttons are active.
b) Made changes to font resizing when MOMI is resized.
c) Reworked 'All Systems' probing logic to prevent unnecessary open and closes of the system probe socket. (for Larry K.)
d) Added Buttons to Config screen to allow user to go directly to the BlackWood Systems home page and to Email BlackWood support with questions/comments.
e) Added Processes Deleted and Free Measure CIDs to CPU Summary screen.
f) Added New CPU Info chart to System Overview screen.
New charts are:
- Dispatch Rate - Disk I/O's per second - Cache Hits per second
- Free Memory - Memory Queue - Page Faults
- Interupt Percent - CPU Queue - Free CID's
- Process Created - Process Deleted - Low PCB's
- High PCB's - TLE's - Memory Pressure
g) Added new tab under 'CPU' called 'CPU Info'.
h) Added new Main Tab called 'SubSystems'.
i) Moved 'EMS Msgs' tab under 'SubSystems' Tab.
j) Added new tab under 'SubSystems' for 'Spool'.
k) Added new subtabs under 'Spool' for 'Spooler','Collector','Device', 'Job','Loc','Print' and 'View Job'.
l) Added new tab under 'SubSystems' for 'Tcp/ip'.
m) Added new subtabs under 'Tcp/ip' for 'Process Info','Process Status', 'Subnet Info' and 'Route'.
n) Config now allows a small version of the CPU busy chart to be displayed in the MOMI Title box when the large CPU busy chart is not displayed. (for Judy F.)
o) Fixed bug causing calendar to display invalid month and days in locales other than United States.
p) Added new Main Tab called 'History'.
q) Added new tab under 'History' called 'Chart' to allow charting of historical data. (This version will only have 1 chart with 16 data element per chart, limited items to be charted, and will only display one type of data(i.e. only CPU info or only process info) per chart. Later versions will allow more charts, more items to chart and the ability to mix data types on a single chart.)
r) Changed Date display formats to prevent standardize on mm/dd/yyyy format. (old method was causing problems in some non-USA formats)
s) Added display of date/time of EMS record being processes so user can tell the current records date/time when using filters and pre-filters that might not be displaying records. (for Don L.)
t) Changed System Overview display of Memory Queue to Memory Pressure to provide a more accurate display of Memory problems. ServerNet no longer reports Memory Queue and S-series and K-series both report Memory Pressure.
u) Server had an uninitialized variable could have caused the program to crash at startup.
v) Server will now only start one measurement for certain entities, such as DiskFile, and will share that measurement with multiple PC clients.
w) Server will now "load balance" additional processes it starts on

behalf of the PC clients.

x) Additional server processes, depending on the type, now consume less memory.

y) Server did not use a 32-bit format for starting and ending eof for the DiskFile entity. 64-bit formatting is now used.

z) The Server mislabeled the estimated $RECEIVE response time for the Process Entity as ms. It is now secs (seconds).

aa) Server now collects stats on the multiple of 10 seconds.

bb) TCP/IP transport performance from the Server to the PC client has been greatly improved almost across the board.

cc) Due to interface changes in G06.12, the ProcessH Entity did not work. This has been corrected.

dd) The MOMI server may now be started prior to MEASURE. MOMI will retry access to MEASURE every 1 minute until access is established. Note that MOMI requires MEASURE up and running to provide most information. On occasion, when MOMI is stopped and restarted, a cpu or two will report MEASURE difficulty for the first minute in the PC client. This is based on how quickly the previous MOMI measurements stopped and restarted. The situation self corrects after 1 minute.

ee) The Server computed CPU idle time slightly higher than was actually. This has been corrected and should be more "accurate" on S Series.

ff) The initial startup of the MOMI Server now uses less cpu, but takes longer, to help insure that MOMI does not adversely impact the system at startup.

gg) The Server tracking of processes started and stopped did not include processes started from the same TACL as $MOMI. This logic has been corrected to only exclude the processes started by $MOMI itself.

hh) This version introduces the Freeware version of MOMI called Mini-MOMI. When the MOMI Server is started without a password it will start in Mini-MOMI mode. Mini-MOMI is a FREE limited function version of MOMI. It will run for 1 year from the version date. Any functions not enabled within Mini-MOMI will display a screen with the location to purchase MOMI or where to get an evaluation password to test full functionality.

