

XIV Management Tools v3.0

Release Notes

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Overview

IBM XIV Management Tools v3.0 contains all the utilities required to manage and monitor your XIV system: IBM XIV GUI for graphic management and control, IBM XIV Top for real time monitoring, and IBM XIV XCLI for CLI access and scripting.

Version 3.0 offers support for IBM XIV Storage System Gen3, as well as enhanced GUI functionality and usability and internal updates for XIVTop and XCLI utilities. The Management Tools package can be used to manage all generations of the XIV system from a single console.

For detailed information about the updates see the “New Features and Functions” section below.

For detailed information about the supported XIV system code version as well as the supported platforms for the management tools package, see the “System Requirement” section below

Reference Material

- **IBM Storage XIV system Gen3** release notes
- [IBM XIV Storage System Information Center](#), the IBM XIV documentation website. Includes user guide, reference guides and release notes for the storage system and its host software.
- “[IBM XIV Storage System: Architecture, Implementation, and Usage](#)”, IBM Redbook publication, Jan 2011. This publication describes the architecture and usage of the IBM XIV Storage system, and discusses various aspects of the IBM XIV Management Tools.

System Requirements

IBM XIV Management Tools Platform

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:	MAC OS X 10.6 with Java version 1.6
CPU:	32 bit Dual Core or equivalent
OS:	Linux (Red Hat 5, SLES 10, SLES 11)
CPU:	x86, x64
OS:	AIX 5.3, AIX 6.1, AIX 7.1
CPU	PPC
OS:	Solaris 9, Solaris 10
CPU:	SPARC, x64
OS	HPUX 11i v2, HPUX 11i v3
CPU	PA-RISC, IA64
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
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IBM XIV System

R2, R2.1, R2.2:	Code level 10.0.x, 10.1.x, 10.2.x
Gen3	Code level 11.0.x

Installation and Upgrade

Windows:	Download the Windows Management Tools installation file, double click it to start the installer and follow the instructions on the screen
Mac:	Download the MAC Management Tools installation file, double click it to start the installer and follow the instructions on the screen
Linux:	<p>Download the GUI installation package and extract the files in it to a designated directory on your system, using the following command:</p> <pre>tar xzf <filename.tar.gz></pre> <p>Run the following command from your designated directory:</p> <pre>XIVGUI/xivgui</pre>
Solaris, HPUX, AIX:	<p>Download the GUI installation package.</p> <p>In order to unzip the package you will need the GNU Unzip utility (gunzip), available from http://www.gzip.org/.</p> <p>Unzip the package using the following command:</p> <pre>gunzip <filename.tar.gz></pre> <p>Extract the files from the unzipped file to a designated directory on your system, using the following command: tar xvf <filename.tar></p> <p>Run the following command from your designated directory:</p> <pre>XIVGUI/xivgui</pre>

New Features and Enhancements

XIV GUI Version 3.0

1. IBM XIV Gen3 Support

1.1. Gen 3 support

The GUI can now be used to manage IBM XIV Gen3 systems, in addition to managing previous generation systems. All systems can be managed from a single console.

1.2. Gen3 3D model

When managing Gen3 systems, the 3D model was updated to depict XIV Gen3 components as well as the updated patch panel and utility panel

2. Central Alerts and Events Monitoring

2.1. Status Bar

The GUI now provides a bar at the bottom of the screen with basic indication of the health status of each managed system. The bar is visible from any GUI screen, regardless of the currently managed system.

2.2. Visual alerts

Live popup alerts will appear upon detection of a failure or other critical situation in any of the managed systems. Additional context-specific information can be easily accessed when the failure is announced.

2.3. "All Alerts"

A list consolidating all the currently known failures across all managed systems is now available. The list is also available for individual systems.

2.4. "All Events"

A consolidated list of events from all the managed XIV systems may be viewed and filtered in a single table.

3. Statistics Enhancements

3.1. QoS monitoring

A new graph shows the aggregated actual bandwidth consumption for all of the hosts in the same QoS performance class, relative to its specified bandwidth limit

3.2. Event drill-down

Single click to navigate from a data point on a graph to the Events view, listing events around the selected point in time, often allowing easy analysis of abnormal system behavior

3.3. Statistics flyover

Data points along the presented graph can be further inspected by placing the mouse on top of them, to show a full list of the exact values

3.4. Synchronized graphs

In a multi-graph statistics view, the individual graphs' timeline may be locked, such that the same timeline selection is applied to all the graphs, and a time scroll affects all the graphs together

3.5. Time selection

Easy selection of statistics time interval now supports either latest hour/day/week/month/year, or a custom calendar-based selection

3.6. System Timeline

Statistics can now be viewed on the system's own timeline, instead of the local GUI timeline

4. Capacity Allocation Enhancements

4.1. Pool capacity selection

When creating a storage pool, you may now visually drag the various size choices out of the available capacity for each. This includes the hard capacity, as well as the pool's soft capacity when using thin provisioned pools, and the snapshots capacity. The same visual capacities notation is also used for Volume capacity selection, as well as in the Pools and Volume by Pools views, for greater understanding of the capacity allocation and actual usage.

