NexentaStor Installation Guide

3.1.6

2000-nxs-v3.1.6-000006-A

This document applies to the following product versions

Product	Versions supported
NexentaStor™	3.1.6

Contents

Preface

This documentation presents information specific to Nexenta products. The information is for reference purposes and is subject to change.

Intended Audience

This documentation is intended for Network Storage Administrators and assumes that you have experience with data storage concepts, such as NAS, SAN, NFS, and ZFS.

Documentation History

The following table lists the released revisions of this documentation.

Table 1: Documentation Revision History

Revision	Date	Description
2000-nxs-v3.1.6-000006-A	June, 2014	GA

Contacting Support

Choose a method for contacting support:

- Visit the Nexenta customer portal http://nexenta.force.com/customerportal or partner portal http://nexenta.force.com/partnerportal. Log in and browse a knowledge base.
- Using the NexentaStor user interface, NMV (Nexenta Management View):
  a. Click **Support**.
  b. Complete the request form.
  c. Click **Send Request.**
- Using the NexentaStor command line, NMC (Nexenta Management Console):
  a. At the command line, type `support`.
  b. Complete the support wizard.

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Introduction

This section includes the following topics:

About NexentaStor

Nexenta provides enterprise class storage within the complexities of the enterprise environment. Business requirements constantly challenge IT management to provide a level of high availability, while simultaneously reducing costs. To this end, storage is a commodity, one where costs must decrease without negatively impacting availability.

NexentaStor provides the following:

- Easy management of extremely large storage pools
- Feature-rich software on a software appliance
- Easy to install and manage
- Online continuation of data for months and years, with tapes relegated to archival purposes only.

The appliance is targeted for second-tier NAS and iSCSI applications that provide low-cost storage and simplified provisioning, expansion, backup, replication and archiving. You can use NexentaStor as a primary NAS in businesses that want to expand.

NexentaStor Advantages

NexentaStor is built on the industry leading ZFS and provides the following features:

- Unlimited snapshots
- Multiple levels of RAID support (RAID-Z, RAID-Z2, RAID-Z3)
- Integrated replication
- Enhanced data protection
- Deduplication
- Data compression

NexentaStor features include:

- Thin provisioning
- Capabilities that reduce the time spent on integrated searches
- User-friendly Web GUI
- Fault management
- Reporting

Optional NexentaStor plugins support:

- High availability
- VMDC to manage VMware storage
- WORM
- Additional savings features
- Cloud archiving
- Replication
- Full breadth of enterprise class capabilities
- Fibre Channel support

See Also:

- *NexentaStor User Guide*
- List of Supported Hardware in the NexentaStor Partner Portal
- For more information, contact sales@nexenta.com.

Versions

NexentaStor is available in the following versions:

- **NexentaStor Unified Appliance**

  CD image (ISO) that you can install NexentaStor on the following appliances.

- Unified Appliance
- Bare metal x86 hardware

Note:

A unified appliance is an x86/64-bit computer with no virtual environments/hypervisors.

Nexenta recommends that you deploy the appliance on a single dedicated x86/64-bit based platform with at least 2GB of RAM.

The NexentaStor installer verifies the hardware compatibility before starting the installation.

See Also:

- Hardware Supported List at the Nexenta Partner Portal

NexentaStor Licenses

Nexenta provides the following licenses:

- **Free Trial**

  45-day free trial (ISO image) of Enterprise Edition.

- **Enterprise Edition** (Commercial version)

  Provides a perpetual license with a limitation based on quantity of terabytes used and technical support.

- **Community Edition**

  Major NexentaStor release with many features supported. Only 18 TB of storage available for use. Technical support is not available.

The following table lists the features available for each type of license.

