Quantum DXi V-Series Quick Start Guide

This quick start guide provides system requirements and basic installation and configuration instructions for the Quantum DXi V-Series appliance. For more information, see the *Quantum DXi V-Series User's Guide (6-67612).* You can access Quantum DXi V-Series documentation at http://www.quantum.com/DXiV-SeriesDocs.

Note: For DXi V1000 Standard Edition users, documentation, community support, and other resources are available through Forum V, (http://www.quantum.com/forumv) Quantum's online support forum for virtualization products.

About the Quantum DXi V-Series

The Quantum DXi V-Series virtual appliances* (DXi) provide an entry point for Quantum customers who want to implement a virtual infrastructure. The DXi is a flexible virtual appliance backup solution that integrates data deduplication and replication technology to connect backup and disaster recovery protection across distributed corporate environments. The DXi uses Quantum's patented data deduplication technology to increase disk capacities by 10 to 50 times and makes WAN replication a practical and effective part of disaster recovery planning. The DXi is designed for customers who need to protect up to 24 TB of deduplicated data and who do not wish to deploy a physical DXi system.

The Quantum DXi V-Series appliances are delivered as VMware virtual appliances in an OVF format that installs within a vSphere infrastructure.

* The 2-TB Quantum DXi virtual appliance, the DXi V1000, and the 4- to 24-TB Quantum DXi virtual appliance, the DXi V4000, are collectively referred to as the Quantum DXi V-Series virtual appliances. For the purposes of this guide, the two versions will be referred to as the DXi and designated by model number where appropriate.

Contents

Included With Your DXi V-Series Appliance

The Quantum DXi appliance is configured to a standard specification. Each order comes with a media kit containing a download authorization code, a product key certificate, a Registration/Explore card, and the EULA.

Licenses

The following licenses are included with the DXi.

- **NAS** - Enables NAS (NFS, CIFS) connectivity.
- **Data Deduplication** - Enables data deduplication and compression.
- **Replication** - Enables replication to other DXi systems.
- **OST** - Enables OpenStorage backup with Symantec OST.
- **Storage Capacity** - Enables the purchased storage capacity for the system.

  For the DXi V1000:

  - A Trial license has 256 GB of storage capacity.
  - An Enterprise Edition initial purchased license has 1 TB and can be expanded to 2 TB of storage capacity.
  - The Standard Edition of the DXi V1000 has 1 TB of storage.

  For the DXi V4000:

  - A Trial license has 4 TB of storage capacity.
  - An Enterprise Edition initial purchased license has 4 TB and can be expanded to 24 TB of storage capacity in 1 TB increments.

  If you purchase a storage capacity upgrade, you will receive an additional license certificate.

DXi Accent

Quantum's DXi Accent software accelerates backups and reduces network bandwidth requirements by distributing deduplication between the backup server and DXi appliances. With DXi Accent, backup windows are reduced and network bottlenecks are eliminated.

To use DXi Accent, you must install the Quantum OST Client Plug-in on the media server. For information about installing the OST Plug-in and using DXi Accent, see the *Symantec NetBackup OST Configuration Guide*.

Service

DXi V-Series Warranty

The DXi V-Series Trial versions include 90 day warranty. The DXi V-Series Trial versions also include 90 days of Quantum Customer Support. Support includes software downloads, Email Home, and Internet access to Quantum's online Customer Support Web site.

The Quantum Customer Support Web site features online service request processing, Web-based event status tracking, and a comprehensive Knowledge Base. Quantum's Knowledge Base gives you 7x24 real-time electronic access to complete product and support resources and the expertise of Quantum's Global Services organization.

The DXi V1000 Standard Edition does not include a warranty, and it does not include Customer Support. For DXi V1000 Standard Edition users, documentation, community support, and other resources are available through Forum V, (http://www.quantum.com/forumv) Quantum's online support forum for virtualization products.

The DXi V-Series Enterprise Editions require the purchase of either a **Gold** or **Silver** Quantum Support Service Plan. A 90 day warranty runs concurrent with the start of the Support Service plan.

Service Plans

Quantum's Global Services organization is geared towards delivering the fastest possible response and root cause resolution, helping you maximize your backup investments, better manage processes, and make the best use of your resources. We ensure total customer satisfaction by providing comprehensive, responsive services on a worldwide basis.

A variety of support options are available to you via Quantum's tiered support plans to meet a range of budget and availability requirements. Quantum's Support Plans include a **Gold** support contract, which includes 7x24 phone support for 1 year, and a **Silver** support contract, which includes 5x9 phone support for 1 year. For more information on these service plans, please visit www.quantum.com or contact your Quantum Sales Representative.

Email Home

The Email Home capability can be configured to automatically send XML-based reports to e-mail recipients.

The report represents a snapshot of the system information at the time the report is generated. Quantum recommends generating and saving a report before performing a software upgrade or reconfiguring the system.

DXi Advanced Reporting

DXi Advanced Reporting, which is included on all DXi appliances, sets new standards for onboard intelligence by giving users a detailed view of internal appliance operations and provides them with years of backup and replication data for extended trend analysis. DXi Advanced Reporting reduces administration time, improves operations, streamlines performance tuning, and helps users maximize the value of their DXi appliances.

For systems with a larger scope, Quantum Vision™ management software provides industry-unique capabilities, giving IT departments global management of all their Quantum disk and tape systems from a single console. Vision's centralized reporting and flexible trend analysis tools help users optimize system value by giving them automated, flexible access to the information they need to make proactive decisions concerning on-going system administration.

Pre-Installation Checklist

The DXi is distributed as a virtual appliance that can interface with your physical agents (such as backup) with multiple VMware ESX or ESXi servers.

System Requirements

Make sure your environment meets or exceeds the following system requirements before you begin installing your DXi:

- Server system with at least an i7 quad-core Intel processor (AMD processors not supported)

  DXi V1000: two virtual CPU cores required

  DXi V4000: eight virtual CPU cores required

- At least one IP address available for use by the DXi (obtained from DHCP or manually assigned at boot time, if assigned manually, have your Gateway IP and Node Netmask IP available)
- VMware environment:

  DXi V1000: One or more ESX4, ESXi4, ESXi5, or ESXi5.1 servers that are part of a vSphere vCenter cluster or on a VMware Workstation 9

  DXi V4000: One or more ESXi5.x servers that are part of a vSphere vCenter cluster
- vSphere vCenter version 4.0 u2 or later
- A 1 GbE or 10 GbE Ethernet port for data movement on the DXi host server
- Browsers: Mozilla Firefox 6 or higher; Microsoft Internet Explorer 8 or higher (Internet Explorer 10 currently not supported)
- Adobe Flash Player plug-in 9 or higher
- Free space on the appropriate vSphere server
  (In general, you will need .5 TB plus your license capacity, examples follow.)

  DXi V1000:
  1-TB license – 1.5 TB storage, thin provisioned; 2.5 TB storage, thick provisioned
  2-TB license – 2.5 TB storage for either provisioning option

  DXi V4000:
  4-TB license – 4.5 TB storage, thin provisioned; 24.5 TB storage, thick provisioned
  24-TB license – 24.5 TB storage for either provisioning option

Note: The DXi V-Series appliances do not provide a facility for shrinking virtual disks, nor does Quantum Technical Support provide guidance or instruction for implementing such an activity. However, if you feel that this task is necessary, you can find more information in the following VMware article: Shrinking Virtual Disks.

- RAM

  DXi V1000: 4 GB

  DXi V4000: 48 GB

Caution: Creating a secondary copy of the data on your DXi should be done using the DXi Replication feature rather than your backup software.

Notational Conventions

The following conventions are used in this document:

Convention	Example
User input is shown in bold font.	**cd /tmp/VISION/**
Computer output and command line examples are shown in monospace font.	`Sample output`
User input variables are enclosed in angle brackets.	**http://<ip_address>**

For UNIX and Linux commands, the command prompt is implied.	`./setup-linux.bin`
	is the same as
	`# ./setup-linux.bin`

File and directory names, menu commands, button names, and window names are shown in bold font.	**/tmp/VISION/**
Menu names separated by arrows indicate a sequence of menus to be navigated.	**Configuration > Licensing**

The following formats indicate important information:

Note: Notes emphasize important information related to the main topic.

Caution: Cautions indicate potential hazards to equipment and are included to prevent damage to equipment.

WARNING: Warnings indicate potential hazards to personal safety and are included to prevent injury.

Installing the Quantum DXi V-Series

Before installing your DXi please keep the following items in mind:

- Only Intel processors are supported. AMD processors are NOT currently supported.
- The DXi will attempt to connect to a License Server during installation. If the software cannot access the License Server (i.e. you do not have or are not allowed Internet access) you must contact Quantum Technical Support for your complete product license key. To contact Quantum Technical Support, call the appropriate number as listed in Table 1 Quantum Technical Support on page 24.
- A default DXi deployment maps its virtual disks to a single datastore. A user can remap these virtual disks to dedicated datastores for higher performance. Such a configuration will improve overall DXi performance under heavy loads.

  Any mapping of virtual disks to multiple VMware datastores should be done before initial configuration of the DXi. VMware may place limitations preventing such changes after the appliance has been run.

