IBM XIV Storage GUI v2.4.2b

Release Notes

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For the latest revision of this document, please check the download section at:
http://www.ibm.com/systems/support/storage/XIV

XIV GUI Platform Requirements:

OS:	Windows 2000, Windows ME, Windows XP, Windows Server 2003, Windows Vista, Windows 7, Windows 2008
CPU:	32 bit Dual Core or equivalent, 64 bit
OS:	Linux (Red Hat 5.x or equivalent)
CPU:	32 bit, 64 bit
OS:	AIX 5.3, AIX 6.1
CPU	PPC
OS:	Solaris v9, Solaris v10
CPU:	Sparc 32 bit, X86 64 bit
OS	HPUX 11i v2, HPUX 11i v3
CPU	PA-RISC
HD:	100MB Free
Memory	512MB RAM (1GB RAM and above recommended)
Monitor Resolution:	1024x768 (Recommended: 1024x768 - 1920x1200)
Monitor Color Quality:	24/32 True Color Recommended

Installation:

Windows:	Download the GUI installation file, double click it and follow the instructions on the screen
Linux:	Download the GUI installation package and extract the files in it to a designated folder on your system, using the following command: `tar xzf <filename.tar.gz>`
Solaris, HPUX, AIX:	Download the GUI installation package. In order to unzip the package you will need the GNU Unzip utility (gunzip), available from

	http://www.gzip.org/.
	Unzip the package using the following command:
	`gunzip <filename.tar.gz>`
	Extract the files from the unzipped file to a designated folder on your system, using the following command: `tar xvf <filename.tar>`

XIV System Requirements:

R2, R2.1, R2.2:	Code level 10.0.x, 10.1.x, 10.2.x

1 What's New

1.1 XIV GUI Version 2.4.2b

1.1.1 Support XIV system version 10.2.1, with mirrored snapshots creation. For More information on the mirrored snapshots feature please refer to the XIV system documentation.

1.2 XIV GUI Version 2.4.2

1.2.1 New mirror connectivity view:
- Central view of mirroring connectivity status among all the managed systems in the GUI
- Easy setup of mirroring connectivity, using drag and drop between two systems, to create a symmetrical link

1.2.2 Asynchronous mirroring setup and monitoring (with systems version 10.2 and above) [UI-4754]
- Setup a mirror and choose if it is a synchronous or asynchronous mirror
- With asynchronous mirrors, monitor the synchronization status as compared with the desired RPO

  For more information on XIV asynchronous mirroring, please refer to the Theory of Operation Guide

1.2.3 In the Volumes and Snapshots view, a new column was added indicating if the volume is used in a mirroring par as a Master or as a Slave [UI-4758]

1.2.4 Navigation between views was enhanced as follows: [UI-4801]
- When using the Systems dock to switch from one system to another, the new system is presented in the same view as the previous one (e.g. move from the Events view on system A directly to the Events view on system B)
- The views history, allowing easy navigation back and forth between views using the green arrows, now keeps a full history, even when switching between systems

1.2.5 System time can now be seen at the top right corner of the GUI

1.2.6 Mapping a volume to a host may now be accessed from the Volumes and Snapshots view, by right-clicking the volume to be mapped and selecting the designated host [UI-4759]

1.2.7 Events extracted by the GUI may now be saved to a file [UI-5817]

1.2.8 System shutdown procedure from the GUI now requires retyping the administrator's password [UI-6232]

1.3 XIV GUI Version 2.4.1

1.3.1 XIVTop launch in context:
- XIVTop can be launched by right clicking a system in the All Systems view or clicking the Top icon in the Statistics view
- When launched from the XIV GUI, XIVTop will use the current user credentials, and will immediately show to the currently viewed system

1.3.2 Demo mode now shows a system with version 10.1, enabling demo mode for 10.1 features

1.4 XIV GUI Version 2.4

System 10.1 Features and Enhancements

1.4.1 Manage XIV systems running version 10.1

1.4.2 LDAP: Use the organization's LDAP server to manage users, passwords and access lists

1.4.3 Cluster private mapping: Define private LUNs for hosts even if they are members of a cluster

GUI Enhancements

1.4.4 Additional statistics filters:
- System statistics per a host ports
- System capacity usage over time

1.4.5 Up to 15 systems can be managed with a single GUI (up from 9)

1.4.6 Demo mode: Ability to run the GUI without connecting to any live system, using predefined sample data and configuration. To access Demo mode login with username "P10DemoMode"

1.4.7 Snapshots Tree and Snapshot Groups Tree views can now be used to actively manage snapshots (e.g. create, delete, map etc.)

