



**BakBone**<sup>™</sup>  
S O F T W A R E

**NETVAULT**  
i n s t a l l a t i o n   g u i d e

*version* **6.5.2**

***Release Date 11/15/2002***

NVE 7010-11C 11/15

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*NetVault Installation Guide - Version 6.5.2*

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**BakBone Software**

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# NETVAULT v6.5.2 installation guide

SECTION 1:

## **Installation Procedures**



**Installation Preparation**

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## Installing NetVault 6.5.x

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NetVault Version 6.5.x Software is easy to install. Information on every aspect of installing the software is detailed below.

### Types of Installation

There are three types of installations:

- **NetVault Server System:** Provides the full range of NetVault facilities with local control using an installed Graphical User Interface (GUI), or remotely over the network with proper security authorization. This type of installation can also act as a client.
- **NetVault Client System:** Provides a subset of NetVault facilities, without the local device support, controlled remotely over the network with proper security authorization.
- **Custom NetVault System:** Provides the facility to install specific NetVault modules.

### General Installation Requirements

Before installing NetVault Software, the following requirements must be in place:

- **Sufficient disk space to install and use the software** - The amount of disk space required depends on the operating system, installation method and likely usage of the NetVault system. For example, in a NetVault Enterprise System backing up a large number of NetVault clients, the NetVault Database directory could be fairly large and require more disk space. If you need assistance determining the amount of space required, contact BakBone *Technical Support* (page 6).
- **A TCP/IP network** - A TCP/IP network is required unless you intend to use the NetVault Software in a *standalone* configuration. This type of network is not necessary if the NetVault Server is backing itself up to a local device.
- **NetVault Graphic Requirements** - Minimum graphic display resolution (under Microsoft Windows NT or UNIX X-Windows) of 800 x 600 pixels displaying 256 colors.
- **Permissions** - Ensure that all installs have execute permission.



### Installation Procedures per O/S

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## Installation Procedures per O/S and Environment

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Below, the installation process for various operation systems is explained in full detail.

### Compaq TRU64 (4.0b and Later)

To install the NetVault 6.5.x software to a Compaq TRU64 system, follow the procedure detailed below:

1. Mounting the CD-ROM: Mount the CD-ROM using the following commands (assuming the mount point “/cdrom” already exists):
  - `su root`
  - `mount -r -t cdfs <CD-ROM device node> /cdrom`
2. Installing the NetVault Software:
  - a. Log on as root.
  - b. Run the command:
    - `cd /cdrom/TRU64`
    - `./INSTALL NVDIST`

### FreeBSD 4.0

To install the NetVault 6.5.x software to a FreeBSD 4.0 system, follow the procedure detailed below:

1. Mounting the CD-ROM: Mount the CD-ROM using the following commands (assuming the mount point “/cdrom” already exists):
  - `su root`
  - `mount -rt cd9660 <CD-ROM device node> /cdrom`
2. Installing the NetVault Software:
  - a. Log on as root.
  - b. Run the command:
    - `cd /cdrom/freebsd`
    - `./install nvdist`

**NOTE:** Once the software is installed, use the nvconfigurator to set the security password to allow access from other NetVault servers and clients.

## HP-UX 10 and 11, HP9000/700 HP9000/800

To install the NetVault 6.5.x software to an HP-UX 10 and 11, HP9000/700 or HP 9000/800 system, follow the procedure detailed below:

1. Mounting the CD-ROM: Mount the CD-ROM using the following commands (assuming the mount point "/cdrom" already exists):
  - `su root`
  - `mount -r -F cdfs <CD-ROM device node> /cdrom`
2. Installing the NetVault Software:
  - a. Log on as root.
  - b. Run the command:
    - `cd /cdrom/HP`
    - `./INSTALL NVDIST`

## IBM AIX 4.2 and 4.3

To install the NetVault 6.5.x software to an IBM AIX 4.2/4.3 system, follow the procedure detailed below:

1. Mounting the CD-ROM: If the CD-ROM is not already mounted, mount it using the SMIT utility
2. Installing the NetVault SCSI driver: Use the SMIT utility to load the NetVault SCSI driver contained in the file image. For complete installation instructions, see the `ui5drv_1.pdf` file in the DOC folder on the NetVault 6.5.x installation CD.
3. Installing the NetVault Software:
  - a. Log on as root.
  - b. Run the commands:
    - `cd <cdrom>/aix` (*where <cdrom> is the device node for the CD-ROM*)
    - `./install nvdist`