A DXi installation consists of the following steps:

- Deploying the DXi on an ESXi Server
- Deploying the DXi V1000 on a VMware Workstation 9
- Accessing the DXi
- DXi Configuration

Deploying the DXi on an ESXi Server

When you are ready, use the following instructions to deploy your Quantum DXi appliance:

For illustrative purposes, the deployment of a DXi V1000 is shown.

The following example represents a typical OVF deployed from a ESXi V5.0.0 server. The actual sequence of windows that you will see will depend on your system's configuration. With a basic knowledge of your system, the selections that you will need to make, such as hosts, clusters, resource pools, multiple storage destinations, networks, etc. should be intuitive. This example does attempt to depict where those windows will be displayed.

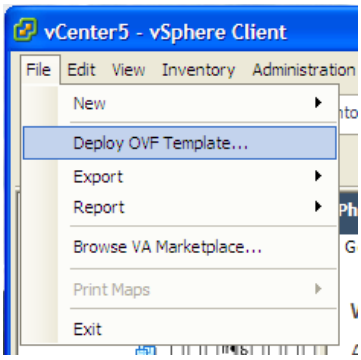
1. If you have not downloaded the Quantum DXi V-Series software, do so now by following the instructions on your DXi Download Authorization Key certificate.
2. Extract the files from the downloaded zip file.

Note: Should you see an error message indicating that you have encounter an invalid file name or one that references an *unexpected error*, disregard the error message and continue extracting the files.

3 Start a vSphere Client.

4 On the vSphere Client window (see Figure 1), select **Deploy OVF Template** from the **File** menu. The **Source** window displays.

Figure 1 Deploying an OVF Template



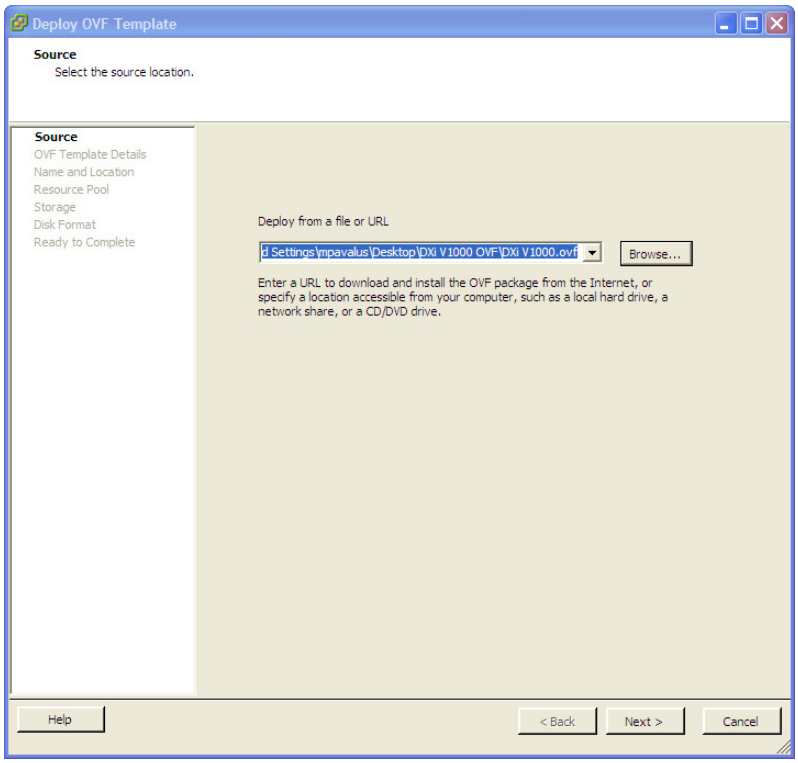
5 On the **Source** window, do the following (see Figure 2):

a Select **Browse,** and then browse to the files you extracted from the Quantum DXi V-Series zip file.

b Choose the file **DXi V1000.ovf.**

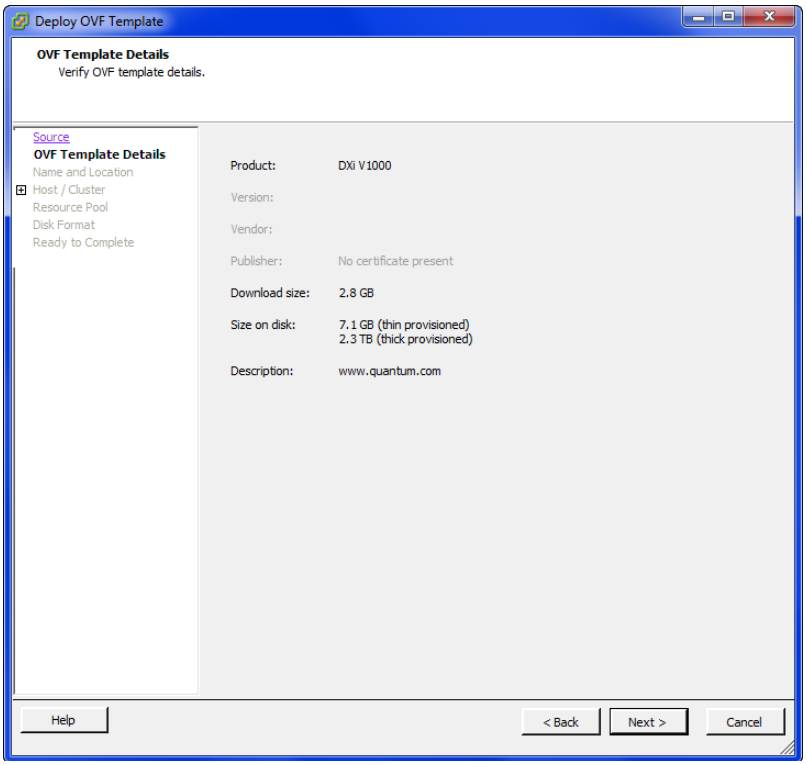
c Click Next. The **OVF Template Details** window displays.

Figure 2 Selecting the Quantum DXi V-Series OVF File



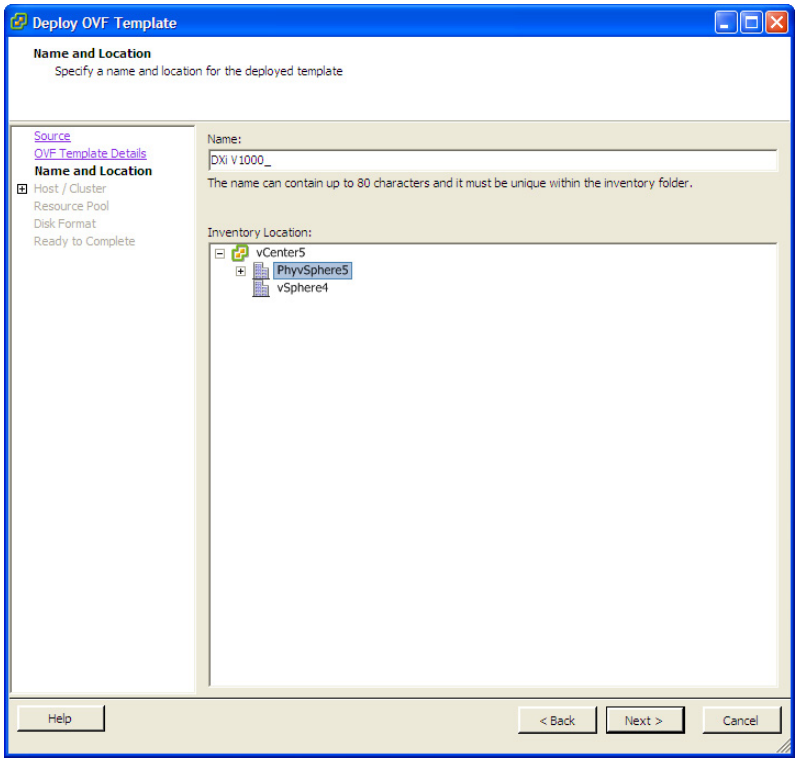
6 On the **OVF Template Details** window (see Figure 3), make note of any information you feel you may need. Click **Next**. The **Name and Location** window displays.