1.4.8 Execute tasks for multiple objects at once, e.g. delete volumes, activate mirroring etc.

1.4.9 Progress bar: Show a progress bar indicating the progress of tasks that take a long time to execute

1.4.10 Enhanced keyboard navigation in tables: Use the left and right arrow keys to collapse and expand trees, use the up and down arrows to navigate through the table lines

1.4.11 Full table expand and collapse option

1.4.12 Enhanced tooltips: Learn why any menu item is currently disabled by placing the mouse over it and reading the context-specific tooltip

1.4.13 "User" column available in the Events table

1.4.14 Capacity Usage thresholds: Adjust the thresholds that determine the alert level for capacity usage by pool volumes and snapshots

1.4.15 Gradual events retrieval: Events are retrieved from the system gradually, to allow better performance as well as the ability to retrieve any number of events that match the used filter (up to a maximum of 10,000)

1.4.16 Resize table columns

1.4.17 Customize the starting index when creating multiple indexed volumes

1.4.18 Create and manage snapshots from the Snapshots Tree view

Advanced Support Features

1.4.19 Support Logs: Automatically collect all the system logs required by IBM-XIV support for timely analysis of the system status and health

1.4.20 Customer contact information forms

1.4.21 VPN setup to allow secure connectivity to IBM-XIV Remote Support Center

2 Bug Fixes

2.1 Fixes in Version 2.4.2b

2.1.1 GUI memory management was improved, to allow managing many more objects across the managed systems without memory exhaustion

2.1.2 In the Consistency Groups view, a mirrored CG is now indicated with an icon [UI-10908]

2.1.3 LUN Mapping for clusters in system version 10.0.1.b now works properly [XEST-14324]

2.2 Fixes in Version 2.4.2

2.2.1 Application administrators now have access to map volumes they manage to hosts [UI-8987]

2.2.2 The GUI now allows defining an iSCSI port with more than 15 characters [UI-8985]

2.2.3 On Linux, XCLI may now be launched the Systems view [UI-5883]

2.2.4 Sort for mirroring based on mirror status now operates correctly [UI-4944]

2.2.5 Nested sorts are now supported in tree tables [UI-3758, UI-2524]

2.2.6 Identical systems will no longer fail to load – instead they will be automatically merged to a single system by the GUI [UI-4604]

2.2.7 On HP-UX, Support Logs collection no longer leads to GUI failure [UI-6009]

2.3 Fixes in Version 2.4.1a

2.3.1 When defining an LDAP server that requires the use of a certificate, the GUI will now properly upload the certificate file [UI-5891]

2.3.2 When working with system version 10.1.0.b and above, special characters, such as '@', may now be used for the user login and password [SYS-6519, UI-8756]

2.4 Fixes in Version 2.4.1
None

2.5 Fixes in Version 2.4

2.5.1 Administrator may now modify FC port type between Target and Initiator [UI-3450]

2.5.2 Internal events are available to a Technician user [UI-2644]

2.5.3 Case sensitivity for usernames now works properly [UI-2598]

2.5.4 When the username/password provided to the system by the GUI are not accepted the GUI will no longer periodically attempt to reconnect until new credentials are provided by the user [UI-3944]

3 Known Issues and Limitations in Version 2.4.2b

3.1 GUI Issues:

3.1.1 **Issue:** In the Snapshot Groups Tree view, the group size which is indicated in the Snapshot Group Share Data pane is incorrect [UI-14643]
Corrective Action: The snapshot group size can be calculated from the size of each snapshot, as they appear in the Volumes and Snapshots view.

3.1.2 **Issue:** When defining a new Event Destination, the destination type pulldown is not working and allows only one option (SNMP, E-Mail or SMS), based on the destinations filter that was in place when the new destination button was clicked [UI-13872]
Corrective Action: Use the new destination wizard to define a new destination, or apply the relevant filter (SNMP, E-Mail, SMS) prior to using the new destination button.

3.1.3 **Issue:** When launching XCLI from the GUI, only the first IP address is used [UI-14343]
Corrective Action: When necessary, replace the order of the system addresses to ensure the first IP address is valid and available.

3.1.4 **Issue:** In the LUN mapping view, the individual expand/collapse buttons to display/hide a volume's snapshots, do not operate properly [UI-9455]
Corrective Action: Use the global collapse/expand all button at the top of the table.

3.1.5 **Issue:** After a module failure, historical statistics data prior to the failure are misleading and erroneous [UI-11723]

Reason: Statistics are collected individually from each module. Therefore, the failed module statistics cannot be collected, even for the time frame when it was available in the past.

Corrective Action: None. This issue will be fixed in future versions of the system and the GUI.

