



Version 1.6.5

Release Notes

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***enterprise-Q* Installation Requirements**

enterprise-Q v1.6.5 compliant software:

1. *Tivoli Framework 3.2 or higher.*
 - The system should be setup as a TMR Server or Managed Node. The latest version of Tivoli Framework to complete eQ validation testing in a lab environment is v4.1.
2. *Netscape 4.x web browser, Mozilla 1.x or Microsoft Internet Explorer 4.x or greater enabled to support JavaScript.*
 - The latest tested version of Microsoft Internet Explorer is 6.0.28. The latest tested version of Netscape Navigator is 6.2. The latest tested version of Mozilla browser is 1.6. Displaying dynamic pull-down menus is not supported under Netscape Navigator and Mozilla browsers.

The following items are now optional:

1. *Apache web server v1.3.6 or greater*
 - *enterprise-Q* v1.6.5 comes with its own version of Apache 1.3.29 which may be installed and configured during *enterprise-Q* installation. If necessary the *enterprise-Q* may work with pre-installed Apache web server. Currently the latest tested version of Apache web server is v1.3.26, and the latest tested version of Apache2 web server is v2.0.43.
2. *MySQL 3.23.xx for Win32, or Oracle Server 7.x or higher, or Oracle Client (SQL*Net) capable of connecting to Oracle Server on another host, or DB2 Client/Server 7.2.*
 - The latest tested version of MySQL is 3.23.33.
 - The latest tested version of Oracle is 9.2 for Solaris and Windows, and 8.1.7 for AIX. Oracle 9.xx 64-bit is supported under Solaris.
 - The latest tested version of DB2 is 7.2.

The above-mentioned software, listing as supported or unsupported, is current as of May 2004. Please, visit www.enterprise-Q.com for the most recent information on supported software.

For detailed installation instructions please refer to the ***enterprise-Q* v1.6.5 User's Guide**.

***enterprise-Q* V1.6.5 New Features**

The following new features were added to *enterprise-Q* 1.6.5 since the release of *enterprise-Q* 1.6.

Expanded Support

Operating systems:

- *enterprise-Q* v1.6.5 can now be installed on SUSE Linux 8.2 or later. Only DB2 v7.2 is currently supported under Linux.

Perl 5.005_03:

- *enterprise-Q* now includes Perl 5.005_03 as part of the distribution. This version of Perl is automatically installed in '`<eq>/perl5`' during the *enterprise-Q* 1.6.5 installation process. As a result, Perl is no longer a prerequisite to installing *enterprise-Q* 1.6.5.

Web Server:

- *enterprise-Q* now includes Apache 1.3.x and optionally installs it, removing Apache as a prerequisite to installing *enterprise-Q* 1.6.5.

RDBMS Support:

- *enterprise-Q* can now be optionally installed without RDBMS support. This option simplifies installation of evaluation and production versions of *enterprise-Q* in cases where historical reporting and other RDBMS related features are not required.

New Applications

IC Manager

This new tool allows the user to view all the InventoryConfig profiles accessible by the user, and modify various attributes of each/every InventoryConfig profile selected, such as the log host, log file path, the lenient flag, distribution notification type and time, and destination of distribution notifications.

SP Manager

This new tool allows the user to view all the Software Packages accessible by the user, and modify various attributes of each/every Software Package selected, such as the log host, log file path, permissions of the log file, and the lenient flag.

The SP Manager application also allows the user to create Software Packages and import a built package from a Managed Node or Endpoint.

Network Discovery

This tool displays all computers in a Windows domain, displays information returned by the Domain Login transaction for these computers, and allows the user to submit to the queue or run immediately an Endpoint installation transaction for selected computers. Currently, *enterprise-Q* must be installed on a Windows-based platform for this tool to function as designed.

New SoftwarePackage Transactions

Capital Software added four (4) new SoftwarePackage-related transactions: **SPAccept**, **SPCommit**, **SPRemove**, and **SPUndo**. These new transactions allow users to 'accept', 'commit', 'remove', and 'undo' Tivoli SoftwarePackage objects.