****
Server Version 1.54 date 01/30/2001
Client Version 1.96
Buffer Version 16.14

a) Made another attempt to assist in selecting correct font if PC is configured with Large Fonts.
b) Re-wrote sort logic to speed up grid sorts.

****
Server Version 1.52 date 01/23/2001
Client Version 1.95
Buffer Version 16.14

a) Added new 'All Processes' subtab to 'Process' tab. All processes allows the user to display all processes on the system then to sort by any of the fields by left-clicking or to filter the display by right-clicking. Over 50 items of infomation on each process is displayed. (a very customizable status command).
b) Added jumps from System Overview screen for clicking on:
- 'CPU que' now jumps to Top Processes for CPU sorted by Ready List
- 'Mem que' now jumps to Top Processes for CPU sorted by PageFaulting
- 'Disk i/o' now jumps to Top Processes for CPU for Disk processes only and sorted by Cpu Busy.
c) Client previously could have difficultly connecting to the Tandem host when using a slow or congested connection. This would be visable as the client getting connected and then the connection drops. The underlying logic has been revised to handle this situation correctly.
d) The Main Tab labels will once again display a '*' if one of the sub-tabs have an active screen.
(i.e. if a PROCESS ENTITY measurement is active the Process main tab will display '* Process').
e) Added count of processes created during previous update period on the 'CPU Summary' screen.
f) Server now removes system qualifiers from process and disk file names referencing the local system.
g) Server now uses the memory pagesize of the cpu the process is actually running in for ProcessH measurement.
h) Server has a bug corrected where a blank line was displayed on the overview screen of the client. This was primarily caused by programs that required a long "fix up" time during initial startup.
i) Server now signals client under more cases where an I/O error is encountered communicating with a MOMI subserver.
j) Server works around a Guardian bug that I/O to an unnamed process in the file portion of the Process Entity screen did not show up or were named incorrectly. I/O to an unnamed file with a PIN larger than 255 will be displayed as 255.
k) Server performance was improved for display of EMS messages.

****
Server Version 1.51 date 11/17/2000
Client Version 1.94
Buffer Version 16.13

a) MOMI Server had a few bugs fixed that could have caused a 'blank line' to appear on the main screen of the MOMI client.
b) MOMI Server was causing junk to appear on the disk file entity screen of the MOMI client. This was corrected.

****
Server Version 1.50 date 11/14/2000
Client Version 1.93
Buffer Version 16.13

a) Added buttons on EMS Message config panel to allow user to set start and stop times to current time (NOW Buttons).
b) Added button on EMS Message Detail to allow copy of message to Windows Clipboard.
c) Reworked screen selection to a more hierarchical design to allow future growth with no impact on screen layout.
d) Added back/forward buttons to scroll thru screen-usage history.
e) Added DiskFiles Measure entity screen under files sub-menu. Now clicking on a Disk or File name will first go to the DiskFiles screen(instead of the Files Entity screen) then clicking on a Filename will jump to the DiskOpens screen for that filename. This change was made because the Files Entity measurement does not show activity from a remote opener only local system openers, DiskFiles does show remote as well as local openers info.
f) Added DiskOpens Measure entity screen under Files sub-menu.
g) Restructured Config screen to reflect new screen layout removing need for screen hiding.
h) Added option on Config screen in the EMS Display options to turn on/off automatic request of EMS Messages when first connected. This was added because on a slow dialup connection sometimes too much bandwidth was being used on EMS Messages when EMS Messages were not the info wanted.
i) Added new All Systems screen. This screen allows the user to see a list of all systems configured, the overall system cpu busy percent, and the version of the MOMI server running on that system. It will indicate if the system is unreachable. The user may decide which systems are monitored. Also clicking on the system name or address of any system actively being monitored will immediately switch to that system.
j) Added Stop-mode display on the Process Entity screen to show if a process is stoppable by anyone, normal stop rules, or an unstoppable process.
k) When adding new system, User will now be ask if they want to change the system name returned, this modified name will be used by MOMI for system selection needs.
l) Function keys have been disabled for moving between screens (was starting to run out of function keys anyway).
m) Added fix to allow the PC Date format to be either mm/dd/yyyy , dd/mm/yyyy or yyyy/mm/dd. This allows non-US format dates to work.
n) Added backup process flag in Last Start/Stop processes and removed Serverclass name (Guardian bug prevented working anyway).
o) Converted EMS start and stop times to 24-hour to match Tandem output.
p) User may now set the number of EMS messages kept in memory. The default is 500 with allowable values of 100-5000. The value may be set in either the Config screen or the mini-config panel in the EMS screen. The value is saved in the INI file when the 'Save Config' button is pressed.
q) MOMI Server has been fixed so it will start on a D39.02 system.
r) MOMI Server will handle changes in G06.09 Measure. Also, internal logic is now in place to make most changes to Measure counter records transparent.
s) MOMI Server had a few cases where errors were not detected with the