3.1.6 **Issue:** When using asynchronous mirroring with internal schedule, the GUI fails to duplicated the last-replicated snapshot on the salve side [UI-11547]

Corrective Action: Use XCLI to duplicate this snapshot. The issue will be fixed in the next version of the GUI.

3.1.7 **Issue:** When a system is in one of the following states: Charging, Booting, Maintenance, the GUI may loose connectivity or display misleading status information [UI-10649]

Corrective Action: None. GUI users should wait until this transient state is over, at which point the GUI will resume normal connectivity and operation.

This issue will be fixed in a future version of the GUI.

3.1.8 **Issue:** In the mirror connectivity view, if a module that is used for remote connectivity fails, the system may appear as an "unmonitored" target, even when it is managed from this GUI [SYS-9575, UI-9552]

Reason: When a module fails, its ports no longer appear in the ports list provided by the system, and therefore the GUI is unable to associate it with one of its managed systems

Corrective Action: While the module is unavailable, manage the connectivity to this system as an unmonitored target.

This issue will be fixed in a future version of the system.

3.1.9 **Issue:** When navigating to the dual connectivity screen, displaying the connectivity between two monitored system, then navigating to the All Systems view, deleting one of those systems, and going back, the connectivity to this now-unmonitored system is not accessible [UI-10896]

Corrective Action: Restart the GUI. The system will appear as an unmonitored target and can be managed as such

3.1.10 **Issue:** In the Volumes and Snapshots view, mirroring indication is not shown for consistency groups [UI-10908]

Corrective Action: Expand the consistency group and see the mirroring indication for each individual volume.

This issue will be fixed in a future version of the GUI.

3.1.11 **Issue:** When defining or deleting an IP Interface object for iSCSI connectivity, the system may take up to 10 seconds to acknowledge its association to the selected port. During this time, the GUI may present inconsistent behavior with respect to this IP Interface and this port [UI-5874, SYS-5862]

Corrective Action: After defining or deleting an IP Interface wait for 10 seconds before continuing any operations based on this definition (e.g. connecting a host or defining a new IP interface to be used with the same port).

3.1.12 **Issue:** When managing systems with a very large number of objects (volumes, hosts etc.) defined, the GUI may behave unpredictably and generate errors [UI-3956, UI-10900]

Reason: Managing a very large amount of objects (typically tens of thousands) may lead to memory exhaustion

Corrective Action: Please contact IBM-XIV customer support

3.1.13 **Issue:** GUI fails to operate properly through desktop virtualizers [UI-4781]

Reason: Due to the heavy graphical nature of the XIV GUI application, it is currently not designed to properly work through desktop virtualizers that run over slow links

Corrective Action: None.

3.1.14 **Issue:** Some system configuration options do not get automatically updated in the GUI when modified on the system [UI-3467][CQ-S1011102]

Reason: When the system is managed from several independent management clients (more than one GUI, XCLI etc.), some configuration changes made by one of the other management clients will not be reflected in the GUI until it is restarted. These include: System configuration, LDAP configuration and Support configuration

Corrective Action: Restart the GUI to view the updated information

3.1.15 **Issue:** On Windows, when choosing "Large Fonts" appearance, some GUI text and tooltips are not properly displayed [UI-2726]

Reason: Font resizing is currently not supported.

Corrective Action: None.

3.2 General Issues:

3.2.1 **Issue:** When using IBM XIV System code level 10.0.0.c or lower, the interface nodes may run out of file descriptors upon repeated retrieval of statistics for a long time.

Continuous use (e.g. through scripts), may cause the system to no longer accept GUI connection and commands. XCLI commands will continue to operate normally.

I/O operations will not be affected and no data will be lost.

Corrective Action: Avoid using XCLI to automatically retrieve statistics repeatedly from XIV systems with code level 10.0.0.c or lower. If you detect that your GUI stopped responding, while XCLI continues to operate, contact IBM support.

Resolution: This problem is fixed in version 10.0.0.d of the system code. The GUI will allow automatic statistics refreshing on systems with updated code level.

3.2.2 **Issue:** When using IBM XIV System code level 10.0.0.b or lower, the system may present memory leakage upon retrieval of statistics from hosts or targets that have more than 10 ports. When used excessively (e.g. through scripts that refresh automatically), this leakage may eventually lead to a complete shutdown of all the interface modules.

Corrective Action: Avoid using XCLI to retrieve statistics from such host and targets from XIV systems with code level 10.0.0.b or lower.

Resolution: This problem is fixed in version 10.0.0.c of the system code. The GUI will allow viewing statistics from any host or target, regardless of its number of ports, on systems with updated code level.