Table 1-1: License Levels and Support

Feature	Free Trial Edition	Enterprise Edition	Community Edition
Time limitation	45 days	none	none
Storage capacity	unlimited	unlimited	18 TB
NexentaStor Plugins	yes	yes	no
Technical support	yes	yes	no
Maintenance agreement	no	yes	no
Storage upgrades	yes	yes	no

Browser Compatibility

NexentaStor and NexentaStor online help are compatible with the three major browsers:

- Microsoft Internet Explorer®
- Google Chrome®
- Mozilla Firefox®

Mozilla Firefox has some compatibility problems with online help. Tables and wingdings characters do not display properly. The content does display correctly though.

Note:

To ensure that NexentaStor appliance works correctly, verify that all browser extensions that block pop-up windows or flash are disabled. You may also add a rule to the browser settings that disables pop-up blocking for the NexentaStor appliance.

Logging In

NexentaStor provides the following administrative User accounts:

- `root`
- `admin`

After registering the appliance, Nexenta sends you the default password and product Registration Key in an auto-generated e-mail.

Make sure that you change the default password after you complete the installation.

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Prerequisites

This section includes the following topics:

About Prerequisites

This section describes the prerequisites for installing NexentaStor.

Hardware Prerequisites

Nexenta recommends the following hardware for the NexentaStor appliance:

- 64-bit processor
- 2 GB RAM minimum for evaluation (recommend 4 to 8 GB), Production use 8 GB minimum plus 1 GB per 1 TB raw disk space minimum (depending on use-case more may be highly desirable), or 2 GB per 1 TB raw for high-end performance deployments. If planning to use deduplication, contact Nexenta Sales or Nexenta Support for sizing assistance.
- 2 identical small disks for high-availability system folder (optional)
- DRAM memory of not more than 128G. Any larger may affect performance.
- Additional drives/storage for data volumes presented directly to the system software (no hardware RAID).

Note:

Network Configuration intended for production deployments must be covered by Nexenta's Hardware Certification List.

Contact Nexenta Sales or a Nexenta Authorized Reseller for more details

Network Prerequisites

Network requirements:

- You must have access to the appliance through the network. You can set it up through direct connection or VPN.

System Requirements

Your environment must meet the following system requirements.

Note: The installation formats and deletes everything on the hard disk drive. Therefore, you must only install NexentaStor on a dedicated system. You cannot share the system with any other software application.

VMware Virtual Environment

Nexenta recommends the following for a VMware™ environment:

- Must contain one of the following supported VMware products:
  - VMware Workstation v6.5 or higher
  - VMware Server v1.0.4 or higher
  - VMware ESX v3.5 Update 2 or higher
  - VMware Fusion (for Mac OS X)
- x86/64 platform with 2GB of memory (512 MB minimum)
- Virtualized network interface
- vSphere Client downloaded and installed on all systems accessing the server
- At least two physical and/or virtual disks, with at least 8GB free disk space

  NexentaStor uses one of the hard drives for a system disk – the disk that holds the system folder and all subsequent system upgrades.

  VMware can support direct access to local hard disks.

Note: The Virtual Appliance, however, runs on 32-bit hardware architectures because the OS loader can automatically determine the architecture and load the corresponding 32-bit or 64-bit kernel.

See Also:

- http://www.vmware.com/products/vsphere

Unified Appliance

Nexenta recommends the following for a unified appliance:

- 64-bit processor
- 2 GB RAM minimum for evaluation (recommend 4 to 8 GB), Production use 8 GB minimum plus 1 GB per 1 TB raw disk space minimum (depending on use-case more may be highly desirable), or 2 GB per 1 TB raw for high-end performance deployments. If planning to use deduplication, contact Nexenta Sales or Nexenta Support for sizing assistance.
- 2 identical small disks for high-availability system folder (optional)
- Additional drives/storage for data volumes presented directly to the system software (no hardware RAID)

Note:

You can install an ISO image on a new VMware Workstation or a Xen virtual machine (VM).

See Also:

- Partner Solutions
- Hardware Supported List

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VMware vSphere Environment

This section includes the following topics:

About VMware vSphere

This section discusses accessing NexentaStor using two different methods:

- Creating virtual machines (VMs) in VMware and then installing NexentaStor in the virtual environment.

  This method provides a fuller understanding of vSphere virtual machines and VM settings.