ProcessH entity. This has been corrected.

t) MOMI Server now reports processes sooner after they are started.

u) MOMI Server did not initialize all necessary values after a takeover from the backup. This would cause last started processes to report all programs on the system. This has been corrected.

v) MOMI Server has several general performance improvements.

****
Server Version 1.36 date 09/28/2000
Client Version 1.90
Buffer Version 16.11

a) Fixed bug in Server that caused MOMI to crash on startup if running on a D39 system.

****
Server Version 1.36 date 08/23/2000
Client Version 1.89
Buffer Version 16.11

a) Added new chart with displaying Process Priority by CPU. This chart shows the process priority distribution on a CPU helping the user determine if batch and mixed-workload is affecting on-line Transaction processing.
b) When adding new MOMI collector in CONFIG screen user may now use a HOST name or the IP Address.
c) Some processes would appear running after they stop. The condition to cause this was the process(es) had to be the highest pin number in the CPU. This problem was fixed.
d) A problem was corrected that the collector processes were sending too much data to the main $MOMI. The information was "correct", but was consuming more CPU that was necessary. Now, only needed information is sent.
e) A problem was corrected that $MOMI was not returning a properly initialized response if the PC Client issued an unknown request. This could occur is a newer version of the client was used with and older version of the MOMI server.

****
Server Version 1.35 date 08/11/2000
Client Version 1.88
Buffer Version 16.10

a) Corrected bug on Win95 systems with handpointer cursor not displaying.
b) Corrected problem that MOMI crashed on a D45 system due to a Guardian procedure incompatibility.

****
Server Version 1.34 date 08/08/2000
Client Version 1.87
Buffer Version 16.10

a) Added column in Top Process screen to display if process is a Backup.
b) Added ability to click on opener process name on Busy Files screen and have that take you to the Measure Process Screen for that process.
c) Big changes to the layout and functionality of the EMS Msgs Screen:
- added status message for EMS Msg specific errors.
- added EMS Messages Stop Date/Time as optional setting.
- moved EMS log selection, START date/time and new STOP date/time selection, and EMS Message refresh rate to EMS config sub-screen.
- changed Color High-Lites from flag that displayes Emphasis and Action type messages in Red and Yellow to now reflect new ability to display messages containing certain user-selectable values in user settable colors. Once the Color High-Lites is checked the user may right click on any color to set the label and the identifying text values. The identifying text value may also be set within the EMS Message Detail screen, hilighting the desired text then right-clicking and putting the text into the desired color.
- dramatic reduction in the PC's cpu processing power and memory requirements needed to display EMS messages.
d) Fixed problem of Measure ProcessH having junk at end of count down field and also enhanced performance.
e) The object file name occasionally was not displayed on the main F1 screen and has been corrected.
f) A problem could occur on Busy Files_F8 where a single busy item would not appear. This was corrected. Also, special openers such as $MONITOR now display as a cpu,pin instead of by name.
g) Logic was reworked and preformance was improved in the basic gathering of data by the collector in each cpu.
h) Reads on $RECEIVE were reduced to 32,000 bytes to insure compatibility with earlier releases of the operating system.
i) The default priorities for server programs that MOMI starts will now always be lower that the priority of $MOMI.
j) Format 2 passwords are now supported.