Figure 3 Viewing the OVF Template Details



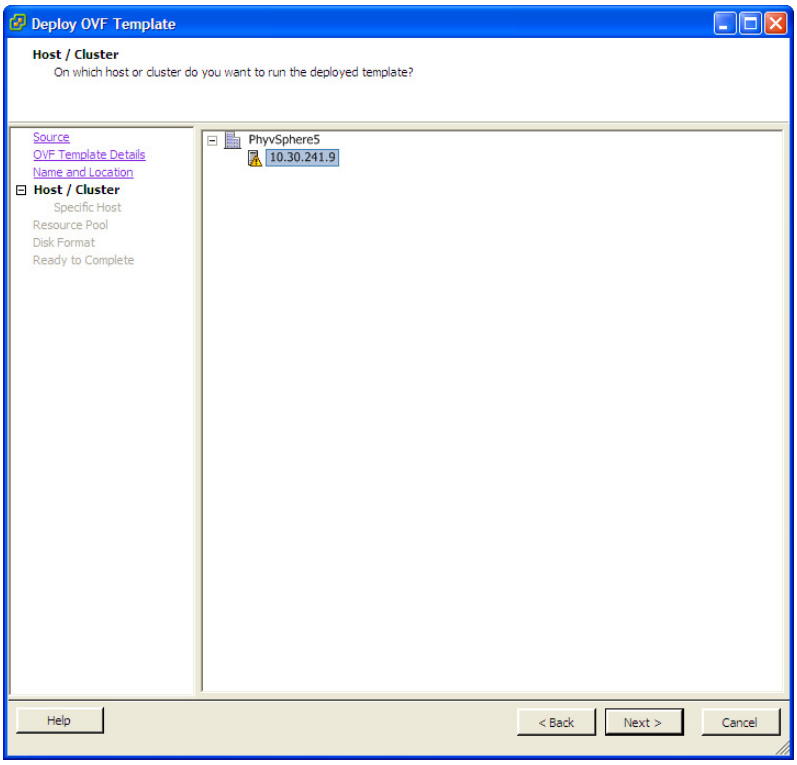
7 On the **Name and Location** window (see Figure 4), enter a name for the new appliance; if necessary, select an **Inventory Location.** Click **Next**.

Figure 4 Specifying the Appliance Name and Location



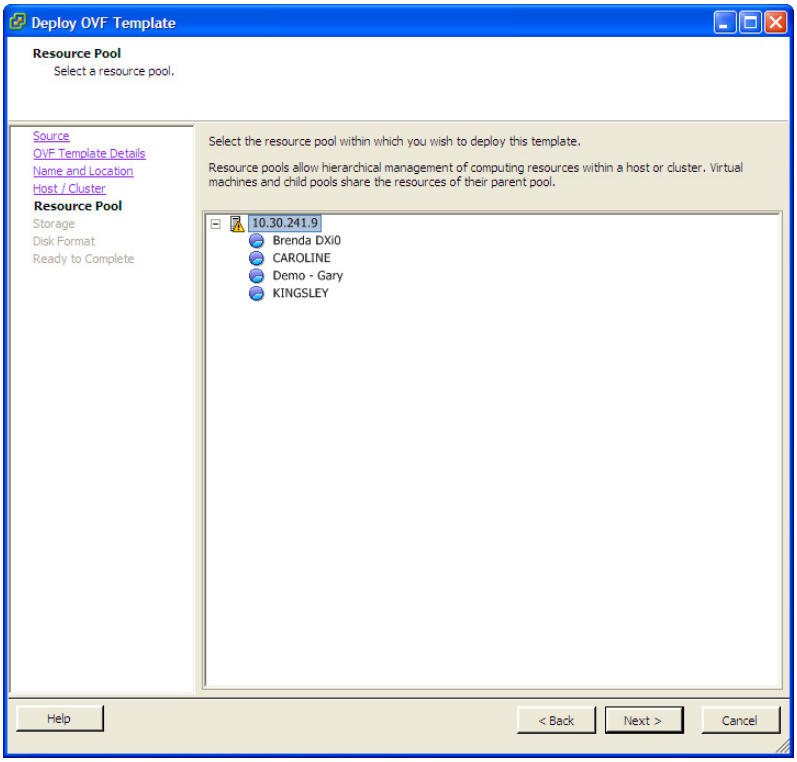
8 If your configuration has multiple hosts or clusters (see Figure 5), select your host or cluster. Click **Next**. This window will not display if you have only one host or a single cluster.

Figure 5 Selecting a Host or Cluster



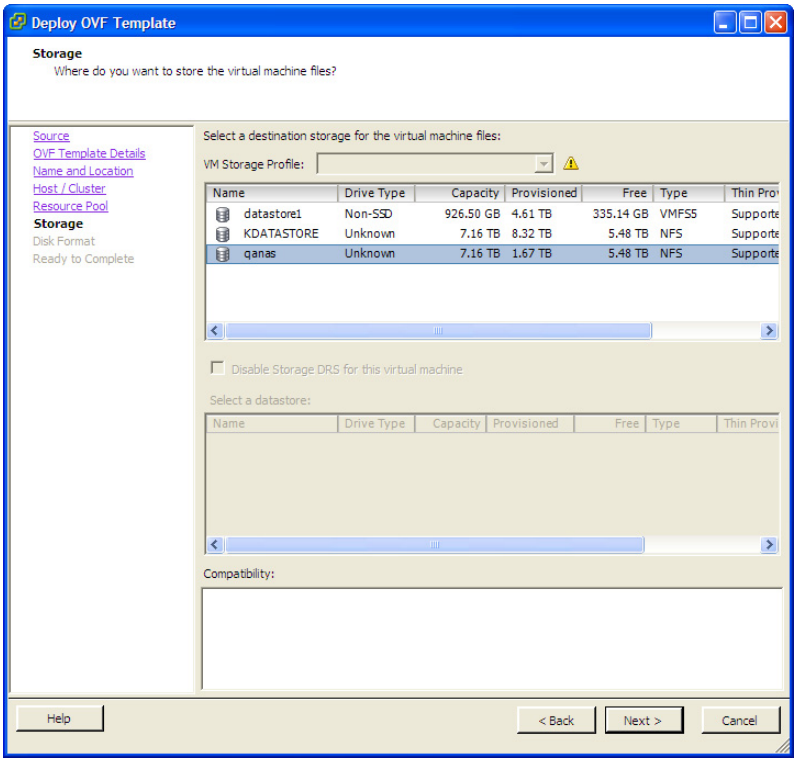
9 If your configuration supports resource pools (see Figure 6), select your resource pool. Click **Next**. This window will not display if you are not using the resource pool capability.

Figure 6 Selecting a Resource Pool



10 If you have multiple storage destinations (see Figure 7), select your storage destination. Click **Next**. This window will not display if you have only one storage device.

Figure 7 Selecting a Storage Destination



11 On the **Disk Format** window (see Figure 8) you will have the follow options:

Thick Provision Lazy Zeroed - creates a virtual disk in a default thick format. Space required for the virtual disk is allocated when the virtual disk is created. Data remaining on the physical device is not erased during creation, but it will be zeroed out on demand later, on first write from the virtual machine.

Using the default flat virtual disk format does not zero out or eliminate the possibility of recovering deleted files or restoring old data that might be present on this allocated space. You cannot convert a flat disk to a thin disk.

T**hick Provision Eager Zeroed** - is a type of thick virtual disk that supports clustering features such as Fault Tolerance. Space required for the virtual disk is allocated at creation time. In contrast to the flat format, the data remaining on the physical device is zeroed out when the virtual disk is created. It might take much longer to create disks in this format than to create other types of disks.

Thin Provision - allows virtual disks to allocate and commit storage space on demand. Use this format to save storage space. For the thin disk, you provision as much datastore space as the disk would require based on the value that you enter for the disk size. However, the thin disk starts small and at first, uses only as much datastore space as the disk needs for its initial operations.

Thin provisioning provides for a faster deployment and uses less disk space during the initial installation. However, thin provisioning will create more i/o traffic for the

vSphere server because the server will need to increase the size of its virtual disk and update its file system (vmfs) metadata accordingly. For more information regarding thin and thick provisioning, see the following VMware KB article: KB 1005418.

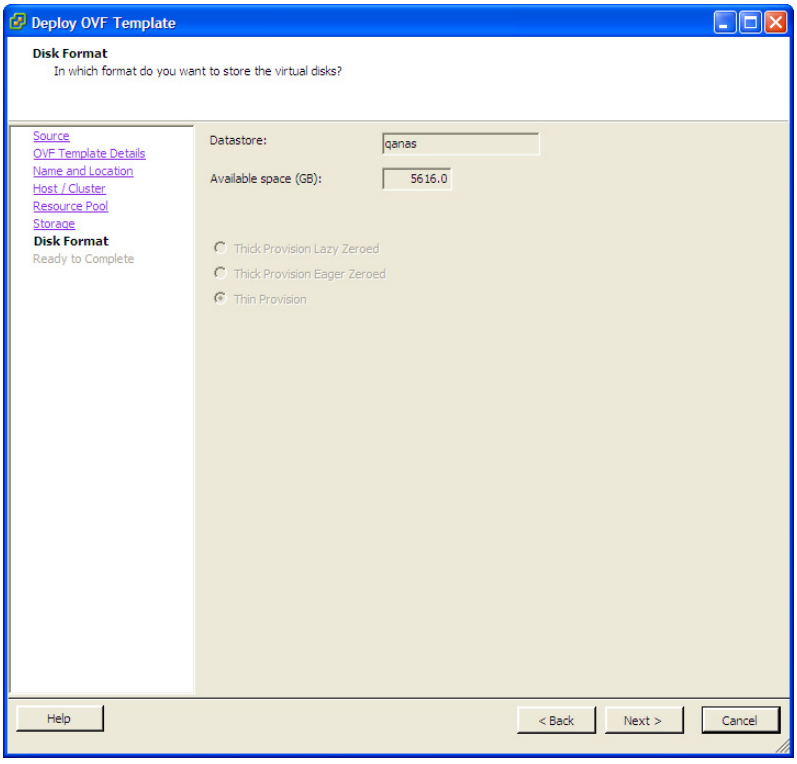
a Based on your configuration and resources, make the appropriate selection regarding disk format provisioning.