Note:	VMware vSphere™ is a third party product. The software is subject to change without notice. Therefore, these instructions may not be applicable in your environment. If they do not, consult VMware's website at www.vmware.com.

About Virtual Environments

There is a lot of information on the Web and in print about deploying and managing virtual machines. This section focuses on using NexentaStor in a vSphere environment.

See Also:

- VMware Technical Resources

Setting Up vSphere Client

To deploy a NexentaStor virtual machine, you must have the VMware vSphere server installed in your environment.

Consult with your IT department for access and permissions to the VMware vSphere server.

NexentaStor can run on VMware vSphere server version 4 or later.

When you remotely access the server using vSphere Client, you must know the following information:

- IP address of the VMware server
- User ID
- Password

❖ *To setup vSphere Client:*

1. From a client computer, open a browser and type the following in the URL address field:

   <vSphere_server_IP_address>

2. Download vSphere client.
3. Install the application.

Creating a Virtual Machine

The following section describes creating and setting up a VM in vSphere.

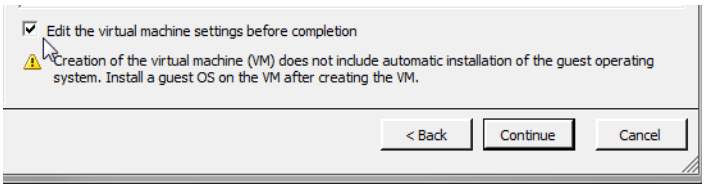
❖ *To create a VM:*

1. Log in to your VMware server with vSphere client.
2. Click **VMs and Templates**.

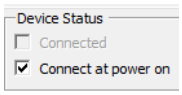
   The server displays all current VMs.
3. Click **Create a new virtual machine**.
4. Select **Typical**. Click **Next**.
5. Type a name for the VM. Click **Next**.
6. If the server is set up with Hosts and Clusters, select an inventory location.
   - If it is not set up with Hosts and Clusters, go to Step 9.
7. Select the Host/Cluster on which to install the VM.
8. Choose a specific host within the Cluster.
9. Select a datastore in which to store the VM. Click **Next**.

   A datastore represents a storage location for virtual machine files. It is platform-independent and host-independent.
10. For Guest Operating system, click **Other**.

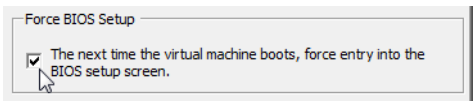
11. Select **Oracle Solaris 10 (64-bit)**. Click **Next**.
12. In the NIC field, select 2 from the dropdown menu.
13. Do not change the defaults: VM network and E1000. Click **Next**.
14. Select an appropriate virtual disk size. Click **Next**.
15. Select **Edit the virtual machine settings before completion**. Click **Continue**.



16. Select **New CD/DVD (adding)**.
17. Select **DataStore ISO file**.
18. Browse to the location of the NexentaStor ISO file and select it.
19. Select **Connect at power on**.



20. Click **Options**.
21. In the Settings section, select **Boot options**.
22. In the Force BIOS setup, select **The next time the virtual machine boots, force entry into the BIOS setup screen**.



23. Click **Finish**. VMware creates the VM.
24. Go to Installation to install NexentaStor.

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Unified Appliance

This section includes the following topics:

About Unified Appliance

This section describes how to setup a unified appliance for installation.

Installing NexentaStor on a Unified Appliance

A unified appliance is an x86/64-bit computer with no virtual environments/ hypervisors. When using a unified appliance, you can install NexentaStor from any of the following devices:

- Internal CD-ROM
- External CD-ROM attached directly to the system
- USB/Flash Drive
- Virtual CD-ROM attached through IPMI

Installing NexentaStor from a CD-ROM

When you load from an internal or external CD-ROM, the installation process is identical.

❖ *To install NexentaStor through an internal or external CD-ROM drive:*

1. Download theNexentaStor image from the NexentaStor Product page.
2. Burn it onto a CD-ROM.
3. Set the system BIOS to load from the CD-ROM first.
4. Reboot the system.
5. Go to Installation to install NexentaStor.

