

IBM XIV Storage System Software



# IBM XIV Management Console for VMware vCenter User's Guide

*Version 1.0.0*



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**Note**

Before using this information and the product it supports, read the information in "Notices" on page 19.

This edition applies to version 1, release 0, of IBM XIV Management Console for VMware vCenter and to all subsequent releases and modifications until otherwise indicated in new editions.

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## About this guide

This publication provides installation and configuration instructions for the IBM® XIV® Management Console for VMware vCenter.

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## Who should use this guide

This publication is for VMware system administrators. To use this publication, you must have an understanding of VMware management and the IBM XIV Storage System.

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## Conventions used in this guide

These notices are used to highlight key information.

**Note:** These notices provide important tips, guidance, or advice.

**Important:** These notices provide information or advice that might help you avoid inconvenient or difficult situations.

**Attention:** These notices indicate possible damage to programs, devices, or data. An attention notice appears before the instruction or situation in which damage can occur.

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## Publications and related information

Product manuals, other IBM publications, and Web sites contain information that relates to the IBM XIV Storage System.

To view a PDF file, you need Adobe® Acrobat Reader, which can be downloaded for free from the Adobe Web site at [www.adobe.com/products/acrobat/readstep.html](http://www.adobe.com/products/acrobat/readstep.html).


### Information centers

From the IBM XIV Storage System Information Center, you can browse all product documentation. The information center is available on the Web at [publib.boulder.ibm.com/infocenter/ibmxiv/r2/index.jsp](http://publib.boulder.ibm.com/infocenter/ibmxiv/r2/index.jsp).

### Publications

Information that is available in the information center is also available in a set of publications, in PDF format.

#### IBM XIV Storage System




- *IBM XIV Storage System Theory of Operations*  (GA32-0791)  
[publib.boulder.ibm.com/infocenter/ibmxiv/r2/topic/com.ibm.help.xiv.doc/docs/GA32-0639-08.pdf](http://publib.boulder.ibm.com/infocenter/ibmxiv/r2/topic/com.ibm.help.xiv.doc/docs/GA32-0639-08.pdf)

This document contains an overview of the IBM XIV Storage System hardware and software.


- *IBM XIV Storage System Planning Guide*  (GA32-0770)

[publib.boulder.ibm.com/infocenter/ibmxiv/r2/topic/com.ibm.help.xiv.doc/docs/GA32-0770-00.pdf](http://publib.boulder.ibm.com/infocenter/ibmxiv/r2/topic/com.ibm.help.xiv.doc/docs/GA32-0770-00.pdf)




This document defines preinstallation requirements for IBM XIV Storage Systems. It is important to ensure that you meet all requirements to guarantee a fast and reliable installation.

- *IBM XIV Storage System Host Attachment Guides*   
[publib.boulder.ibm.com/infocenter/ibmxiv/r2/index.jsp](http://publib.boulder.ibm.com/infocenter/ibmxiv/r2/index.jsp)  
These documents provide information about attaching host systems to the IBM XIV Storage System. Guides are available for each supported operating system, including IBM AIX®, Linux®, and Microsoft® Windows®.
- *IBM XIV Storage System User Manual*  (GC27-2213)  
[publib.boulder.ibm.com/infocenter/ibmxiv/r2/topic/com.ibm.help.xiv.doc/docs/GC27-2213-05.pdf](http://publib.boulder.ibm.com/infocenter/ibmxiv/r2/topic/com.ibm.help.xiv.doc/docs/GC27-2213-05.pdf)  
This document describes the IBM XIV command-line interface (XCLI) system and utility commands used to manage and maintain the XIV system, including the command syntax, parameter descriptions, output descriptions, and examples.
- *IBM XIV Storage System XCLI User Manual*  (GA32-0638)  
[publib.boulder.ibm.com/infocenter/ibmxiv/r2/topic/com.ibm.help.xiv.doc/docs/GA32-0638-02.pdf](http://publib.boulder.ibm.com/infocenter/ibmxiv/r2/topic/com.ibm.help.xiv.doc/docs/GA32-0638-02.pdf)  
This document describes how to use the IBM XIV command-line interface (XCLI) to run XIV system and utility commands.

### VSS Provider - Xprov

- *IBM XIV Storage System VSS Provider - Xprov Release Notes*   
[publib.boulder.ibm.com/infocenter/ibmxiv/r2/topic/com.ibm.help.xiv.doc/docs/xProv\\_2\\_2\\_3.pdf](http://publib.boulder.ibm.com/infocenter/ibmxiv/r2/topic/com.ibm.help.xiv.doc/docs/xProv_2_2_3.pdf)  
This document describes the supported environment, new features, known issues, and installation information.