Note: Quantum recommends **Thin Provision**; however, the **Thin Provision** option will allow you to deploy the DXi in a datastore smaller than what is presented in the system requirements. You must make sure that you will be able to move the DXi to a larger datastore when it grows in size or when you add more disk capacity to the datastore. In either case, your system must meet the system requirements (see Free space on the appropriate vSphere server (In general, you will need .5 TB plus your license capacity, examples follow.) on page 4).

b Click **Next**.

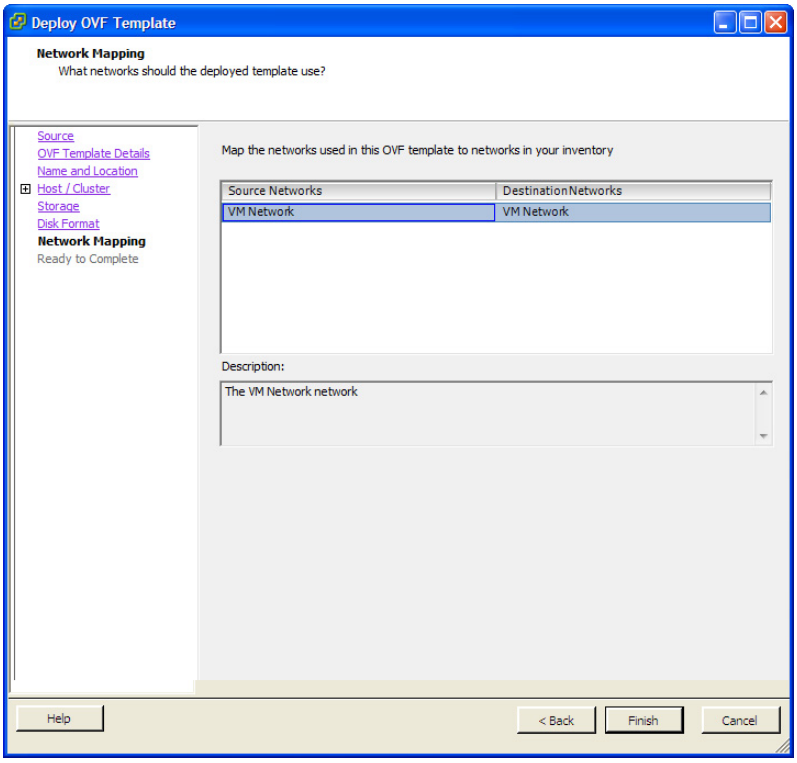
Note: If you see a message stating that you have insufficient storage, you should cancel the deployment and address this issue. For free space requirements, see Free space on the appropriate vSphere server (In general, you will need .5 TB plus your license capacity, examples follow.) on page 4.

Figure 8 Selecting Thin Provision



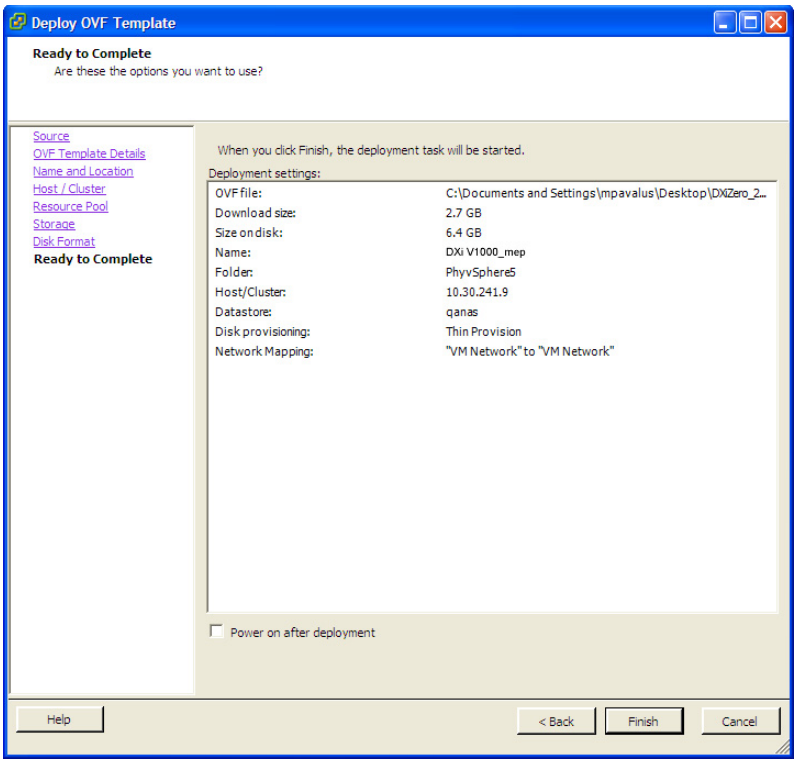
12 The default Network Connection for the DXi is **VM Network** (see Figure 9). Other Network Connections can be selected after the OVF has been installed by editing the virtual machine properties. Click **Next**. The **Ready to Complete** window displays. This window will not display if you have no other network connections.

Figure 9 Selecting the Network Mapping



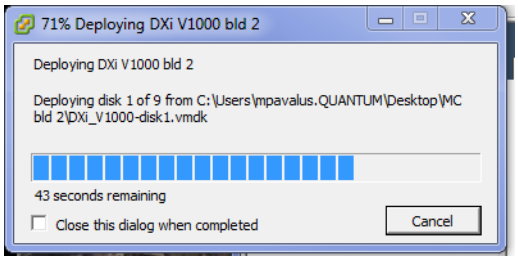
13 On the **Ready to Complete** window (see Figure 10), check the settings, if they are correct, click **Finish**.

Figure 10 Completing the Deployment Task



A deployment progress dialog box displays (see Figure 11).

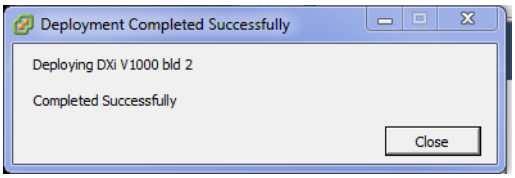
Figure 11 OVF Deployment Progress



When the OVF deployment has completed, the **Deployment Completed Successfully** dialog box displays (see Figure 12). The deployment will usually take approximately 7 minutes for a DXi V1000 and approximately 10 to 12 minutes for a DXi V4000.

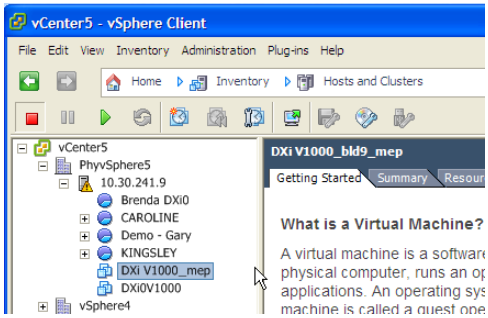
Select **Close**.

Figure 12 OVF Deployment Completed



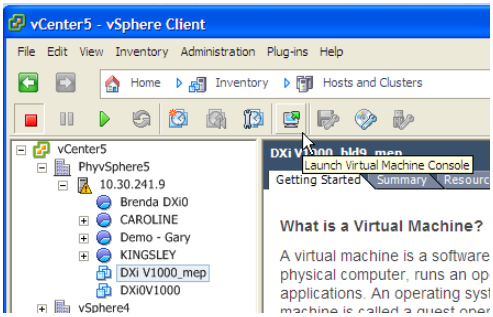
14 On the vSphere Client window, select your appliance's name (the name you entered in Step 7 on page 10) in the left panel (see Figure 13).

Figure 13 Selecting Your Appliance



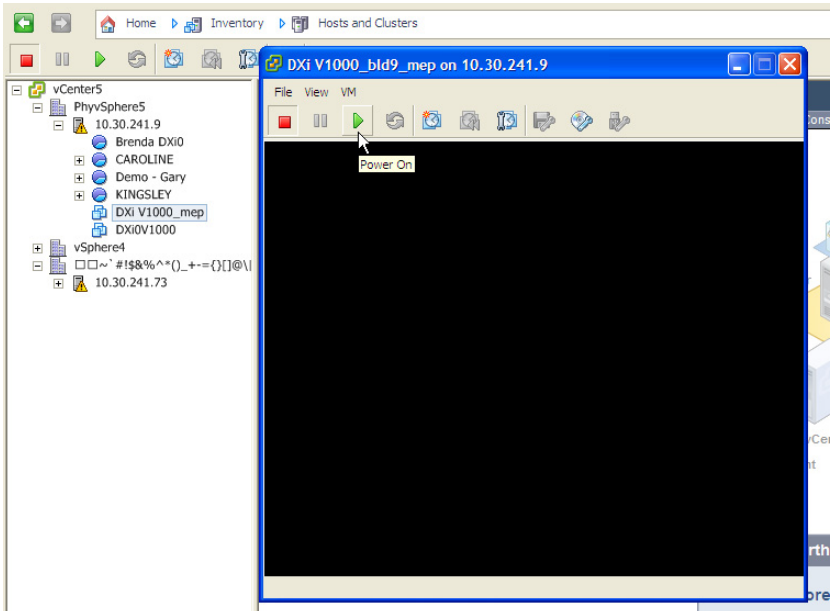
15 On the vSphere Client window, click the **Launch Virtual Machine Console** button (see Figure 14). Your appliance's virtual machine console window displays.