Installing NexentaStor from a USB Flash Drive

When installing from a USB flash drive, ensure that the flash drive is large enough to store the image.

❖ *To install NexentaStor through a USB flash drive:*

1. Download the NexentaStor image from www.nexenta.com.
2. Copy it onto a USB flash drive.
3. Set the system BIOS to load from the USB ports first.
4. Reboot the system.
5. Go to Installation to install NexentaStor.

Installing NexentaStor from a Virtual CD-ROM Drive

Virtual Media provides a virtual CD/DVD-ROM drive, which you can use to install NexentaStor from standard media from anywhere on the network.

❖ *To install NexentaStor through a virtual CD-ROM drive, using IPMI:*

1. Set up the system with IPMI to create an IPMI server.
2. Download the NexentaStor CD image from www.nexenta.com to the IPMI server, or a system that contains a CD-ROM that is sharable across the network.
3. Open a web browser and log in to IPMI.
4. Mount the CD-ROM as virtual media.
5. Set the system to boot from the virtual media first.
6. Reboot the system.
7. After installation, set the system to boot from the hard drive first.
8. Go to Installation to install NexentaStor.

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Installation

This section includes the following topics:

About Installation

The following section contains information for installing NexentaStor.

Downloading NexentaStor

Prior to installation, you must download the ISO file from the Nexenta Website.

❖ *To download the NexentaStor ISO image:*

1. Go to www.nexenta.com.
2. In the title bar, select **Products > NexentaStor**.
3. Select the NexentaStor to download.
4. Burn or copy the software to a bootable media device:
   - CD-ROM
   - USB drive
   - External hard drive

Booting from a Storage Device

To install the software, you must set the BIOS boot option to boot from the storage device containing NexentaStor.

❖ *To change the Boot option in the BIOS:*

1. Boot into the system BIOS.
   - Unified Appliance
     - Restart the system and follow the on-screen instructions to enter the BIOS.
   - vSphere
     1) Right-click the VM and select **Power > Power On**.
     2) Click **Edit Settings > Boot options**.
     3) In the Force BIOS setup, select **The next time the virtual machine boots, force entry into the BIOS setup screen**.
     4) Reboot.
     5) Click **Console** to view the BIOS.
2. Using the arrow keys, move to the Boot menu.
3. Follow the on-screen instructions to promote the storage device containing NexentaStor to be the first boot device.
4. Click **F10 Save and Exit**.

Note:

After installation, repeat the steps in this section and set the hard drive to be the first boot device.

Selecting the Serial Port

You can install the appliance using one of the following methods:

- keyboard/monitor
- serial port COM1

By default, the boot manager uses the serial port if your BIOS supports keyboard/monitor to serial port redirection.

❖ *To install the appliance by using the serial port:*

1. Boot into the system BIOS.
2. Refer to your vendor's documentation to set the BIOS to use the serial port.
3. Select the following serial port parameters:
   - 9600
   - 8
   - N
   - 1

4. Reboot and insert the NexentaStor Installation CD. The Nexenta Installation welcome message displays on the remotely connected terminal window.
5. Set the remote terminal client to support ANSI or VT100 emulation.

See Also:

- Booting from a Storage Device

Installing NexentaStor

This section describes the initial steps for installing NexentaStor. After installing the software, you obtain a license and configure the software.

❖ *To install NexentaStor:*

1. Read the product license and click **I Agree** to accept.
2. Connect the storage device containing NexentaStor to the appliance. Click **OK**.
3. Specify your location, country or region and time zone.

   To select, press the spacebar.
4. Confirm the time zone settings by clicking **Yes**.
5. Select the disk on which to install the NexentaStor Operating System.
   - For mirrored ZFS-boot configuration, select two or more equal-sized disks.

Note: Nexenta recommends setting up a mirror set for the system volume.

NexentaStor does not support more than three drives for the syspool.