****
Server Version 1.33 date 07/13/2000
Client Version 1.86
Buffer Version 16.09

a) The non-accelerated version of the Server is no longer distributed. If you need a non-accelerated version, please contact BlackWood. This means if you have changed your OBYMOMI file to run the Accelerated Server BWMOMIA and/or BWMTCPA it will need to be changed to the default names BWMOMI and BWMTCP.
b) Added '*' to tab name when that screen is active for the following screens: 'Measure Process_F7' , 'Busy Files_F8' , 'EMS Msgs_F10' & 'Measure ProcessH'. This will show if a screen is active even if it is not the displayed screen.
c) Measurement of Busy Files_F8 does not allow $*. This prevents a "whole system" measurement from being started. We may allow this to be reactivated via a runtime parameter in the future.
d) Measurement of Busy Files_F8 did not function on older versions of the operating system. This has been enhanced to better handle the situation.
e) The Busy Files_F8 screen sometimes had "junk" in the countdown timer. This has been corrected. The countdown timer also now starts with a slightly larger value so when it reaches zero (if looking at your watch, the data should then appear.
f) Measure Process_F7 screen now displays the approximate Average Response Time next to the file $RECEIVE. For processes using waited i/o to $RECEIVE, this value should be fairly accurate. For processes using no-wait i/o, the value may or may not be accurate due to MEASURE limitations. In addition, $RECEIVE will be listed first if it had any i/o for the measurement period.
g) an incorrect cpu,pin specification will now generate a meaningful error message.
h) The MOMI server now performs more detailed checking on the state of TMF. This is reflected on the System Overview_F1 screen. The TMF State field will now display problems if begintransaction's are disabled.

****
Server Version 1.32 date 07/10/2000
Client Version 1.85
Buffer Version 16.08

a) Added display on Top-Processes screen when no data matches selection criteria so user will not continue waiting for Tandem to respond.
b) Client now correctly clears data values on CPU Busy History and TMF Rate charts when a CPU crashes or the MOMI collector for that cpu fails. Previously old data continues to be displayed.
c) In the event a server program started by MOMI fails, the values for that cpu will be removed from the client display.
d) In the 1.84 version of the server, a new feature was added to attempt to return the minor version of the operating system by reading the RLSEID file located in the SYSnn subvolume. The file used to read this information was left open by MOMI programs. Directly, this did not cause any issue but this version now closes the file after the information is obtained (the file was and still is opened read-only).
e) Code has been added to handle the situation where ServerNet I/O rates are returned as negative and caused the a MOMI server to fail.
f) The Server now reduces some cpu usage on larger systems.
g) The Trace log is now color coded for Send/Recv/others.
h) A 'Print List' button on the EMS screen now allows you to print a list of all messages on the screen (visible or scrolled off).
i) The long-awaited 'Busy Files' screen is now available. You will need to go into the Config screen and activate it and it's Auto-Display.
j) The 'Measure ProcessH' screen is now available. This allows you to do a procedure-level measure on a process to determine where it is spending its time to allow the programmer to better optimize the code. You will need to go into the Config screen and activate it.
k) added Process Creation time to 'Measure Process' screen.
l) The Measure Process_F7 screen now only starts one measurement at a time. Previously, multiple measurements were internally maintained for a period of time after selecting a new process to measure.
m) Certain MOMI sub-server processes are now run at priority 100 & 105. The sub-servers for Measure Process_F7, Busy Files_F8, EMS Msgs_F10 and Measure ProcessH all run at a lower priority. This allows the "standard" MOMI components to run at a higher priority and the potentially cpu intensive components to run at a lower priority. A future version may allow the user to set these prioities.
n) Cpu types are now correctly identified up to the S74000 and S7400.
o) Error messages for the EMS Msgs_F10 screen have been extensively reworked to report 'collector not found' and security errors.

****
Server Version 1.31 date 06/20/2000
Client Version 1.84
Buffer Version 16.07

NOTE: The sample CALENDAR.MOM file will not be installed with the Typical installation. You must choose a Custom Install. If CALENDAR.MOM already exists and you try to install a new copy the install program will give an error message saying 'An Error occurred while extracting a file:' Answer yes to the error message and the install will complete. The install will NOT overwrite your copy of the CALENDAR.MOM file.

a) Added display on Top-Processes screen when no data matches selection criteria so user will not continue waiting for Tandem to respond.

b) Client now correctly clears data values on CPU Busy History and TMF Rate charts when a CPU crashes or the MOMI collector for that cpu fails. Previously old data continues to be displayed.

c) In the event a server program started by MOMI fails, the values for that cpu will be removed from the client dispay.

d) The server now attempts to returns the minor version of the operating system using the RLSEID file located in the SYSnn subvolume. The "offical" Guardian procedure for obtaining this information still does not work as of G06.07.

e) Code has been added to handle the situation where ServerNet I/O rates are returned as negative and caused the a MOMI server to fail.

f) The Server now reduces some cpu usage on larger systems.