Figure 14 Launching the Appliance's Virtual Machine Console



16 On your appliance's virtual machine console window, click the **Power On** button (see Figure 15). The power on process usually takes approximately 15 minutes for a DXi V1000 and approximately 20 to 25 minutes for a DXi V4000.

Figure 15 Powering On the Appliance



17 If your network uses DHCP to assign IP addresses, you will not see the prompts to enter your IP addresses; proceed to Step 18.

If your network does not use DHCP to assign IP addresses, you must enter the following IP addresses: **Node IP address, Node Netmask**, and **Gateway IP** (see Figure 16).

To input your IP addresses, do the following:

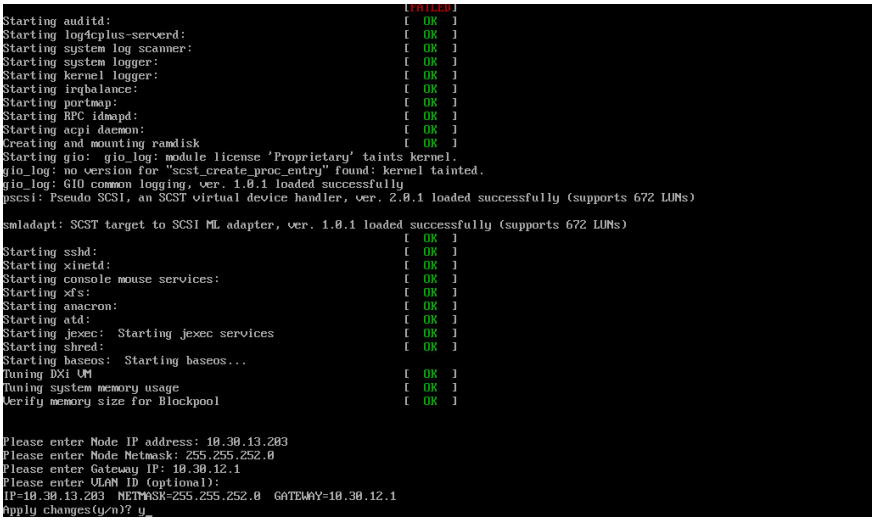
a For each IP address, enter the address at its respective prompt, and then press **<Enter>**.

Note: If you do not have a default Gateway IP, use IP 0.0.0.0.

b If necessary, enter your **VLAN ID**. Whether you enter a VLAN ID or leave it blank, Press **<Enter>.**

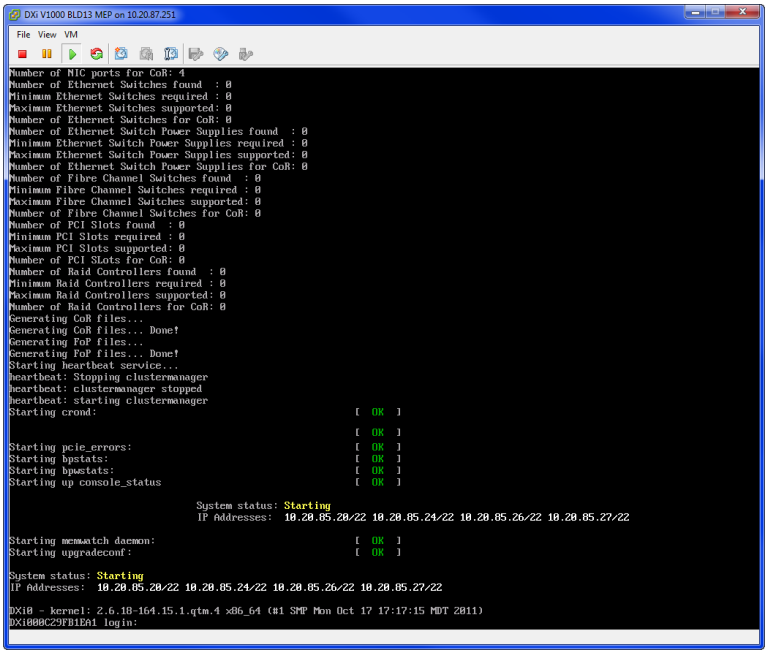
c Enter **y** for **Apply changes (y/n)?**, and then press **<Enter>**.

Figure 16 Entering Your IP Addresses (non-DHCP only)



18 The power on process displays a standard Linux login prompt (see Figure 17). No action is required. This is part of the DXi's normal power on process.

Figure 17 Displaying Linux Login Prompt



19 When you see the **System status: Normal** message (with the IP address under it), your DXi has completed its power on process (Figure 18).

Note: You can always find your IP address in the **Summary** tab of your vSphere Client (see Figure 19).

Figure 18 Displaying NFSD Message, Power on Complete

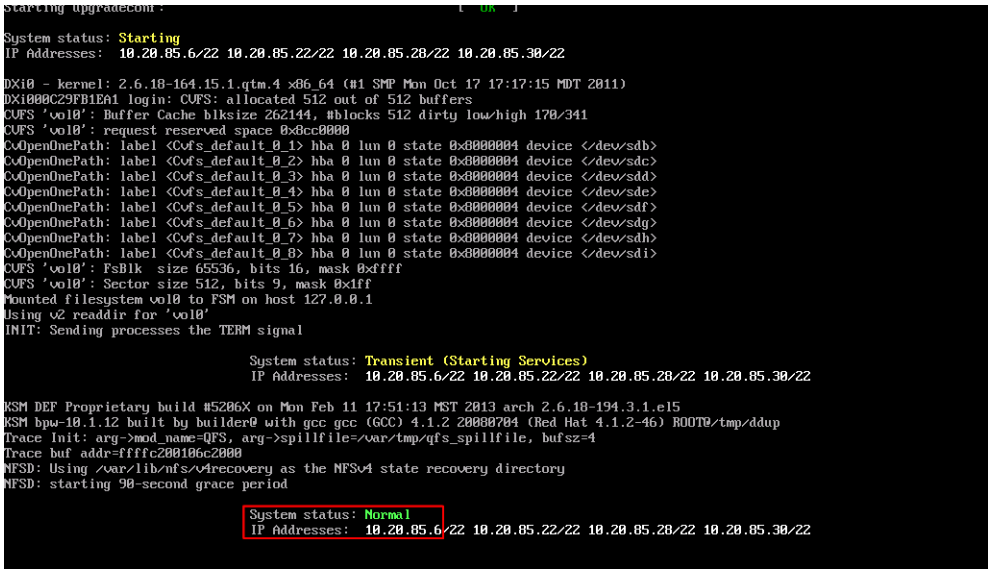
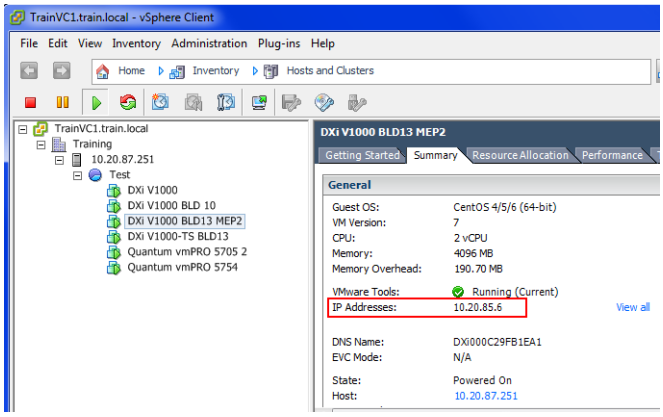


Figure 19 Summary Tab vSphere Client



Deploying the DXi V1000 on a VMware Workstation 9

The process to deploy the DXi V1000 from a VMware Workstation 9 is essentially the same as the one used to deploy it from an ESXi server.

1. If you have not downloaded the Quantum DXi V-Series software, do so now by following the instructions on your **DXi V1000 Download Authorization Key** certificate.
2. Extract the files from the downloaded zip file.
3. From the Workstation 9 window, select **Open** from the **File** menu.
4. Browse to the **DXi V1000.ovf** file and select **Open**.
5. Enter the name for the virtual machine.
6. Enter or browse to the directory for the virtual machine files, and select **Import**. A status bar indicates the progress of the import process.

   After Workstation 9 has successfully completed the import process, your DXi V1000 is listed in the virtual machine library.

Accessing the DXi

When you have the IP address for your DXi, you can begin the configuration steps which will allow you to use your DXi.

For illustrative purposes, the setup of a DXi V1000 is shown.

1. Launch a supported Web browser on a workstation that has access to your network.
2. In the browser address box, type the IP address of your appliance, and then press **<Enter>**.

   Note: If your DXi has not completed its power on process, it will display a message telling you that it has not finished.

   The Login window for your DXi V1000 displays.
3. On the Login window of your DXi V1000 (see Figure 20), select **Administrator**, type **password** for the **Password**, and click **Login**. The DXi V1000 **Getting Started Wizard** displays (see Figure 22).