### Remote Mirroring for VCS Cluster

- *IBM XIV Storage System Remote Mirroring for VCS Installation Guide*   
[publib.boulder.ibm.com/infocenter/ibmxiv/r2/topic/com.ibm.help.xiv.doc/docs/IBM\\_XIV\\_Remote\\_Mirroring\\_Agent\\_for\\_VCS\\_2.1.0\\_Installation\\_Guide.pdf](http://publib.boulder.ibm.com/infocenter/ibmxiv/r2/topic/com.ibm.help.xiv.doc/docs/IBM_XIV_Remote_Mirroring_Agent_for_VCS_2.1.0_Installation_Guide.pdf)  
This guide describes how to install and configure the VERITAS Cluster Server (VCS) enterprise agent for IBM XIV Remote Mirroring.
- *IBM XIV Storage System Remote Mirroring for VCS Release Notes for Windows*   
[publib.boulder.ibm.com/infocenter/ibmxiv/r2/topic/com.ibm.help.xiv.doc/docs/IBM\\_XIV\\_Remote\\_Mirroring\\_Agent\\_for\\_VCS\\_2.1.0\\_Release\\_Notes\\_for\\_Windows.pdf](http://publib.boulder.ibm.com/infocenter/ibmxiv/r2/topic/com.ibm.help.xiv.doc/docs/IBM_XIV_Remote_Mirroring_Agent_for_VCS_2.1.0_Release_Notes_for_Windows.pdf)  
This document describes the supported environment, new features, fixes, and known issues.
- *IBM XIV Storage System Remote Mirroring for VCS Release Notes for Solaris* 

publib.boulder.ibm.com/infocenter/ibmxiv/r2/topic/  
com.ibm.help.xiv.doc/docs/  
IBM\_XIV\_Remote\_Mirroring\_Agent\_for\_VCS\_2.1.0\_Release\_Notes\_for\_Solaris.pdf

This document describes the supported environment, new features, fixes, and known issues.


## MPIO Management Console

- *IBM XIV Storage System MPIO Management Console User's Guide*   
(GA32-0746)

publib.boulder.ibm.com/infocenter/ibmxiv/r2/topic/  
com.ibm.help.xiv.doc/docs/hag\_1\_5\_x/GA32-0746-00.pdf

This guide discusses the IBM XIV MPIO Management Console application, which provides monitoring and management capabilities to the multipath subsystems of the IBM XIV Storage System.

## Remote Support Proxy




- *IBM XIV Storage System Remote Support Proxy Installation and User's Guide*  (GA32-0795)




publib.boulder.ibm.com/infocenter/ibmxiv/r2/topic/  
com.ibm.help.xiv.doc/docs/GA32-0795-00.pdf

This guide describes how to install, configure, and use the IBM XIV Storage System Remote Support Proxy to connect an XIV system to the XIV Remote Support Center.

## IBM Redbooks publications and technical papers




Various IBM Redbooks® publications, Redpapers, and white papers are available for the IBM XIV Storage System. For additional papers, see the IBM XIV Storage System Web site at [www.ibm.com/systems/storage/disk/xiv/](http://www.ibm.com/systems/storage/disk/xiv/).

- *IBM XIV Storage System: Architecture, Implementation, and Usage*   
[www.redbooks.ibm.com/abstracts/sg247659.html?Open&cm\\_sp=MTE10970](http://www.redbooks.ibm.com/abstracts/sg247659.html?Open&cm_sp=MTE10970)  
This Redbooks publication describes the concepts, architecture, and implementation of the XIV system, which is designed to be a scalable enterprise storage system based upon a grid array of hardware components.
- *IBM XIV Storage System with the Virtual I/O Server and IBM i*   
[http://www.redbooks.ibm.com/abstracts/redp4598.html?Open&cm\\_sp=MTE11087](http://www.redbooks.ibm.com/abstracts/redp4598.html?Open&cm_sp=MTE11087)  
This paper discusses and explains how you can connect the XIV system to the IBM i operating system through the Virtual I/O Server (VIOS). A connection through the VIOS is especially useful for IT centers that have many small IBM i partitions. When using the VIOS, the fibre-channel host adapters can be installed in the VIOS and shared by many IBM i clients using virtual connectivity to the VIOS.
- *Performance Reinvented*   
[ftp://service.boulder.ibm.com/storage/disk/xiv/  
ibm\\_xiv\\_performance\\_paper.pdf](ftp://service.boulder.ibm.com/storage/disk/xiv/ibm_xiv_performance_paper.pdf)  
This white paper describes how the XIV system provides a solution to today's performance requirements.

- *Reliability Reinvented*   
[ftp://service.boulder.ibm.com/storage/disk/xiv/ibm\\_xiv\\_reliability\\_paper.pdf](ftp://service.boulder.ibm.com/storage/disk/xiv/ibm_xiv_reliability_paper.pdf)  
 This white paper describes how the XIV architecture delivers a new standard of reliability and availability for enterprise-class storage systems
- *Snapshot Reinvented*   
[ftp://service.boulder.ibm.com/storage/disk/xiv/ibm\\_xiv\\_snapshots\\_paper.pdf](ftp://service.boulder.ibm.com/storage/disk/xiv/ibm_xiv_snapshots_paper.pdf)  
 This white paper describes the XIV snapshot architecture and explains its underlying advantages in terms of performance, ease of use, flexibility and reliability. It also describes how these advantages are achieved by harnessing the power afforded by the unique grid architecture.
- *Thin Provisioning Reinvented*   
[ftp://service.boulder.ibm.com/storage/disk/xiv/ibm\\_xiv\\_thin\\_provisioning\\_paper.pdf](ftp://service.boulder.ibm.com/storage/disk/xiv/ibm_xiv_thin_provisioning_paper.pdf)  
 This white paper explores the benefits of thin provisioning, the XIV approach to implementing it, and other XIV capabilities that ease management and increase return on investment for IT managers and storage administrators.