****
Server Version 1.30 date 06/01/2000
Client Version 1.83
Buffer Version 16.07

a) With this version the Tandem Server MUST be replaced before the Clients are upgraded. The old Clients will run OK with the new Server but the new Clients will not run with the old Server.
b) new OBYMOMI file that corrects problems if customers TACL #informat is not set to type TACL. the password and TCP/IP process and port changes should be moved to the new file from the old OBYMOMI file.
c) Restored the Calendar function which was removed in version 1.21. Installing the PC MOMI client will now include a default CALENDAR.MOM dates file. The Calendar is displayed by clicking on the date in the top-right corner of the screen. It will allow the user to set important dates in color on the screen.
d) Printer now defaults to Landscape mode.
e) New TMF Rate Chart selection added to System Overview screen.
    1) Transactions BEGAN per second on the system and their average duration and Transactions BEGAN per CPU per Second.
    2) Currently ACTIVE transactions on the system and per CPU.
    3) Transactions BEGAN on this system but completed on another system and their average duration.
    4) Transactions began on another system but completed on this system and their average duration.
    5) Number of ABORTED transactions per second and their average duration.
f) Measure Process screen now contains new elements:
    1) Wait state of process
    2) Privileged-code / Page-Faulting / Ready-list state of process
    3) Backup CPU.PIN (if running non-stop)
    4) Initial Priority as well as Current Priority and display red if they don't match.
g) When the PC MOMI client is run for the first time, it will walk the user thru setting an initial system and then set that system as the default and start viewing it (the default system may be changed at any time).
h) A run-time parameter may be used to re-locate the MOMI.INI and CALENDAR.MOM file. If no param is set the MOMI.INI goes into the default system directory and CALENDAR.MOM goes into the program directory. By changing the location of these files MOMI is able to support many users/configurations on a single machine.
   To use the file re-location parameter add the directory where you want the files located after the run command, for example in MOMI's shortcut target put:
     C:\program files\MOMI\MOMI.EXE D:\data\myfiles\MOMI
   You will need to move copies of the MOMI.INI and CALENDAR.MOM into the new location or else start with new empty files.
i) Added 2 new columns to Top Processes screen:
    1) IPri (Initial Priority of process). displays red if different from Current Priority (CPri).
    2) I (process currently in Inspect or Debug).
   Added ability to select on the new items:
    1) if 'Priority Changing' is selected only processes currently at a priority other than their initial priority will display.
    2) if 'In Inspect' is selected only processes currently in Inspect or Debug will be displayed.

j) Top Process screen busy histogram now displays in color defined for CPU's in the Config screen.
k) System Overview Top processes will display the Priority in red if the current priority is not the same as the initial priority.
l) The Tandem components are now distributed in accelerated versions and non-accelerated versions. BWMOMI and BWMTCP are non-accelerated and BWMOMIa AND BWMTCPa are accelerated. Simply change the OBYMOMI file to point the desired object files.
m) A bug was corrected that prevented a process from being "re-measured" on the Measure Process_F7 screen. Now, errors on this screen are reported in a manner that does not stop the rest of the MOMI client.
n) The Tandem MOMI server now runs nonstop. This mode is a passive backup that in the event of a cpu failure the backup simply takes over and restarts the MOMI subsystem.

****
Server Version 1.21 date 05/08/2000
Client Version 1.82
Buffer Version 16.06

a) Removed Calendar function added in version 1.20. Calendar control had bug causing access violations at shutdown. Once control is corrected this function will be added back in.

****
Server Version 1.20 date 04/25/2000
Client Version 1.82
Buffer Version 16.06

a) Client and Server should both be upgraded for this version.
b) Tested/Certified with Windows 2000.
c) Removed requirement of a default printer.
d) Added Calendar Dates function when Date button is pressed, also added CALENDAR.MOM database to install.