Enhanced Applications

***enterprise-Q* Web Interface**

- Frame with page management buttons was moved from the bottom of the screen to the top of the screen. The web interface was also modified to optionally adjust the frame depending on the number of buttons displayed in the frame.
- “Save CSV” button previously displayed in table settings section at the bottom of many pages was moved closer to other page management buttons.
- A few pages were modified to optionally display icons instead of buttons. As the icons require less space on the page than buttons, using this feature may allow more data to be displayed on the page, especially on the “Queue Status” page. This behavior can be configured on the **User Preferences** page.
- Users can now specify type and size of a font that will be used for all EQ web interface pages. This behavior can be configured on the **User Preferences** page.
- Web pages no longer access queue files directly. Instead, the pages call new EQQueue program (EQQueue.exe on Windows) to read queue data, filter out unnecessary records, and return only required data columns. Due to internal optimizations in EQQueue program, as well as optimizations in how the program reads the queue data, this new method is much faster than old method of reading the queues directly. As a result, the response time required to read the queue and display EQServer data has significantly improved. This change affects the following pages: **Queue Status**, **Quick Report** and **Actions Summary Report**.

Data in report tables on many *enterprise-Q* pages:

- Data in columns can now be easily sorted by clicking on the column name. If the data in the column was already sorted then clicking on the column name reverses sorting order of the data.
- Groups in the table can now be sorted by clicking on the first part of the group name. Clicking on the first part of the group name again reverses sorting order of the groups.
- Group header records now include “Expand/Collapse” icons that allow a user to expand or collapse one group with one click.

Help page:

- This page now displays name of current EQ user in square brackets immediately after EQ version.

Perform Action page:

- The page now optionally displays target filter fields before displaying target lists for the action. The target filter fields allow the user to specify criteria (filters) to limit the list of targets displayed on the following page. The number of filter fields can be configured from the **EQ GUI Configuration** page.
- Users can now submit EPInstall transaction from EQ web interface. When submitting the transaction users have an option to use Endpoint installation rules to determine installation parameters for new endpoint, or specify all necessary parameters on the **Perform Action** page.
- It is now possible to set or reset lenient flag for a FilePackage profile in the FilePackage profile properties popup window.
- Users can now set or reset lenient flag for an InventoryProfile in the InventoryProfile profile properties popup window.
- Users can now change log file and log host, as well as set or reset lenient flag for an InventoryConfig profile in the InventoryConfig profile properties popup window.
- It is now possible to change log file and log host, as well as set or reset lenient flag for a SoftwarePackage profile in the SoftwarePackage profile properties popup window.
- “Dispatch options” section on the page can now be optionally hidden, and displayed when only necessary, or have its data changed in a popup window. The “Display dispatch options” field on the **User Preferences** page controls this behavior.
- “Distribution Tuning” section on the page can now be optionally hidden, and displayed when only necessary, or have it’s data changed in a popup window. The “Display distribution tuning options” field on the **User Preferences** page controls this behavior.
- “Mdist 2 Distributions Settings” section on the page can now be hidden when necessary.
- “Create Profile Manager” and “Create Policy Region” actions no longer require user to select target(s) from the targets list. Although enterprise-Q 1.6 and earlier versions of EQ required the user to select a target, this selection was always ignored.

- It is now possible to upload a list of targets from your local computer to EQ server. To do this, use “Upload file” button located next to the “View” list button in the “Combine with/... targets from user-created lists” section. The list of targets should be a text file, with one target name per line. Each target name may be prefixed with target type (**‘Endpoint’**, **‘ManagedNode’**, or **‘PcManagedNode’**):

```
<target-type>:<target-label>  
or  
@<target-type>:<target-label>  
or  
<Endpoint-label>
```

If target type is not provided then **‘Endpoint’** is assumed, as depicted in the last example above.

- A “View value” button was added to the “Action Class” field in the “Distribution Tuning” section. Click on this button to see a value assigned to the class.
- “Debug Logging Level” selection was added to “Mdist2 Distribution Settings” section on the **PerformAction**->InventoryConfig page.
- “User Notification Message” and Multicast options were added to “Mdist2 Settings” sections on the **Perform Action**->Install Software Package page.
- “Distribution Merge Options” field was added to “Tmw2kProfile Distribution Options” section on the **Perform Action**->Tivoli Monitoring Profile page.

Action Report page:

- The page now allows the user to enable or disable displaying all actions distributed to “Computer” targets.
- It is now possible to use “To” and “From” fields in the “Limit by Dates” fields to limit displayed records to actions performed during specified time interval.
- The page now honors the option “Remember settings for each screen” on the **User Preferences** page.