## Related Web sites

View these Web sites to get more information about the XIV system.

- IBM XIV Storage System   
[www.ibm.com/systems/storage/disk/xiv/](http://www.ibm.com/systems/storage/disk/xiv/)  
 Use this Web site to learn about the XIV system, including features and hardware summary. This Web site also has links to white papers, Redbooks publications, and product documentation.
- Support for XIV Storage System   
[www.ibm.com/systems/support/storage/xiv](http://www.ibm.com/systems/support/storage/xiv)  
 Use this Web site to obtain downloadable files, links to submit and track problems, and support phone numbers and contacts.
- IBM Systems Storage forum   
[www.ibm.com/developerworks/forums/forum.jspa?forumID=846](http://www.ibm.com/developerworks/forums/forum.jspa?forumID=846)  
 Use this forum to share ideas with knowledgeable experts and discover how the latest IBM storage solutions can address your business challenges. Forum topics include storage management, storage virtualization, business continuity, infrastructure simplification, disk storage systems, and storage software products and solutions.

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## Getting information, help, and service

If you need help, service, technical assistance, or just want more information about IBM products, you can find a variety of sources to assist you. Table 1 provides a list of Web pages that you can view to get information about IBM products and services and to find the latest technical information and support.

*Table 1. IBM Web sites for help, information, and service*

Web site	Description
ibm.com®	Main IBM home page

Table 1. IBM Web sites for help, information, and service (continued)

Web site	Description
<a href="http://www.ibm.com/storage/support">www.ibm.com/storage/support</a>	IBM Support home page
<a href="http://www.ibm.com/planetwide">www.ibm.com/planetwide</a>	IBM Support page with pointers to the relevant contact information for a specific country

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## How to order publications

The IBM Publications Center is a worldwide central repository for IBM product publications and marketing material.

The IBM Publications Center offers customized search functions to help you find the publications that you need. Some publications are available for you to view or download at no charge. You can also order publications. The publications center displays prices in your local currency. You can access the IBM Publications Center through the following Web site:

[www.ibm.com/shop/publications/order/](http://www.ibm.com/shop/publications/order/)

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## Sending your comments

Your feedback is important in helping to provide the most accurate and highest quality information.

### Procedure

To submit any comments about this book or any other IBM XIV Storage System documentation:

Send your comments by email to [starpubs@us.ibm.com](mailto:starpubs@us.ibm.com). Be sure to include the following information:

- Exact publication title and version
- Publication form number (for example, GA32-0770-00)
- Page, table, or illustration numbers that you are commenting on
- A detailed description of any information that should be changed

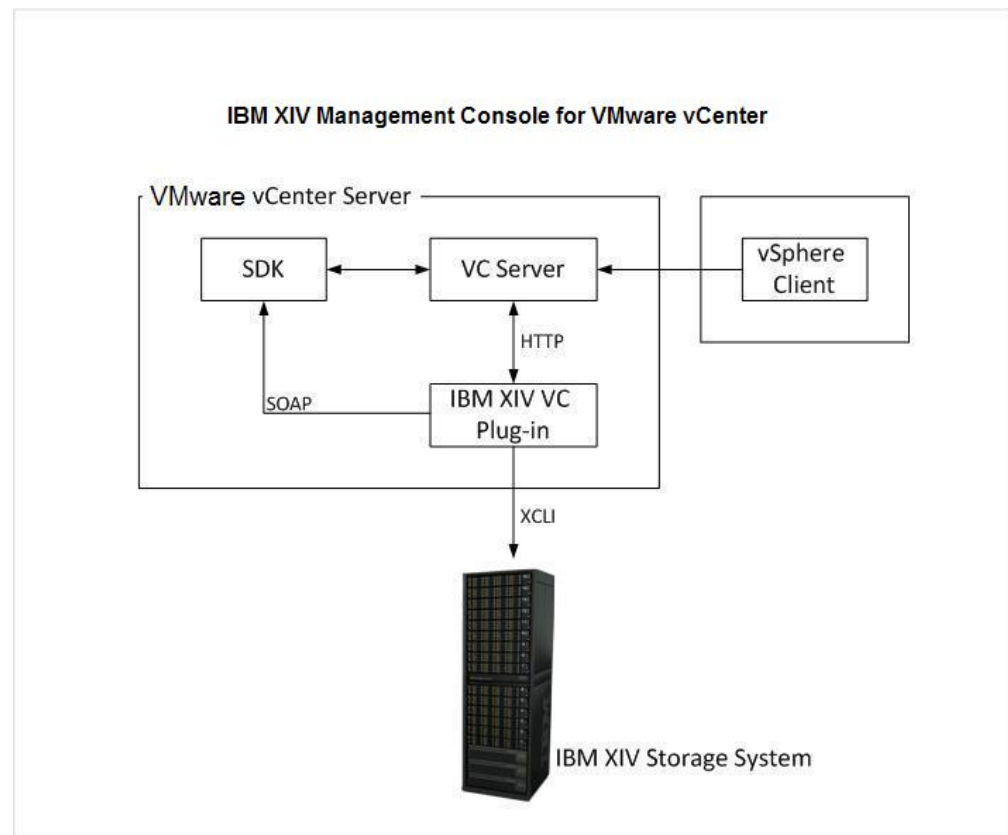


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## Chapter 1. IBM XIV Management Console for VMware vCenter overview

The IBM XIV Management Console for VMware vCenter is a plug-in that integrates into the VMware vCenter Server and manages XIV systems.