****
Server Version 1.19 date 03/08/2000
Client Version 1.81
Buffer Version 16.05

a) Client and Server should both be upgraded for this version. If not when changing from Top Processes Screen (sorted by other than Busy) to System Overview Screen the 1st time the System Overview would display the top processes sorted by the value set in the Top Processes Screen, the 2nd display would correct the problem.
b) Client now allows user to click on busy history and Servernet I/O chart items and see the data for that item. On the CPU Busy history the Top 6 processes in that cpu at that time are also displayed. (If Server is not upgraded as the same time as Client the Top Processes history will not contain valid data).
c) The Top Processes Screen now shows upto 30 processes on a scrollable grid.
d) If the User wishes to replace the BlackWood Emblem in the Top-Left corner of the screen with their own emblem they should place a Bitmap sized 160x40 pixels in the MOMI program directory and name it 'Customer.bmp'. As long as 'Customer.bmp' is located it will be used, if it is not found the default BlackWood emblem is used.
e) EMS Messages screen now puts latest message at top of screen instead of bottom.

****
Server Version 1.18 date 02/23/2000
Client Version 1.80
Buffer Version 16.04

a) Support for 2 gigabyte processors.

****
Server Version 1.18 date 02/18/2000
Client Version 1.79
Buffer Version 16.04

a) Corrected bug in CPU smoothing causing problem when changing systems, if changing from system with more cpu's than new system, old system cpu's still displayed on chart.
b) Corrected problem causing print to not work on some Windows 95 & 98 computers.

****
Server Version 1.17 date 02/16/2000
Client Version 1.79
Buffer Version 16.04

a) Corrected time of trace items to match Tandem Time.
b) Improved CPU Smoothing to prevent invalid CPU busy percents under certain circumstances.
c) Added ability to select fonts.
d) Improved 'large fonts' support. Note: The user should look around for a font that works well with their system.
Some standard fonts that work well with most 'large font' pc's are:
Small Fonts, Arial Narrow, MS Sarif, and Times New Roman.

****
Server Version 1.16 date 01/27/2000
Client Version 1.79
Buffer Version 16.04

a) Added multiple MOMI Icons within client so user can pick.
b) Fixed bug that was clearing filter name when filter was started.
c) Fixed bug that was not clearing errors when system was changed.
d) Fixed bug that under some conditions with CPU Busy chart smoothing turned on would report a negative cpu busy %.
e) Fixed bug that would cause Measure Process to sometimes report 'process not found' when BWMOMI server was started from a remote system.

****
Server Version 1.15 date 01/14/2000
Client Version 1.78
Buffer Version 16.04

a) Change cursor when over fields that will jump to another screen.

****
Server Version 1.14 date 01/05/2000
Client Version 1.77
Buffer Version 16.03

a) Added TMF Rate to CPU history chart.
b) Fixed bug causing last characters in filenames to duplicate on the file section of the Measure Process Screen.
c) Changed individual screen Update/Pause logic to make it consistant.
d) Top Processes screen when sorted for Memory use now excludes everything from $SYSTEM.SYSnn.

****

Server Version 1.13 date 12/16/1999
Client Version 1.76
Buffer Version 16.02

a) CPU Busy chart now can have smoothed charts based on config setting.
b) Long System names now accomodated (previous limit '\' + 4 characters).
c) Application Title now contains current system name for task bar.
d) Support for MOMI on a D39 system.
e) Added display of number of Server threads in-use and available.
f) Added errors messages if 'Measure not started' and 'out of threads'.
g) Fixed bug causing remote file names in the file section of the Measure Process screen to always display local system name.

****
Server Version 1.12 date 11/03/1999
Client Version 1.73
Buffer Version 16.01

a) Connection indicator now smaller to not cause distraction.
b) BWMOMI and BWMTCP now password activated.
c) BWMOMI alters its Measure datafiles security to 'NNNN' to prevent problems if restarted under another userid.

****
Server Version 1.11 date 10/16/1999
Client Version 1.70
Buffer Version 16.00

a) Top Processes now has selection for Tape only.
b) Problem with CPU failure not being reported correctly is now fixed.

****
Server Version 1.10 date 10/05/1999
Client Version 1.62
Buffer Version 15.01

a) Chart selector is now buttons instead of radiobuttons.
b) EMS Messages now have the ability to 'Pre-Filter' data. This will help when a few messages are spread out in more than the 500 messages kept in memory. This will use the filter before the message is kept.
c) CPU History now allows viewing all cpu's or only selected cpu's.
d) Configuration screen re-organized so Config settings are always visible and a button will toggle the display of the Trace log.