4.2. Volume metrics

Volume capacity may now be defined in GiB, a binary gigabyte, in addition to the previously available metrics using decimal GB or block size.

5. System 3D Model Enhancements

5.1. Maintenance mode

The system is now able to differentiate between failures that require immediate attention versus failures that are not considered critical to the system health and can therefore be deferred to the next scheduled technician visit. Failed components that do not require immediate attention will be shown with a semi-transparent red overlay, and will turn fully red once the system determines that immediate attention is warranted.

5.2. Interface modules indication

For greater understanding of system components, the 3D model now visibly highlights modules that are used as interface nodes

5.3. Module temperature

Indication of module temperature is now available in the 3D model, as well as in the module zoom-out. Click on the temperature indication in the zoom-out view to toggle between Celsius and Fahrenheit.

6. All Systems Enhancements

6.1. Connectivity Monitoring

Connectivity between groups may now be viewed in the All systems view, indicating the overall status of member connections between the groups

6.2. Status indicators

Additional optional status indicators may be used in the All-Systems screen, in the bubble on top of each system: Number of volumes, and number of hosts

6.3. Single system view

When the GUI is used to manage a single system, the All-Systems view will be bypassed in favor of the single system view

7. Licensing and Support

7.1. Support Logs

A simplified procedure is now offered to collect support logs from the managed system and automatically upload them to IBM for further inspection by the IBM XIV support team

7.2. System Licensing

When a new system is installed in the datacenter, or if an update to the system warrants it, customers will be required to electronically accept the license agreement for that system. The GUI will present the license and the ability to accept it upon access to that system

8. Miscellaneous Usability Enhancements

8.1. Application users

A single Users screen now consolidates all the definitions for users and application users. Create a group in order to define its access rights and associate application users to that group

8.2. Volume serial

A new column is now available for selection on all volume views, shows the volume's serial number in the system. A general GUI configuration allows users to choose between decimal or hexadecimal format for the volume serial number

8.3. "Sort By"

Sorting added to all tree-tables, allowing sort options based on the top level of the tree, in addition to the regular columns sort. Right click a top tree element to access these sorting options

8.4. Search enhancement

Search results now list all the objects on the currently managed system that match the search-term, regardless of the current view from which the search was carried. This includes hosts, volumes, pools, users etc. A click on the search result will lead the user to the context-specific view for that object type.

8.5. Demo mode access

Quick access to the GUI demo mode available through a checkmark at the login screen

XCLI Version 3.0

XCLI was adapted to support XIV Gen3 systems

XIV TOP Version 3.0

XIV Top was adapted to support XIV Gen3 systems

Fixes in this Release

XIV GUI Version 3.0

1. When defining or deleting an IP Interface object for iSCSI connectivity, the GUI will now present consistent behavior for this IP Interface and port [UI-5874, SYS-5862]
1. GUI will now show proper indication when power supply to a PSU is not available [UI-25555]
2. The option to restore a locked snapshot is now enabled [UI-21880]
3. Volumes-by-Hosts view is now available also when running against system version 10.0.x [UI-21908]
4. Changing some of the IP addresses for a monitored system now applies, whether the currently active IP address was changed, or not [UI-20162]
5. The statistics time axis will show the correct time, even if the time on the workstation where the GUI runs is not synchronized with the XIV system time [UI-22658]

6. When using Async mirroring, the calculated effective RPO on the slave will be correct even if the system time on the master and slave systems are not synchronized [UI-17794]
7. The GUI will behave predictably even when managing systems with a very large number of objects (volumes, hosts etc.) [UI-3956, UI-10900]
8. LDAP configuration changes will automatically be updated in the GUI [UI-3467][CQ-S1011102]

Note: See “Known Limitations” section with the same reference

XCLI Version 3.0

No fixes

XIV TOP Version 3.0

No fixes

Known issues and limitations

XIV GUI Version 3.0

1. 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.

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

2. Some configuration options do not get automatically updated in the GUI when modified on the system through a different management client [UI-3467][CQ-S1011102]

Reason: When the system is managed from several independent management clients (more than one GUI, XCLI etc.), some changes applied to the system configuration or the support configuration, that are made by one of the other management clients, will not be refreshed and reflected in the GUI until it is restarted.

Mitigation: Restart the GUI to view the updated information

3. When running the GUI on a Unix platform in dual screen, the GUI may not respond to the mouse [UI-80712]

Mitigation: disable desktop effects or use a single screen.

XCLI Version 3.0

1. In Windows, when using the command `xcli -r <script>` the script file cannot be resolved if provided with a relative path [UI-2455]

Mitigation: Always provide the script file full path

XIV TOP Version 3.0

None