   Note: It might be possible for you to log on before your DXi has completed its power on process. If this happens, a **Limited Mode** window displays (see Figure 21). When the power-on process has completed, you will have full access to your DXi; however, you might need to close the browser, start a new browser session, and log in again.

Figure 20 Displaying the DXi 1000 Log in Window

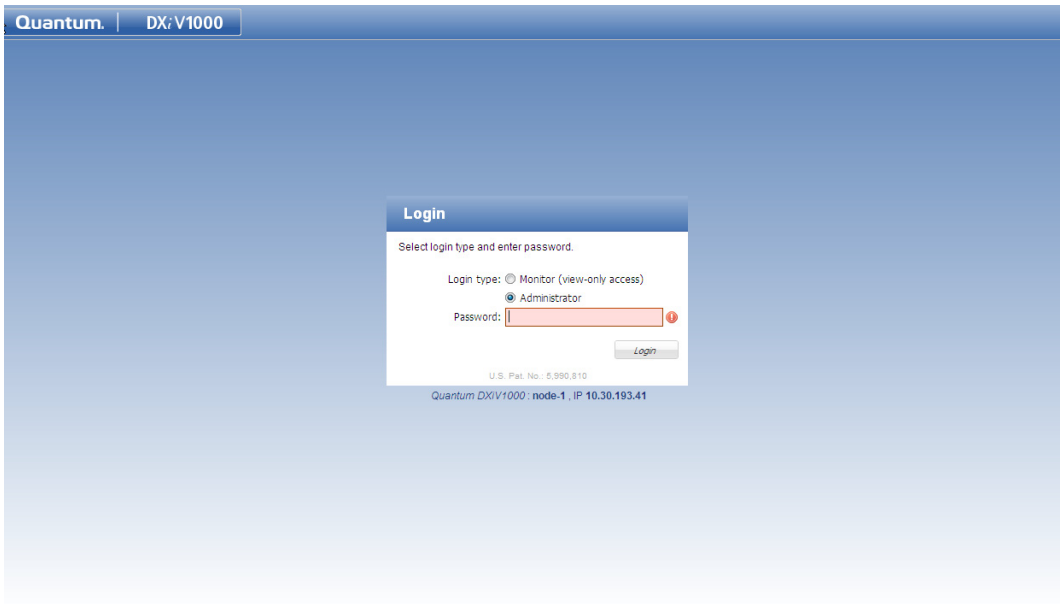


Figure 21 DXi V1000 Still in Power on Process

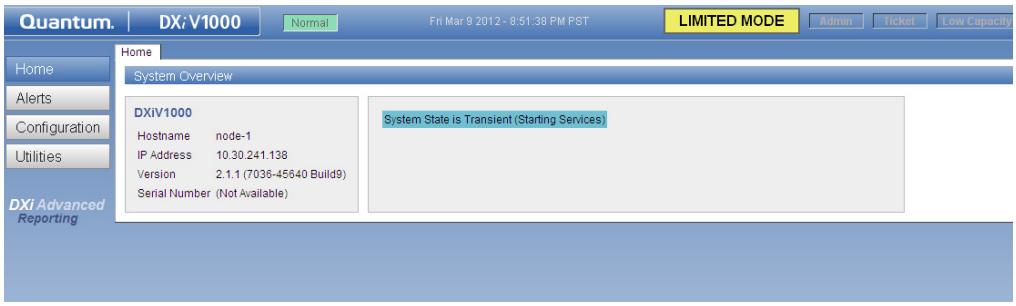
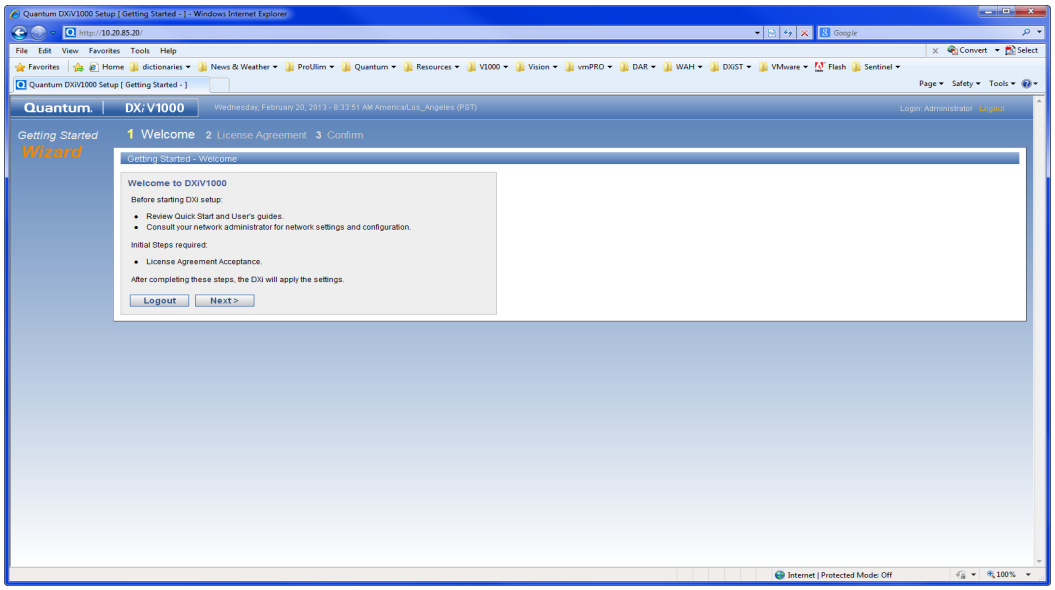


Figure 22 Displaying the DXi Getting Started Wizard

4 Please read the information presented on the **Getting Started - Welcome** page, and then click **Next**. The **Getting Started - Product Key and License Agreement** page displays.



5 On the **Getting Started - Product Key and License Agreement** page (see Figure 23) do the following:

a Enter your **Product Key**.*

b Select **I have read and accept this License Agreement.**

Note: License Agreements for the DXi V1000 and the DXI V4000 are different.

c Click **Next.**

The **Information - Confirm** page displays.

Figure 23 Accepting the DXi License Agreement

* The Quantum DXi will attempt to connect to a License Server during installation. If the software cannot access the License Server (i.e. you do not have or are not allowed Internet access) you must contact Quantum Technical Support for your complete product license key. To contact Quantum Technical Support, call the appropriate number from the following list:

Table 1 Quantum Technical Support

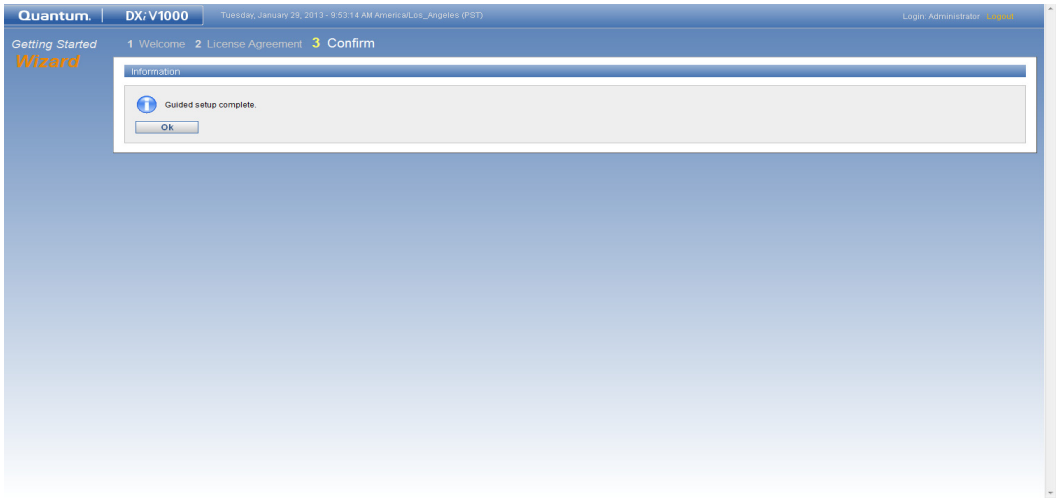
North America	1-800-284-5101 (toll free) +1-720-249-5700
EMEA **(Europe, Middle East and Africa)**	+800-7826-8888 (toll free) +49-6131-3241-1164
APAC (Asia Pacific)	+800-7826-8887 (toll free) +603-7953-3010
India	000-800-001-6014 (toll free) +603-7953-3010
Mexico	001-877-785-2465 (toll free) +1-720-249-5700
South and Central America	+800-33441000 (toll free) +1-720-249-5700

(Quantum Technical Support support numbers can also be found at http://www.quantum.com/ServiceandSupport/Contacts/ProductSelect/Index.aspx.)

Note: When you have completed this procedure you will need to manually enter your license key (Manually install your DXi licensed features on page 27).

6 On the **Information - Confirm** page, click **OK** (see Figure 24). The **Configuration Wizard Home** page displays.

Figure 24 Confirming Initial Install.



DXi Configuration

When the **Configuration Wizard Home** page displays, and the **No Space** warning (Figure 25) has changed to **Normal** (see Figure 26), you can now begin configuring your DXi.

For illustrative purposes, the configuration of a DXi V1000 is shown.