6. NexentaStor warns that the installation repartitions the disk and destroys all current information on the disk.
   - Click **Yes** to allow repartitioning
   - Click **No,** and select another disk, to not allow repartitioning
7. NexentaStor installs on the drive. Click **OK** when complete.

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Registering the Appliance

This section includes the following topics:

About Registering the Appliance

The following section contains detailed instructions on how to register NexentaStor Appliance products.

Registering the Appliance

After installation, you must obtain a NexentaStor registration number.

❖ *To register the appliance:*

1. Boot the NexentaStor appliance.
2. In the Appliance window, select:

   ```
   Boot from local hard drive...
   ```

3. After the appliance boots, review the NexentaStor software license agreement.
4. Press **Enter** key to accept the license.

Obtaining a Registration Key

During the installation process, you must register your software on the Web and receive a license through email. Then you can configure the appliance.

Note: If you are registering an Enterprise Edition, you must have your sales order number to complete the registration.

❖ *To obtain a registration key:*

1. For the trial version of the Enterprise Edition go to the Trial Registration page

Note: The Machine Signature displays on the appliance's console. This value identifies the machine. For each registration, enter the exact value for the Machine Signature to register the software.

2. For the Community Edition go to the Community Edition Registration page.
3. Fill out the registration form.
4. Click **Submit Request**. Nexenta generates a unique license key and e-mails it to you for activation.

Note: For the Enterprise Edition, install the free trial. You convert your free trial license to a commercial license by entering the license key you receive, though email, after you have purchased an Enterprise license.

The registration key for the Community edition does not work for the Enterprise edition. Likewise, the Enterprise registration key does not work for the Community edition.

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Configuring NexentaStor

This section includes the following topics:

About Configuring NexentaStor

NexentaStor contains two Configuration Wizards. This section provides instructions for setting up and configuring those wizards.

Applying the Registration Key

After obtaining the registration key, you can continue with registration and configure the appliance.

❖ *To apply the registration key:*

1. Enter the product registration key exactly as it appears in the registration email.

The registration key is case sensitive. Make sure to enter the key exactly as specified in the auto-generated e-mail. Enter the dash separating groups of key characters.

You can connect to the system through the stated address if you configure a client on the same network.

2. Select Y to configure your network interface.
   - Select **N** to skip reconfiguration.
3. Proceed to Setting up the Network Interface.

Setting up the Network Interface

To facilitate initial configuration of the primary network interface, Nexenta pre-configures the appliance with a random static IP address in range from 192.168.10.10 to 192.168.210.210 with the subnet mask 255.255.0.0.

You can change the NexentaStor appliance to operate on your company's network interface.

❖ *To change the network interface, using NMC:*

1. Type

```
nmc:/$ setup network interface
```

2. Select a network card to configure.
3. Choose DHCP or static configuration method.
4. Proceed to Configuring the Network Protocol and Port..

Nexenta strongly recommends that you use DHCP for addresses.
If you use a static IP address, you must specify the device IP address, subnet mask, default gateway, and DNS server addresses.

Configuring the Network Protocol and Port

To access the NexentaStor graphical user interface, configure the network protocol and port number. Depending on your environment prerequisites, you can configure http or https network protocols.

You can specify any port number available in your network or use the default setting. Consult with your network administrator to verify available port numbers.

❖ *To configure the network protocol and port:*

1. Select the transport protocol for NexentaStor Web GUI (NMV):
   - HTTP — Fast and (plain text), but unsecured
   - HTTPS — Secured, but slower
2. Specify a Web GUI port. The default is **2000**. Do not change to a value used by other services.

At this stage, you can ping the appliance from an external host.

3. Proceed to Accessing the NexentaStor Appliance.

Accessing the NexentaStor Appliance

After a successful installation, the console displays the IP address of the NexentaStor appliance that you just created. After you open NexentaStor GUI in browser, you then configure the software.