Actions Summary Report page:

- The page now allows the user to enable or disable displaying all actions distributed to “Computer” targets.
- The code that retrieves and processes data from EQ historical database was optimized. As a result the page displays EQ historical data faster (or much faster if time limits are used) than the same page from EQ 1.6.
- The page now honors the option “Remember settings for each screen” on the **User Preferences** page.
- The page will now save and restore the value of “Limit by Dates” and “Display Systems” fields if the user has the option “Remember settings for each screen” enabled on the **User Preferences** page.

Queue Status page:

- The pull-down menu displayed when a user clicks on a target name includes “Hardware Inventory”, “Software Inventory” and, optionally, one custom query. Selecting one of these will display the results of running the query.
- The users now can dispatch an individual transaction for each selected target using “Dispatch transactions” button or selecting “Dispatch transaction” from the target’s pull-down menu. This feature may be useful when only one transaction for the target should be executed without running any other transactions queued for the same target. Note that the dispatched transaction will be attempted only if all earlier transactions for the target have the flag “Skip on Failure/Contention” set to “Yes”.

Node Status page:

- The screen no longer tries to determine the INTERP type of a target of type “Computer”.
- “Troubleshoot Node” section was completely removed from the page. “Troubleshoot in a Popup Window” button was renamed to “Troubleshoot” button and moved closer to other page management buttons.
- “Run Action” section of the page can now be hidden or displayed without reloading the page.

List of Nodes page:

- The page now displays “Hardware Inventory”, “Software Inventory” and optionally one custom query in a target pull-down menu. These selections allow the user to display hardware/software inventory, or run a pre-configured query for this target.

Troubleshoot Nodes page:

- It is now possible to upload a list of targets from your local computer to EQ server. To do this, use “Upload file” button located next to the “View” list button in the “Combine with/... targets from user-created lists” section.

Query Reports page:

- New “Select Columns” button located next to the currently selected Query name allows the user to select which columns from the query will be displayed before running the query.
- Changing currently selected “Query Library” will automatically reload the page and update a list of queries in that Query Library.

Remote Control page:

- The page now optionally displays target filter fields that allow the user to specify criteria (filters) that will limit the list of targets on the following page. The number of filter fields can be configured from the **EQ GUI Configuration** page.
- Controller name can now be optionally specified on the first **RemoteControl** page. If the controller is specified on that page then the second **RemoteControl** page won't prompt user for the controller name.
- The page now logs all accesses to the **Remote Control** page to a file named '`<eq>/logs/RemoteControl.log`'.

Edit User page:

- It is now possible to specify one comment line for any EQ user account. When a new EQ user account is created, the EQ web interface generates a default comment line that indicates who created the account and when it was created.

User Preferences page:

- Users can select now whether they want to display buttons or icons on some EQ pages.
- A frame containing all page management buttons can be optionally hidden when there are no buttons displayed in the frame. Users now have an option to enable or disable this feature.
- Users can now specify type and size of the font to use for all EQ web interface pages.
- “Distribution Tuning” and “Dispatch Options” sections on the **Perform Action** page can be optionally hidden. Users can now specify default state (hidden or visible) for these sections. This feature is not available for end-users.

EQServer Enhancements

- Added new command “DispatchMID” that can be used to dispatch transactions with provided message IDs.
- The “Dispatch” command now supports T_TRANS and T_PROFILE keywords. When these keywords are provided along with a target name, the EQServer will dispatch all transactions for the target whose T_TRANS and T_PROFILE parameters match those supplied in the Dispatch command.
- If T_DISPATCH parameter is provided and is set to 2 when a new transaction is submitted to the queue (T_MSG=Add), then the EQServer will automatically dispatch the newly submitted transaction without dispatching any other transactions for the targets.
- The EQServer now logs all configuration parameters, class definitions and transaction definitions immediately after creating a new daily log file.

enterprise-Q Distribution Monitoring

The following modifications were made that affect all enterprise-Q monitoring processes; EQICMon, EQSPMon, and EQTMMon:

- Added a configuration parameter called APP to accommodate differing text returned in the 'Application' field of the 'wmdist -I' command. This functionality was added to accommodate different results returned from the Tivoli 'wmdist -I' command, as installing certain Tivoli patches will alter the results returned from this command.
- Moved the routine to convert various time formats to a common Perl library file named 'EQCommonLib.pl'. This functionality was added to accommodate different timestamp formats seen in Tivoli logfiles after installing certain Tivoli patches. Moving this routine to a Perl library allows new time formats to be easily added without recompiling.
- The LOGID is now returned in response to 'T_MSG=AddProfile' for use in subsequent 'T_MSG=AddDist' message, which will reduce overhead and redundant processing.
- Improved setting and handling distribution START_TIME attribute. Also, fixed bug in RemoveTIDCheck routine so as to not delete TIDTargets record if START_TIME not set.
- Added two new configuration parameter called TIDWARNING and TIDTIMEOUT.
 - TIDWARNING – Send STATUS for each target associated with a TIDTargets record if the TID has not been matched with a distribution from the logfile after TIDWARNING seconds.
 - TIDTIMEOUT – Create an internal DistRec from TIDTargets records if the TID has not been matched with a distribution from the logfile after TIDTIMEOUT seconds.

EQICMon-specific enhancements:

- Fixed bug in processing results returned from 'wgetinvglobal' introduced by certain Tivoli patches.
- Take advantage of 'wdistinv' returning both the MDISTID and the SCANID, improving performance and accuracy. 'wdistinv' returns the SCANID in newer releases of Tivoli Inventory.

Transactions Enhancements

- Domain Login transaction now logs all Endpoint data to a temporary status file. The update_status program stores this data in a new table named EQ_DOMAIN_LOGIN in the EQ historical database.
- EPInstall transaction was modified to accept Endpoint installation data from command line in case there is a SKIP_RULES keyword on the command line and it has a non-zero value.
- EPLogin transaction now includes Endpoint details in the “reason” message sent to the EQServer.
- SPInstall was modified as follows to take advantage of new features in EQSPMon to improve performance and accuracy:
 - Check for LOGID in return message from AddProfile and include this information in AddDist message. EQSPMon will use the LOGID passed in the AddDist message instead of having to determine it again.
 - Added support for NOTICE and MULTICAST capabilities
 - Added new routine called SPCheck to set loghost, logfile, and logmode properly
- InventoryConfig was modified as follows to take advantage of new features in EQICMon to improve performance and accuracy:
 - Check for LOGID in return message from AddProfile and include this information in AddDist message. EQICMon will use the LOGID passed in the AddDist message instead of having to determine it again.
 - Check for SCANID and MDISTID in return message from 'wdistinv' and include this information in AddDist message
- Tmw2kProfile was modified as follows to take advantage of new features in EQTMMon to improve performance and accuracy:
 - Check for LOGID in return message from AddProfile and include this information in AddDist message
 - Added TMMERGE prompt option allowing 'Preserve local mods', 'Exact Copy', etc.

enterprise-Q Installation

- Perl v5.00503 is now included with the *enterprise-Q*. As a result the perl is no longer a pre-requisite for *enterprise-Q* installation, and all prompts related to perl installation were eliminated from the installation procedure.
- “None” option was added to the list of available RDBMS vendors. Use this option to install *enterprise-Q* without database support. When *enterprise-Q* is installed without database support all features relying on the RDBMS, such as historical reporting, DomainLogin information, etc, will not be available.
- Pre-installing Apache web server is no longer a prerequisite for EQ installation as *enterprise-Q* now comes with Apache v1.3.29. The installation procedure now prompts if the user wants to use included version of Apache or use pre-installed version of Apache web server. If the user chooses to install included version of Apache web server, it is installed in a directory named ‘<eq>/apache’ and is automatically configured during the installation. For UNIX installations, the user must start Apache as the root user after installing enterprise-Q.
- A new table named EQ_DOMAIN_LOGIN was added to EQ database schema. This table is used to store data passed to the DomainLogin transaction.

Other Enhancements

- An update_status program now looks for status data stored by the DomainLogin transaction, and, if DomainLogin data found, it is stored in a new EQ_DOMAIN_LOGIN table in the EQ historical database.
- Running EQMDStat (EQMDStat.exe on Windows) with ‘-h’ switch now prints a help message.
- <eq>/lib/tivclientlib.pl – TivSPInstall routine was modified to search and replace single-quotes with double-quotes to support user_notification capability.
- <eq>/trans/tasks/RemoveNode.Tivoli-4.x.pl - New remove node for use with Inventory 4.x. This one uses 'winvrnode' instead of 'wrminvnode' as required by newer Tivoli Inventory installations. Switching to this version requires the user to recreate the task using this script instead of 'RemoveNode.pl'.
- adv_login_policy.v1.0.pl - Advanced LoginPolicy creates an EP file and makes sure EQLoginServer exists and is running. EQLoginServer is a daemon process that loops on a timed interval to process all the EP files and send EPLogin transactions to the EQServer. This advanced login policy script should be used in large environments where a significant reduction in socket I/O between Gateway and the enterprise-Q server is required. This script is available for registered customer on our web site at:

www.capitalsoftware.com/cgi-bin/downloads/CSListPatches.pl?TYPE=Enhancement

enterprise-Q V1.6.5 Bug Fixes from v1.6

Complete bug descriptions are available for registered users from our web site at the following URL:

<http://www.capitalsoftware.com/cgi-bin/support/CSListBugs.pl>

For a list of bugs fixed in enterprise-Q v.6 please see enterprise-Q 1.6 Release Notes.

EQ Server

- Bug #305: When a user removes a running transaction for a target from the queue the associated dispatch transaction still refers to the deleted transaction, and stays in the dispatch queue for long time without dispatching any other transactions for the target.

Web Interface

- **Troubleshoot Node** popup window now includes a link to Endpoint's web page only if it could successfully determine LCF agent port.
- **Mdist2 Gateway Status** window now correctly identifies distributions of Tmw2kProfile profiles.
- Bug #303: If password validation is enabled on the "EQ GUI Configuration" page then entering new database password on the "Installation Parameters" page, or system account password on the "EP Install Configuration" page may fail with error "Password validation failed: <explanation of the failure>".
- Bug #307: A few pages like "Edit Script -> Add Transaction", "Edit Action defaults" and others display "QueryLibrary" and "RemoteControl" action groups or actions as if they are real transactions.
- Bug #308: Some of InventoryConfig profile information (Perform Action-> Tivoli Inventory 4.0 profile -> View button next to a pull-down menu with profile names), particularly "Save Results" and "Lenient flag" data, is missing from the popup screen when the Enterprise-Q is used with CM 4.2.
- Bug #309: When Enterprise-Q is installed with DB2 database support, clicking on the "Select" button next to the "Job Id" field on the "Run Action" page generates an Apache error in a popup window.

Other fixes:

- Bug #306: If the EQServer is not running when update_status is started (scheduled execution, or by clicking on the 'Update data in database' button in the web interface), the update_status program logs an error message and terminates without removing a lock file. This lock file prevents all database updates for the

next four hours. Any attempt to run the `update_status` program during that time interval results in "Cannot execute - update_status process already running" error.

Awareness Notes for *enterprise-Q* v1.6.5

- Bug #21: During processing of custom profile/profile manager names and EQ scripts the Enterprise-Q may substitute endpoint's label instead of endpoint's hostname if the EQ cannot resolve endpoint's IP address to a hostname using DNS. Currently there is no workaround for this bug.
- Bug #31: When Enterprise-Q is installed together with the MySQL database, the installation script assumes some default settings for MySQL (no password for root account, and "equser" name and no password for EQ database account), which may not be correct for customer's MySQL configuration. The easiest way around this problem is to:
 - Temporarily disable the password for MySQL root account if it's enabled,
 - Install Enterprise-Q and allow the Enterprise-Q to create all necessary tables in the MySQL database,
 - Enable the password for MySQL root account if you disabled it previously,
 - Change username and password for "equser" account in the MySQL database,
 - Update the MySQL username and password on the **Installation Parameters** page.
- Bug #61: *AutoPack* transaction cannot determine a condition when a target is not subscribed to a profile manager containing distributed AutoPack profile. In case if the distribution was initiated for multiple targets (i.e. more than target was passed to the AutoPack transaction) then the distribution will fail for all targets even if all targets but one are valid subscribers to the profile. Currently there is no workaround for this bug.
- Bug #101: The Enterprise-Q web interface identifies all Windows 2000 and Windows XP targets as Windows NT targets. The reason is that the real OS name of the target is not available locally (Tivoli uses the same interp type *w32-ix86* for all three operating systems), and the only way to determine target's real OS name is to contact the target. The EQ web interface currently does not do that because contacting the target may introduce a prolonged delay in getting the real OS name (and therefore a prolonged delay in displaying some EQ pages), or it may not return any data at all if the endpoint agent is not running. Currently there is no workaround for this bug.