The IBM XIV Management Console for VMware vCenter installs a service on the VMware vCenter Server. This service queries the VMware software development kit (SDK) and the XIV systems for information that is used to generate the appropriate views. The VMware vSphere Client accesses these views through HTTP requests. The following figure provides an example of how the XIV system is accessed in a VMware environment.



### XIV management view in the VMware vSphere Client

After you configure the IBM XIV Management Console for VMware vCenter, new tabs are added to the VMware vSphere Client. You can access the tabs from the **Datacenter**, **Cluster**, **Host**, **Datastore**, and **Virtual Machine** inventory views.

From the XIV tab, you can view the properties for XIV volumes that are configured in the system. Table 2 on page 2 describes the properties that are displayed.

Table 2. VMware vSphere Client column descriptions

Column	Description
Datastore Name	The name of the data store for which this LUN is a member. If this LUN is assigned as a mapped raw LUN, the <b>Datastore Name</b> column displays RDM and the path to the vmdk file of the LUN. If the LUN does not belong to a Datastore and is not assigned as a mapped raw LUN, N/A is displayed.
Vendor	The vendor of the LUN. A value of IBM XIV indicates that this is a LUN assigned from the XIV system.
XIV System	If the system is configured, the system name is displayed. If the system is not configured, the serial number is displayed. If this is not an XIV LUN, N/A is displayed.
Volume Name	The name of the volume that is defined in the XIV system. If the XIV system is not configured, Unknown XIV system is displayed.
Volume Size	The size of the volume that is allocated to the XIV system. If the XIV system is not configured or this is not an XIV LUN, N/A is displayed.
Free Space	The free space that is available on the XIV LUN. This value does not indicate space allocation. If the XIV system is not configured or this is not an XIV LUN, N/A is displayed.
Pool	The name of the pool that this volume is defined as in the XIV system. If the XIV system is not configured or this is not an XIV LUN, N/A is displayed.
Volume Serial	The serial number for the XIV volume. If the XIV system is not configured or this is not an XIV LUN, the serial number that is used for inquiry data is displayed.
Identifier	Displays the VMware LUN identifier.

## Cache management

The IBM XIV Management Console for VMware vCenter uses a cache database to store data. By default, the cache is automatically refreshed every 30 minutes. You can manually refresh the cache by clicking **Update** in the XIV tab view.

## Log file

The log file is named `xiv_console_for_vcenter.log`. The log file is located in the `C:\Windows\Temp` directory.

---

## Supported software and hardware

For proper installation and usage, you must meet all software and hardware requirements.



Table 3 describes the software and hardware requirements that must be met before you install the IBM XIV Management Console for VMware vCenter.

*Table 3. Supported software and hardware*

Requirement	Description
VMware vCenter Server	Version 4.0 on the following operating systems: <ul style="list-style-type: none"> <li>• Microsoft Windows Server 2003</li> <li>• Microsoft Windows Server 2008</li> <li>• Microsoft Windows Server 2008 R2</li> </ul> <b>Note:</b> VMware vCenter Server 4.1 is not supported for this release.
IBM XIV Storage System	Version 10.0.0 to 10.2.2

## Prerequisites

Table 4 describes the prerequisites that must be met before you install the IBM XIV Management Console for VMware vCenter.

*Table 4. Software prerequisites*

Software	Description
VMware vCenter Server	The VMware vCenter Server must be installed on the same host as the IBM XIV Management Console for VMware vCenter.
XPyV	XPyV version 1.0.8 or later is supported. The XPyV software is included in the IBM XIV Management Console for VMware vCenter installation package.
Internet Explorer	Internet Explorer 7 or later must be installed on all VMware vSphere Client hosts.



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## Chapter 2. Installing the IBM XIV Management Console for VMware vCenter

The InstallShield Wizard takes you through the installation process.

### Before you begin

The VMware vCenter Server must be installed.

### Procedure

Perform the following steps to install the IBM XIV Management Console for VMware vCenter:

1. Download the `IBM_XIV_VC_Management_Console_for_VMware_vCenter_1.0.0.exe` file.
2. Double click the file to start the installation process. The Welcome page is displayed.
3. Click **Next**. The License Agreement page is displayed.
4. Read the License Agreement and select **I accept the terms in the license agreement**. Click **Next**. The Destination Folder page is displayed.
5. Use the default installation directory that is displayed or click **Change** to select a different directory. Click **Next**.

The default installation directory is `C:\Program Files\IBM\IBM XIV Management Console for VMware vCenter`. The Ready to Install the Program page is displayed.

6. Click **Install**. The installation process begins. The InstallShield Wizard Completed page is displayed after the process is complete.
7. Select **Launch IBM XIV Management Console for VMware vCenter configuration wizard** and click **Finish**. The configuration is started. See Chapter 3, "Configuring the IBM XIV Management Console for VMware vCenter," on page 7 for more information.



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## Chapter 3. Configuring the IBM XIV Management Console for VMware vCenter

### Before you begin

The following prerequisites must be complete:

- The IBM XIV Management Console for VMware vCenter must be installed.
- You must have a valid user name and password for the VMware vCenter Server before you can configure the IBM XIV Management Console for VMware vCenter.