❖ *To access the NexentaStor appliance:*

1. Point a browser to the URL in the message.
2. Proceed to Basic Configuration.

Note: If your Internet Browser does not connect to the appliance, the primary networking interface may be configured incorrectly. Verify or fix the configuration by logging in to the NMC and typing:

```
nmc:/$ setup appliance init
```

Basic Configuration

At this stage in the installation, the appliance contains a web interface ready for initial configuration through the NexentaStor GUI-based Configuration Wizard. The Wizard guides you through essential appliance configuration steps.

The NexentaStor Configuration Wizard is subdivided into two guided stages:

- Stage I — Basic Configuration

Note: You must perform all Wizard-guided steps of the Basic Configuration.

- Stage II — Advanced Configuration

Note: A Wizard demonstration is available at www.nexenta.com. The demo illustrates the essential steps for setting up the installed appliance.

❖ *To configure the appliance:*

1. After connecting through a secure connection, the security certificate displays. Click **OK** to accept the certificate.
2. Change the following basic information as needed for your network:
   - Host name
   - Domain name
   - Time zone
   - NTP server
   - Keyboard layout
3. In Step 2, type the `root` and `admin` passwords.
4. Alternatively, leave these fields blank and click **Next**.

   NexentaStor uses the default password for the `root` and `admin` accounts. Default password is `nexenta`.
5. Configure the Mailer settings in Step #3.

   It is important to set up a mail server and a mailing address for reporting system notifications, reports, and faults. Part of the NexentaStor appliance's Fault Management and Reporting is

managed through notifications. Nexenta recommends that you configure either the appliance's mailer or enable the appliance's inbox.

If you do not configure the mailer or enable the Inbox, the appliance fails to notify you of important events. The notifications only display in the appliance's log.

You can specify separate e-mail addresses for the following:

- **Statistics**

  Volumes reports, Network Statistics, NFS Statistics

- **Notifications**

  System reports with status: Notice and Info

- **Faults**

  System reports with status Warning and Critical

You can run both stage I and stage II of the Wizard again, at any time, to modify the configuration. You can also manually review the changes and apply or edit them.

6. Optionally, click **Test** to send a test e-mail to the specified e-mail address.
7. Review the settings and click **Save**.

   After saving the configuration, the second installation wizard opens.

Advanced Configuration Wizard

Stage-II Wizard contains a number of optional steps to setup the network and storage, data volumes, folders and zvols.

❖ *To configure the advanced features of the appliance:*

1. Add a network interface, if needed.
2. Setup or change the default gateway and name servers.

   The field contains the default information from the installation.
3. Configure the iSCSI Initiator to use virtual LUNs exported through iSCSI target. The appliance supports the following types of iSCSI discovery:
   - Target Address Discovery
   - Static Configuration
   - iSNS Discovery
4. Review and assign the available disks. You can assign the disks to be used for the following: Review the available disks. If you added any new disks, click **Refresh > Rescan all HBAs and refresh device links.** The disks display in the list.

- Data
- Cache
- Log

  For example, you can assign some of your SSDs as data devices and others as cache or log devices.

5. Create a volume configuration by selecting one of the following volume types:
   - None
   - Mirror of disks
   - RAID-Z1
   - RAID-Z2
   - RAID-Z3

   A NexentaStor volume is a ZFS pool with additional attributes. Redundant configurations typically improve performance and reliability but reduce effective storage capacity.
6. Adjust the number of disks for each device using the vertical scroll bars.

   Before you create a volume, verify that the disks that you plan to use for the volume do not contain any old volume labels, i.e. they are not included in any other volume configuration.
7. Optionally, import volumes from another ZFS-based system.
8. Create folders and/or nested folders.

   A NexentaStor folder is a ZFS file system.
9. Specify the necessary attributes.

   Each attribute is defined in the UI.
10. Review your selections. Make any changes needed.

Manually Running a Wizard

You may need to run the initial or advanced configuration wizards after the installation.