- If you have Internet access and you have entered a valid Product Key, the DXi will automatically retrieve its license. (After a successful installation, it will automatically check with the license server to retrieve any future license updates.) Proceed to Support Wizard on page 28.

  You can verify that your licensed features have been installed by viewing the information at the top of the **License Keys** page (see Figure 27).

  To display the **License Keys** page, Select **Support** on the **Wizard** menu**,** and then click **Next** until you reach the **License Keys** page. If the licensing information is missing, you can attempt to retrieve your licensed features from the license server by following the steps show in Retrieve and install your DXI licensed features on page 26.

- If you do not have Internet access, you must manually enter your license key. Proceed to Manually install your DXi licensed features on page 27.

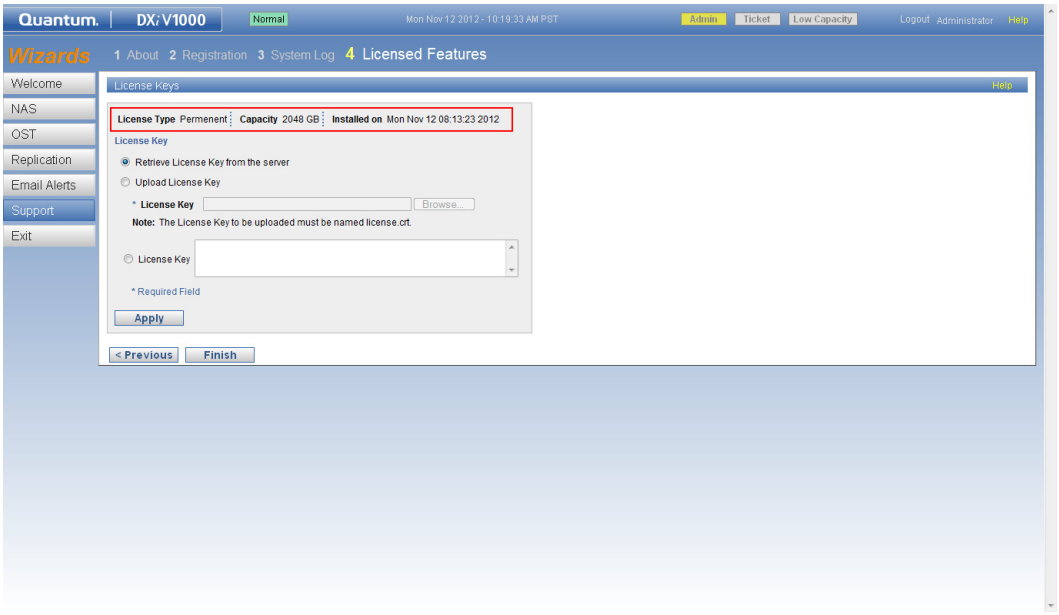
Figure 25 No Space

Figure 26 Configuration Wizard Home page

Retrieve and install your DXI licensed features

1. On the **License Keys** page (see Figure 27) select **Retrieve License Key from the server**.
2. Select **Apply**. The **Information** page displays. It presents information regarding the status of the installation of your licensed features (see Figure 29).
3. Select **OK**. The **License Keys** page displays.
4. Select **Finish**. The **Configuration Wizard Home** page displays.

Figure 27 License Keys page



Manually install your DXi licensed features

1 Select **Support** on the **Wizard** menu, and then click **Next** until the **License Keys** page displays (see Figure 28).

2 On **License Keys** page, select **License Key**.

3 Enter the license key (that you were given when you called Quantum Technical Support) into the text area. (The license key is a long text string that ends with the equal, "=", character (see Figure 28.)

4 Select **Apply**. The **Information** page displays. It presents information regarding the status of the installation of your licensed features (see Figure 29).

5 Select **Finish**. The **Configuration Wizard Home** page displays. Continue the initial configuration of your DXi by accessing the **Support** wizard (see Support Wizard on page 28).

Figure 28 License Key Example

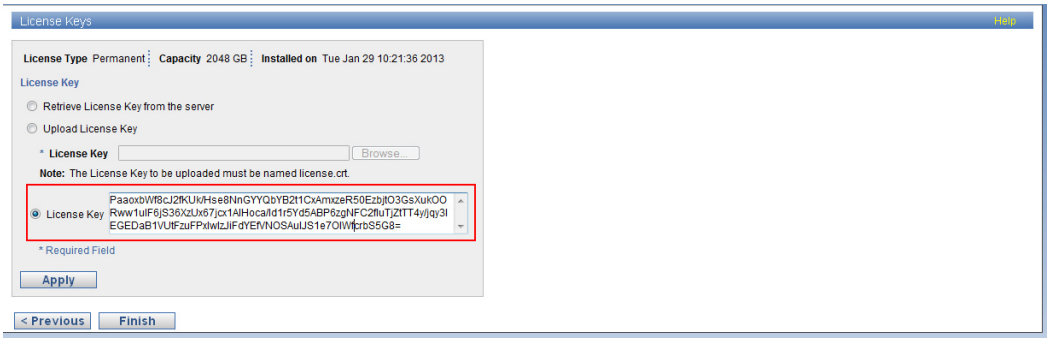
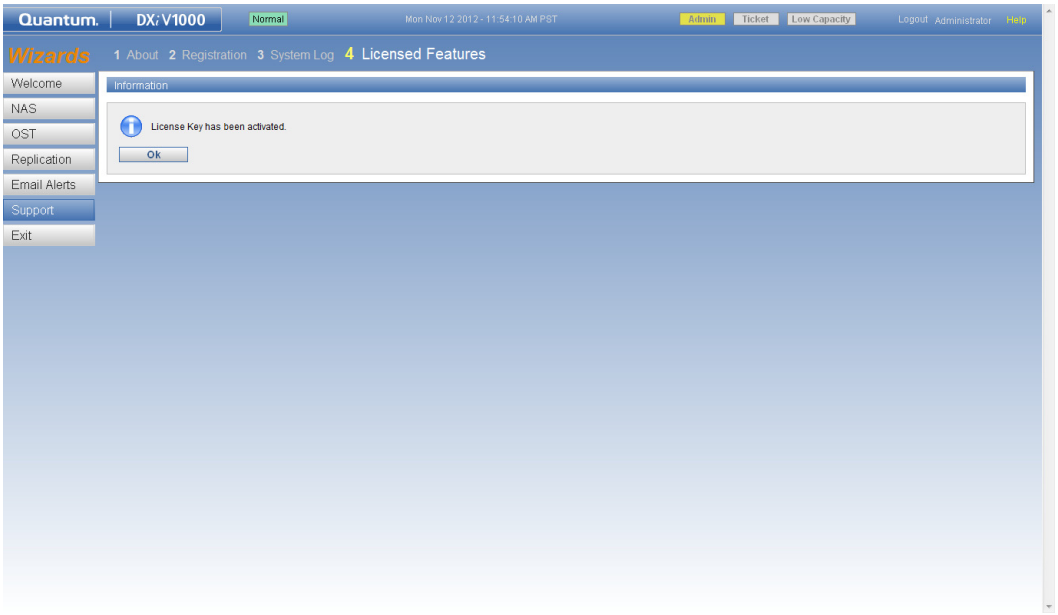


Figure 29 Install Licensed Features Information page



Support Wizard

Use the **Support** wizard to continue with the initial configuration and registration of your DXi.

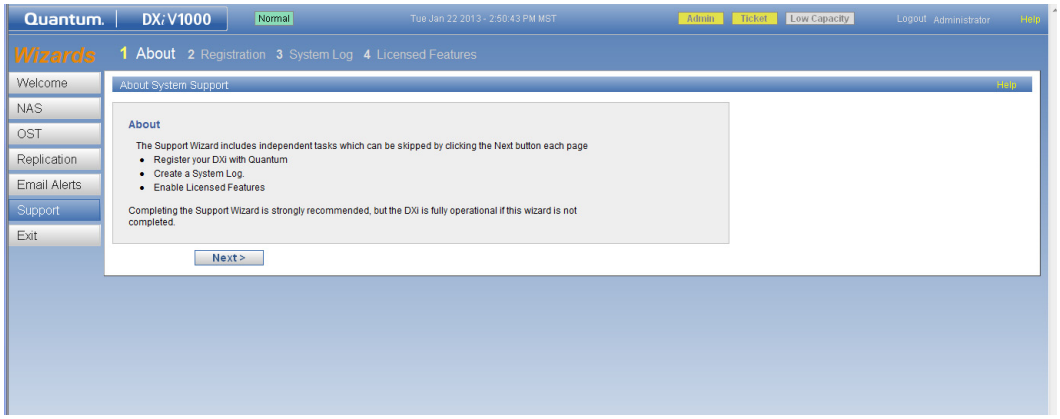
Note: At any time while using the wizard, you can click **Previous** to return to the previous step.

1 Select **Support** on the **Wizard** menu. The **About** page of the **Support** wizard displays (see Figure 30).

2 Read the information about the wizard.

3 Click **Next** to continue. The **Support** wizard **Registration** page displays.

Figure 30 Support Wizard: About



4 On the **Support** wizard **Registration** page, register your DXi to receive service and support from Quantum (see Figure 31). To register your DXi, do the following:

Note: The Standard Edition version of the DXi V1000 does not include any Custom Support; therefore, Standard Edition customers should not register their DXi V1000.