### About this task

The IBM XIV Management Console for VMware vCenter configuration wizard starts at the end of the installation process. If the wizard is not started, go to the IBM folder in the Programs menu to start the wizard.

The configuration wizard is a command-line interface (CLI). The following is an example of the Welcome page that is displayed:

```
Welcome to the IBM XIV Management Console for VMware vCenter setup wizard, version 1.0.0.  
Use this wizard to configure the IBM XIV Management Console for VMware vCenter.  
Press [Enter] to proceed.
```

### Procedure

Perform the following steps to configure the IBM XIV Management Console for VMware vCenter:

1. Press Enter to start the configuration process. The following is an example of the instructions that are displayed:

```
The Wizard will now install the Management Console service and register the extension  
in the VC server.  
Do you want to continue? [default: yes]:
```

2. Press Enter to proceed or type no to exit. The following is an example of the instructions that are displayed:

```
The IBM XIV Management Console requires a valid username for connecting to the  
vCenter server.  
This user should have permission to register the Plug-in in the Plug-ins Manager.  
Please enter a username:
```

3. Enter the user name for the VMware vCenter Server. The user must have permission to register extensions on the VMware vCenter Server. The following is an example of the instructions that are displayed:

```
Please enter the password for the user administrator:
```

4. Enter the password for the user you have chosen for connecting to the VMware vCenter Server.

The wizard validates the user credentials. If the credentials are not correct, you are prompted to enter a user name and password.

The following is an example of the instructions that are displayed:

The IBM XIV Management Console for VMware vCenter is now configured.  
Press [ENTER] to proceed.

5. Press Enter. The wizard confirms that the extension is registered on the VMware vCenter Server. If an error occurs during this process, the error message is shown and written in the log file. If there are no errors, the IBM XIV Management Console for VMware vCenter is now configured. See Chapter 4, “Administering the IBM XIV Management Console for VMware vCenter,” on page 9 for more information.

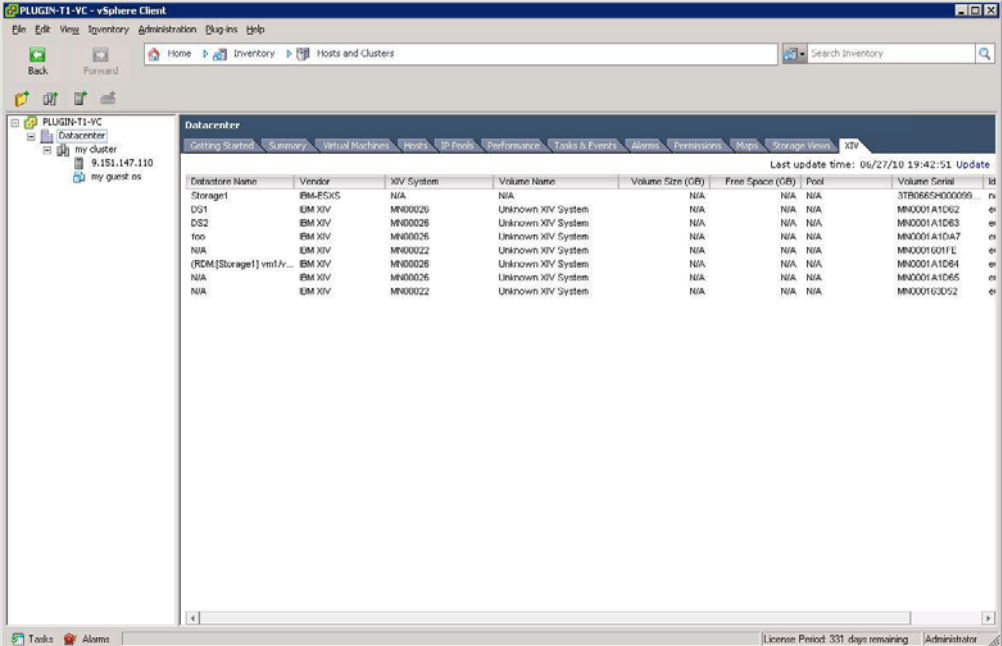
## Chapter 4. Administering the IBM XIV Management Console for VMware vCenter

After you configure the IBM XIV Management Console for VMware vCenter, new tabs are added to the VMware vSphere Client. You can access the tabs from the **Datacenter**, **Cluster**, **Host**, **Datastore**, and **Virtual Machine** inventory views.

### Procedure

The following steps take you through using the XIV tab view and defining XIV systems in the Systems table:

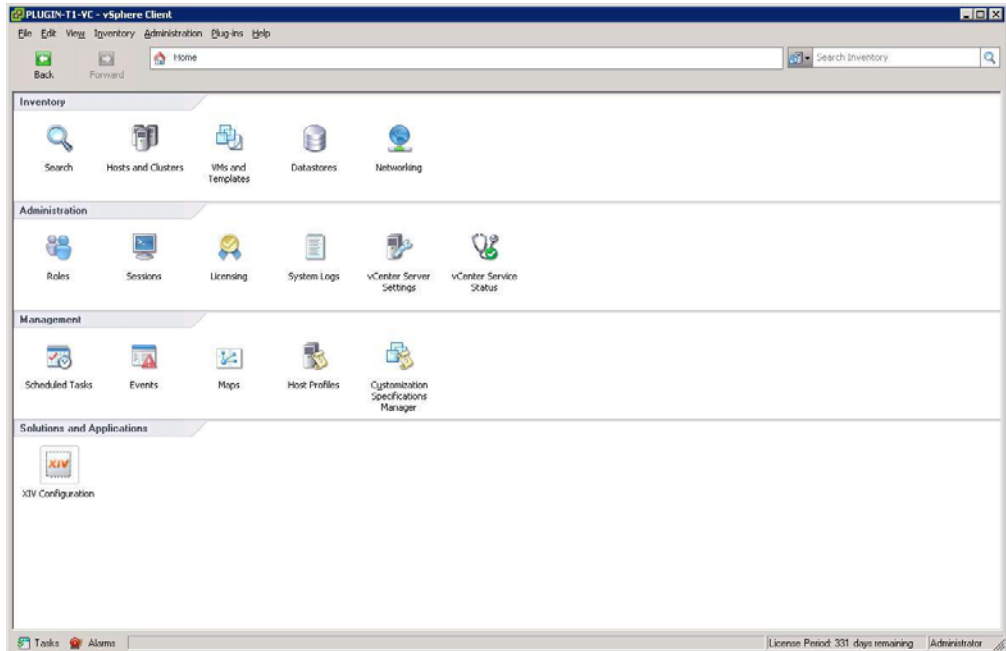
1. Select **View** → **Inventory** → **Hosts and Clusters**.
2. Click **Datacenter**, and then click the **XIV** tab. The following figure shows an example of the table that is displayed.



Datastore Name	Vendor	XIV System	Volume Name	Volume Size (GB)	Free Space (GB)	Pool	Volume Serial	Id
Storage1	IBM XIV	N/A	N/A	N/A	N/A	N/A	STR0654000099	n
DS1	IBM XIV	MN00026	Unknown XIV System	N/A	N/A	N/A	MN0001A1D62	e
DS2	IBM XIV	MN00026	Unknown XIV System	N/A	N/A	N/A	MN0001A1D63	e
foo	IBM XIV	MN00026	Unknown XIV System	N/A	N/A	N/A	MN0001A1D67	e
N/A	IBM XIV	MN00022	Unknown XIV System	N/A	N/A	N/A	MN0001S011E	e
(RDM[Storage1] vmt/...	IBM XIV	MN00026	Unknown XIV System	N/A	N/A	N/A	MN0001A1D64	e
N/A	IBM XIV	MN00026	Unknown XIV System	N/A	N/A	N/A	MN0001A1D65	e
N/A	IBM XIV	MN00022	Unknown XIV System	N/A	N/A	N/A	MN0001C0D52	e

The table displays management information for the VMware vCenter Server and XIV systems. Some of the information is not displayed until you define the XIV system in the Systems table. For example, the **Volume Name** column displays Unknown XIV System.

3. Define the XIV system in the Systems table:
  - a. Click **Home** to return to the main panel of the VMware vSphere Client. The following figure shows an example of the VMware vSphere Client main panel.



- b. Click the **XIV Configuration** icon in the Solutions and Applications section. An empty table is displayed.
- c. Click **Add** at the top of the panel or right-click in the main area and select **Add** to enter the credentials for the XIV system.
- d. Enter the user name, password, and host name or IP address for the XIV system that has volumes allocated in the VMware environment.

**Tip:** If you do not have this information, contact your storage administrator.

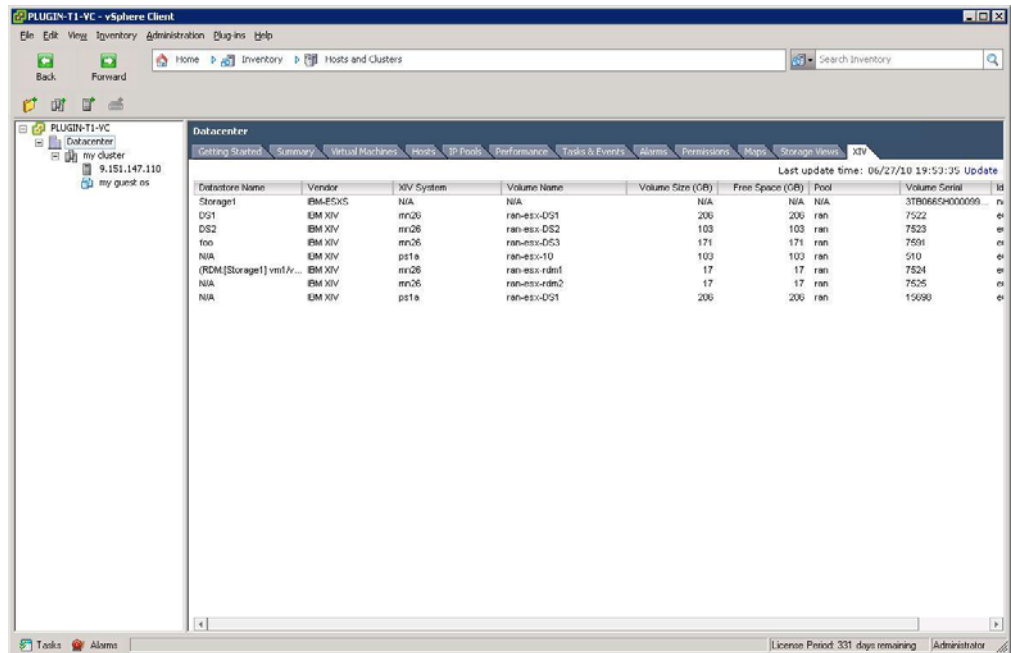
- e. Click **Add** to add the XIV system to the configuration. The XIV systems are now defined in the Systems table.