❖ *To run the wizards after the initial setup:*

◆ Point your Browser to the appropriate URL:

`http://<ip_address>:<port_number>/wizard1`

`http://<ip_address>:<port_number>/wizard2`

❖ *To run the wizards after the initial setup using NMV:*

- Click **Settings > Appliance > Wizard1 | Wizard2**

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Plugins

This section includes the following topics:

About Plugins

You can add and remove a NexentaStor pluggable module, or plugin. Plugins extend NexentaStor's functionality and use the same Storage Appliance API (SA-API) as the other software components. During installation, the plugin integrates into the NexentaStor core software.

For Free Trial users, commercial plugins are available **upon request**. When requesting, please specify:

- NexentaStor license key
- Plugin name

Accessing the Repository

Plugins are **not** downloadable from the website. Once purchased, your Nexenta sales representative uploads the plugins to your company's Nexenta repository, from which you can download them.

❖ *To view the repository, using NMC:*

◆ Type:

```
nmc:/$ show appliance repository
```

Accessing the Plugins

Plugins are available remotely and locally.

- *To list plugins available for installation, using NMC:*
  - Type:

    ```
    nmc:/$ show plugin
    ```

    ```
    nmc:/$ show plugin remotely-available
    ```

- *To list plugins available for installation, using NMV:*
  1. Click **Settings > Appliance.**
  2. In the Administration panel, click **Plugins**.

Installing Plugins

You can install and manage plugins through both NMC and NMV.

- *To manage an existing plugin or install a new one, using NMC:*
  1. Type:

     ```
     nmc:/$ setup plugin install <plugin_name>
     ```

  2. Confirm or cancel the installation.
- *To manage an existing plugin or install a new one, using NMV:*
  1. Click **Settings > Appliance.**
  2. In the Administration panel, click **Plugins**.

Note:

The plugins may not be immediately available from your NexentaStor repository once uploaded. They can take up to six hours to become available.

3. Click **Add Plugin**  in the Remotely-available plugins section.
4. Confirm Plugin installation.

See Also:

- Nexenta products

Removing Plugins

You can remove plugins in NMC or NMV.

❖ *To remove an existing plugin, using NMC:*

1. Type:

   ```
   nmc:/$ setup plugin <plugin_name> uninstall
   ```

   System response:

   ```
   Uninstall plugin <plugin_name>? (y/n)
   ```

2. Confirm or cancel removal.

❖ *To remove plugins, using NMV:*

1. Click **Settings > Appliance.**
2. In the Administration panel, click **Plugins**.
3. Click **Delete Plugin**  in the Installed Plugins section.
4. Confirm or cancel removal.

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Upgrading

This section includes the following topics:

About Upgrading the Appliance

This section discusses upgrading NexentaStor with future patches and upgrades.

Upgrading the Appliance

After performing a major upgrade, you can upgrade the NexentaStor appliance with patches, new versions and various options, using NMC.

❖ *To upgrade NexentaStor:*

1. Type:

```
nmc:/$ setup appliance upgrade -C
```

2. Select **Yes** to delete the cache files on the appliance.

Upgrading to the Enterprise Version

It is easy to upgrade from the Community version to the Enterprise version.

❖ *To upgrade from Community version to the Enterprise Edition, using NMC:*

◆ Type:

```
nmc:/$ setup appliance upgrade -U <registration key>
```

❖ *To upgrade from Community version to the Enterprise Edition, using NMV:*

1. Click **Upgrade to Enterprise**.
2. Follow the on-screen prompts.

Upgrading the Data Volume

You must upgrade your data volume to the latest version.

- *To upgrade the data volume:*
  - Type:

```
nmc:/$ setup volume <volume_name> version-upgrade
```

Upgrading Folders

You can upgrade all folders, a specific folder, or a specific folder and its subfolders.

- *To upgrade all folders to the latest version:*
  - Type:

```
nmc:/$ setup folder version-upgrade
```

- *To upgrade only one specified folder to the latest version:*
  - Type:

```
nmc:/$ setup folder <fol_name> version-upgrade
```

- *To upgrade a specified folder and all of its subfolders to the latest version:*
  - Type:

```
nmc:/$ setup folder <fol_name> version-upgrade -r
```

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