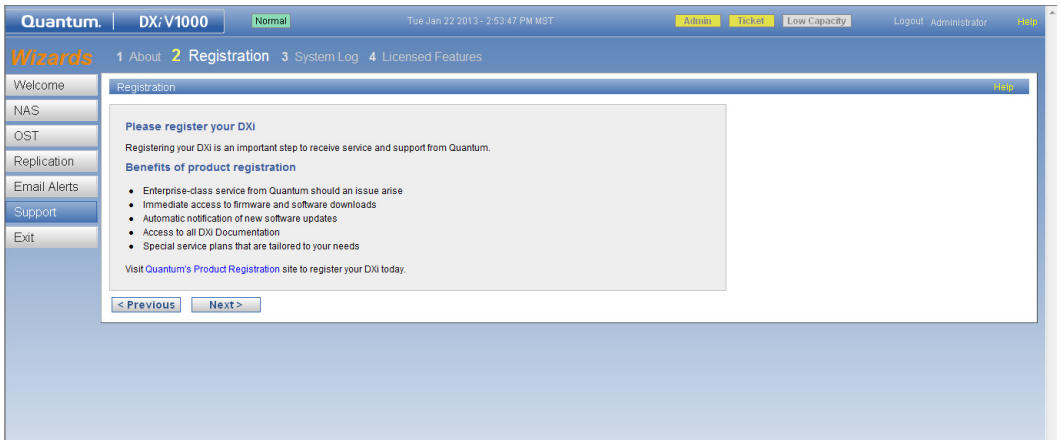
a Click the link for Quantum's Product Registration site.

b Follow the on screen instructions to register your system.

c When you are finished, switch back to the **Support** wizard.

d Click **Next** to continue. The **Support** wizard **System Log** page displays.

Figure 31 Support Wizard: Registration

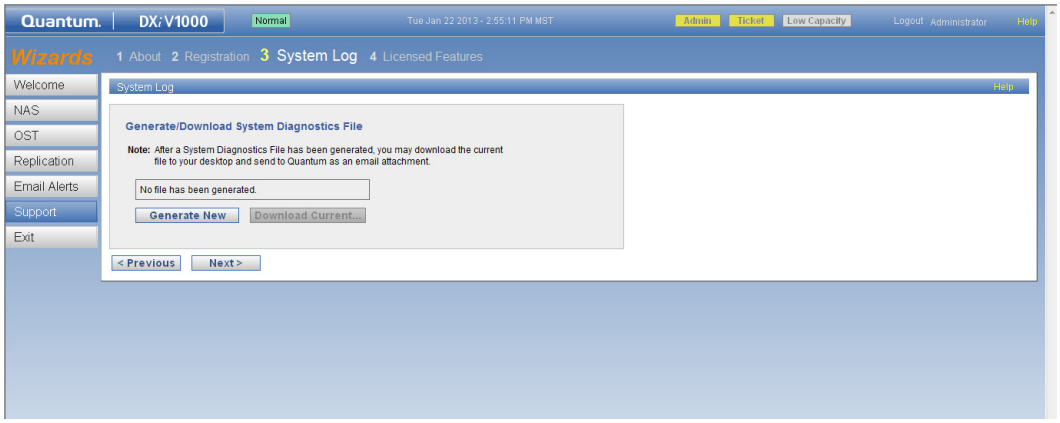


5 On the **Support** wizard **System Log** page, click **Generate New** to generate a new system diagnostics file (see Figure 32).

Note: This system diagnostics file contains the diagnostic logs for all of the system components. The diagnostic files are helpful when troubleshooting problems on the DXi. You should generate a system diagnostic file after setting up your DXi and save it for future reference.

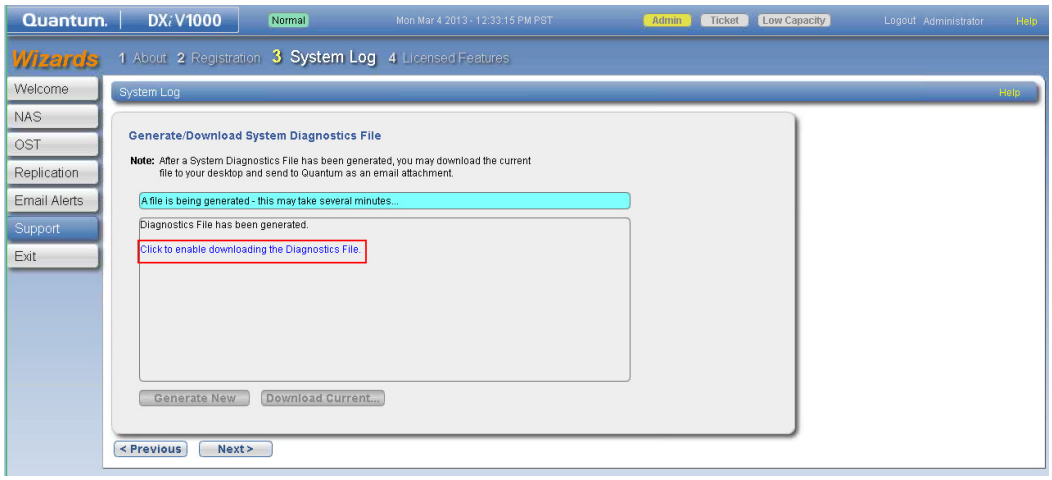
The system generates a new diagnostics file. This can take several minutes.

Figure 32 Support Wizard: System Log



6 After the file finishes generating, select the **Click to enable downloading the Diagnostics file** link to enable the **Download Current** button (see Figure 33).

Figure 33 Download System Log



7 To download the generated diagnostics file, click **Download Current**.

A dialog box displays asking if you want to open or save the file.

8 Click **Save** or **OK** to download the file.

9 Click **Next** to continue. The **Support** wizard **License Keys** page displays.

If you have not installed your licenced features, or have new features to install, use the **Support** wizard **License Keys** (see DXi Configuration on page 25) to add your licensed features.

Next Steps

Here are the next steps you can take:

If you have Internet access, go to http://www.quantum.com/DXiV-SeriesDocs and watch the how-to videos available in the **Support Video Gallery**. These videos provide overviews and demonstrations on how to install a DXi V-Series virtual appliance and configure network settings, NAS shares, VTL partitions, replication, and OST features.

- How to Install and Initially Configure DXi V1000 Virtual Appliance
- How to Configure DXi V1000 Network Settings

Use the other **Configuration Wizards** on the **Wizards** menu to configure additional features of the DXi:

- **NAS Wizard** - Helps you configure the DXi as a NAS (Network Attached Storage) appliance for use on a Windows or UNIX/Linux network.
- **OST Wizard** - Helps you configure the DXi to present its storage as one or more OST (OpenStorage) storage servers for use with a backup application.
- **Replication Wizard** - Helps you configure the DXi to send replicated data to or receive replicated data from another DXi system.
- **Email Alerts Wizard** - Helps you configure the DXi to automatically send notifications and reports to selected recipients.

- **Support Wizard** - Helps you enable licensed features on the DXi, register your system with Quantum, and perform other tasks that will aid Quantum customer support in assisting you.

Note: To learn more about using the **Configuration Wizards**, refer to the *Quantum DXi V-Series User's Guide* (6-67612). located at http://www.quantum.com/DXiV-SeriesDocs.

Additional Notes

The following section presents various topics regarding the DXi V-Series appliances.

DXi V4000 Infrastructure and Resource Allocation

The infrastructure and resources allocated to a DXi V4000 installation will affect the application's performance and scalability. In a particular controlled environment, a DXi V4000 sustained 24 concurrent streams. This installation consisted of:

- Dedicated ESXi host
  - ESXi 5.1.0
  - 2x Intel E7540 @ 2.0 Ghz
  - 128GB RAM
  - 1x 10 GbE Network interface
  - 1x 1 GbE Network interface
  - 4x 8GbFC HBA's for datastores
  - 20 data stores, each having the following attribute
    - Capable of up to 300 MB/s read/write rates
    - RAID 6
- DXi V4000 VM
  - A single dedicated datastore
  - 1x 10GbE Network Interface (data)
  - 1x 1 GbE Network Interface (management)
  - Processor: 8 virtual CPU cores (as reported by vSphere)
  - RAM: 48 GB

Other deployments, using 14 separate datastores, one datastore for each virtual data disk, allowed the DXi V4000 to sustain 48 concurrent streams.

Note: Other testing has shown up to 50 concurrent streams

Changing the resources (storage in this case) on the back-end can and will change performance results. Any changes with respects to any of the resources, CPU speeds, type of storage, network infrastructure will be unique to your environment. Performance results will vary. It is incumbent on the Virtualization Administrators to understand their environments and how the resources are shared.

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For assistance, contact the Quantum Customer Support Center:
USA: 1-800-284-5101 (toll free) or +1-720-249-5700
EMEA: +800-7826-8888 (toll free) or +49-6131-3241-1164
APAC: +800-7826-8887 (toll free) or +603-7953-3010
Worldwide: http://www.quantum.com/ServiceandSupport

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