You can now click **Update** to change system properties or click **Delete** to remove the system from the configuration.

4. From the main menu, select **View** → **Inventory** → **Hosts and Clusters**.
5. Click **Datacenter**, and then click the **XIV** tab.

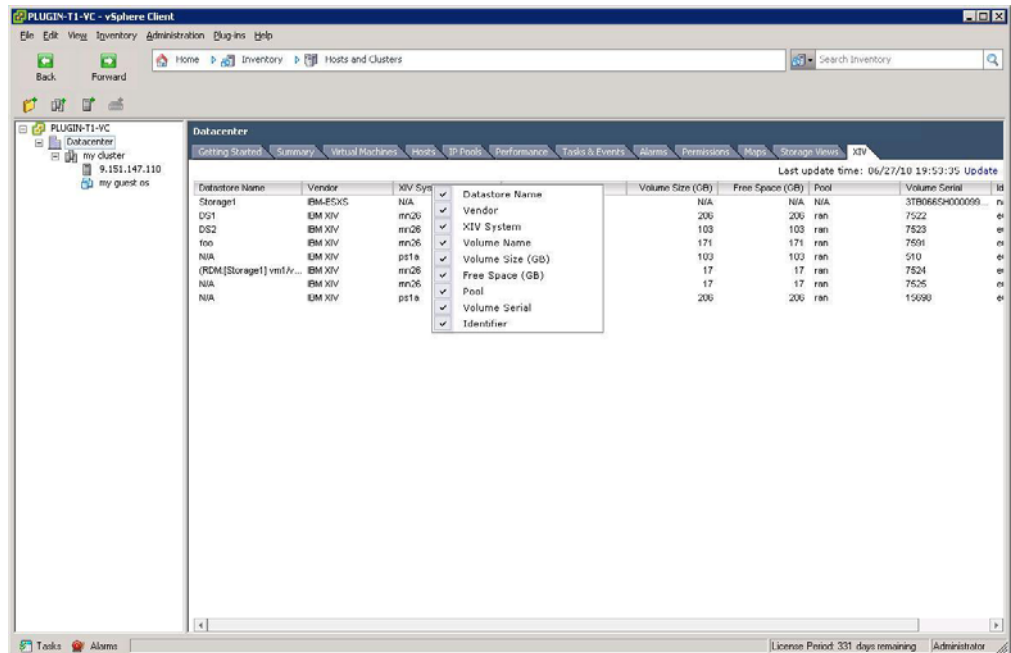
All columns should now display information. The following figure shows an example of the information that is displayed.





By default, the page view for the VMware vSphere Client is refreshed every 5 minutes and the cache information is reloaded every 30 minutes. New information is displayed after the cache is reloaded. For more information about these settings, see “Changing the IBM XIV Management Console for VMware vCenter settings” on page 12.

- Optional: Right-click anywhere on the table headings to change the information that is displayed. The following figure shows an example of the information you can select or clear.



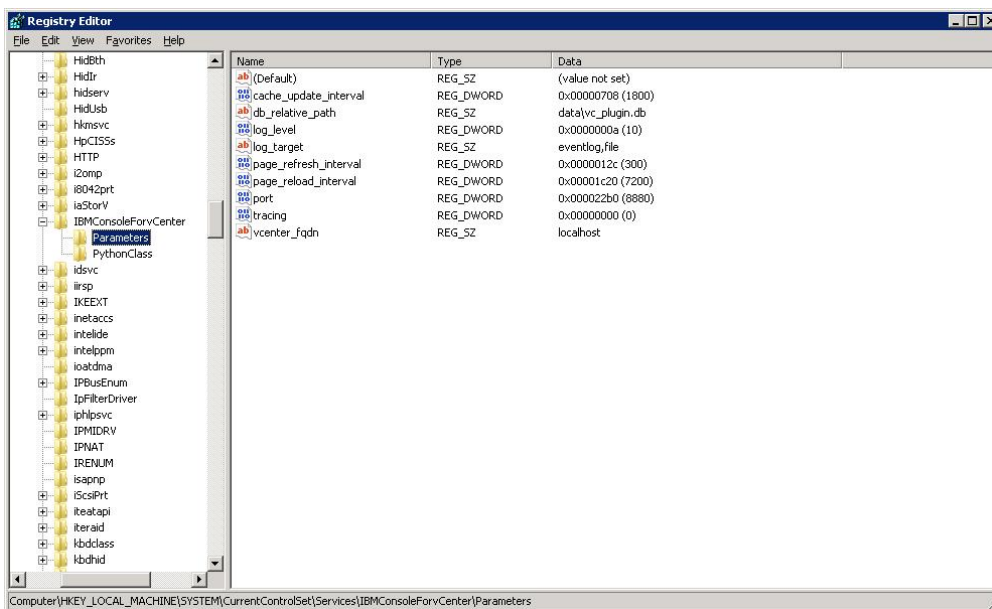
# Changing the IBM XIV Management Console for VMware vCenter settings

You can use the registry entry for the IBM XIV Management Console for VMware vCenter to configure certain settings.

## Procedure

Perform the following steps to change the IBM XIV Management Console for VMware vCenter settings:

1. Start the Windows Registry Editor.
  - a. From your desktop, select **Start** → **run**.
  - b. Type `regedit` and press Enter. The Registry Editor is displayed.
2. Go to `HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\IBMConsoleForvCenter\Parameters`. The following figure shows an example of the information that is displayed.



3. Use the following table to determine the parameters that you want to change.

Table 5. Registry keys

Key	Description	Default value
Cache-update_interval	The interval for updating the cache with information from the VC server. This is stated in seconds.	1800 seconds (30 minutes)
Db_relative_path	The relative path to the database file. Do not manually edit this parameter.	Data\vc_plugin.db
Log_level	The type of messages to be logged. The log file is named <code>xiv_console_for_vcenter.log</code> . The log file is located in the <code>C:\Windows\Temp</code> directory.	Info (10)

Table 5. Registry keys (continued)

Key	Description	Default value
Log_target	The target for logging. The log is directed to a file and to the Event Viewer application log. Do not manually edit this parameter.	Eventlog,file
Page-refresh_interval	The refresh interval for updating views in the VMware vSphere Client. This parameter does not reload cache information.	300 seconds (5 minutes)
Port	The port that the IBM XIV Management Console for VMware vCenter web service uses for requests from the VMware vSphere Client.	8880
Tracing	Turns tracing on or off. Do not change this parameter unless you are instructed to do so by IBM Support.	Off (0)
Vcenter_fqdn	The fully qualified DNS of the VMware vCenter Server. This is normally localhost. Do not manually change this parameter.	localhost



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## Chapter 5. Troubleshooting the IBM XIV Management Console for VMware vCenter

This topic provides solutions for problems that you might encounter.

Problem	Solution
The configuration wizard fails after you enter an incorrect username or password. The following message is displayed: 'Failed to register extension on VC: faultstring="The session is not authenticated.'"	Restart the configuration wizard. See Chapter 3, "Configuring the IBM XIV Management Console for VMware vCenter," on page 7 for more information.
When you switch to the XIV tab view, the LUN table does not display or generates an error.	<ul style="list-style-type: none"><li>• Ensure that the IBM XIV Management Console for VMware vCenter service is running.</li><li>• If the service has failed, view the log file for more information. The log file can be found in the C:\Windows\Temp directory. The log file name is <code>xiv_console_for_vcenter.log</code>.</li></ul>
The VC plug-in is disabled in the VMware client plug-in manager.	<ul style="list-style-type: none"><li>• Ensure that the IBM XIV Management Console for VMware vCenter service is running.</li><li>• Open the plug-in manager in the VMware vSphere Client. Go to <b>plug-ins</b> → <b>manage plug-ins</b> and right-click <b>enable</b>.</li></ul>
The registration fails during the configuration.	<ul style="list-style-type: none"><li>• Verify that the fully qualified domain name is properly resolved for the VC server. The registration process checks the DNS and networking settings.</li><li>• If a networking problem occurred during the configuration process, the plug-in might be registered, but disabled. If the plug-in is registered, you can enable it to fix this issue.</li><li>• Rerun the configuration wizard.</li></ul>
The Event Viewer application log displays warning messages for the VMware server SOAP API.	Verify that the VMware Virtual Center services are started. You can ignore these warning messages if they are generated only during boot.

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### IBM XIV Management Console for VMware vCenter events

The IBM XIV Management Console for VMware vCenter software generates informational event, warning event, and error event messages. An event code or number is associated with the event and indicates the reason for the event.

## Information event messages

Table 6. Information event messages

Code	Description
301	The service is started.
302	The service is stopped.
303	The service is in the process of stopping.
304	The cache maintainer is initializing.
305	The cache maintainer has been initialized.
306	The cache maintainer is running.
307	The cache maintainer is stopping.

## Warning event messages

Table 7. Warning event messages

Code	Description
331	The cache manager did not find a volume to match a datastore extent. This extent does not have information to display in the view.
332	The datastore type is not supported by this version of the IBM XIV Management Console for VMware vCenter. Report this event to IBM Support.
333	The cache manager did not find any volumes that match the VMware filename. The VMware filename might be mapped to a raw volume. Information for this filename is not displayed in the view.
334	The cache manager reported an error that might be temporary. If this message appears, an error has occurred and the cache manager cannot update the cache.
335	The cache manager found an XIV volume, but cannot access its properties. The Rescan operation in the <b>Host configuration</b> tab might fix this problem.

## Error event messages

Table 8. Error event messages

Code	Description
361	The cache manager reported a persistent error. As a result, the cache manager cannot update the cache.
362	IBM XIV Management Console for VMware vCenter cannot unregister as a plug-in for the server. You must manually unregister the IBM XIV Management Console for VMware vCenter.

Table 8. Error event messages (continued)

Code	Description
363	The IBM XIV Management Console for VMware vCenter service did not uninstall during the uninstall process.
364	IBM XIV Management Console for VMware vCenter cannot register as a plug-in for the server. To fix this issue, rerun the configuration wizard.





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