## LINUX (Intel x86)

To install the NetVault 6.5.x software to a Linux (Intel x86) system, follow the procedure detailed below:

1. Mounting the CD-ROM: Mount the CD-ROM using the following commands (assuming the mount point “mnt/cdrom” already exists):
  - `su root`
  - `mount /mnt/cdrom`
2. Installing the NetVault Software:
  - a. Log on as root.
  - b. Run the commands:
    - `cd /mnt/cdrom/linux`
    - `./install nvdist`

## Microsoft Windows NT4

### *Installation Requirements*

The requirements for installing NetVault on a Windows NT system are as follows:

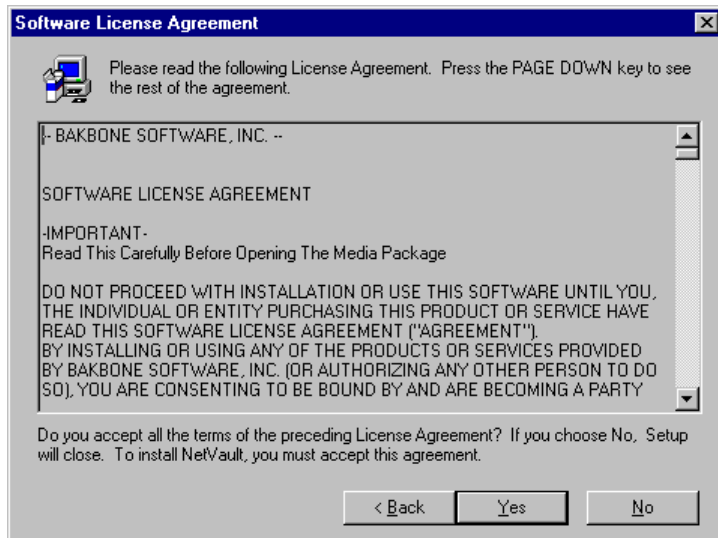
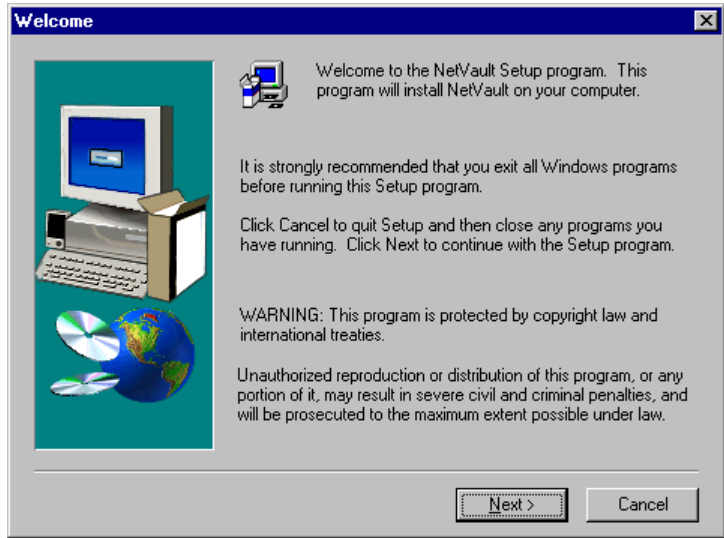
- A computer running Microsoft Windows NT, version 4.0 with at least 32 Mbytes RAM. At this time only the Intel processor (or compatible) is supported. You must also have SP3 (NT 4.0) or later installed.
- Approximately 10 Mbytes of available disk space; more if you intend to use this machine to control a large NetVault domain (a server and many clients) or large multi-drive tape libraries.
- For NetVault Server and Custom installations (with the GUI), it is necessary to pre-install Microsoft Internet Explorer Version 3.02 or later, in order to use the HTML-based help system (NT version 4.0 or later) included with the NetVault Software.
- TCP/IP networking software installed.

### *Installation Procedure*

To install the NetVault Software on a Windows NT workstation or server, follow these steps:

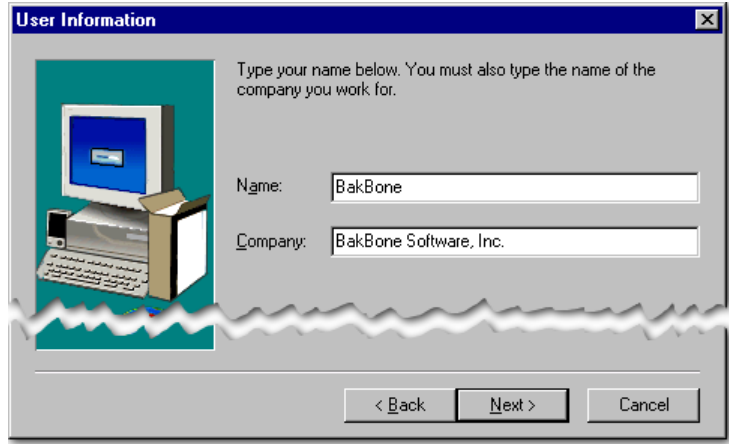
1. Log on as the Administrator or as a user with Administrator privileges.
2. Close all programs.
3. Insert the CD into the CD-ROM drive. Locate and run the **setup.exe** file. The file should be located as follows:
  - `<cd drive>\winnt\setup.exe`
4. An InstallShield Wizard will open and begin the installation setup.

5. Once the **InstallShield Wizard** has loaded, the **NetVault Setup Welcome** dialog box will open, as shown in the figure at right:
6. Click **Next** to open the **License Agreement** window as shown in the figure on the following page:

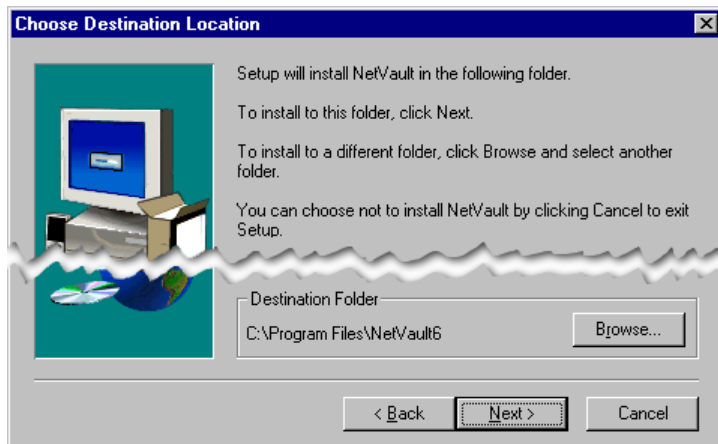




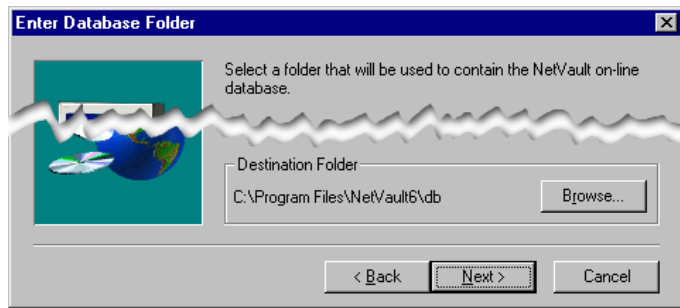
7. Click **Yes** to accept the agreement.
8. The **User Information** window will appear. Enter a valid **Name** and **Company** and click **Next**.
9. The **Choose Destination Location** window is revealed. The



default location for an installation of NetVault is displayed in the **Destination Folder** frame (C:\Program Files\NetVault6). If this location is acceptable, click **Next**. Otherwise, click on the browse button and navigate to the desired directory or manually input a path into the window that is displayed (see the figure on the next page).

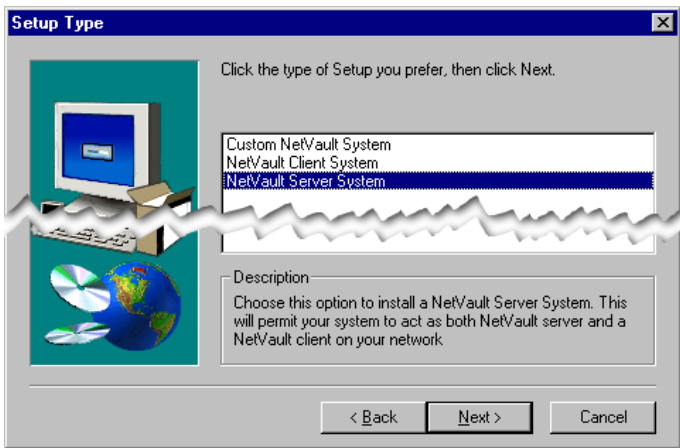


10. With the installation destination folder defined with the desired installation location, click **Next** to proceed to the **Enter Database** dialog box:



11. Define the destination for the **NetVault Database** in the same manner as the installation (see Step 8, above for more details). When finished click **Next**.

12. The **Setup Type** dialog box will open, as shown in the figure at right:

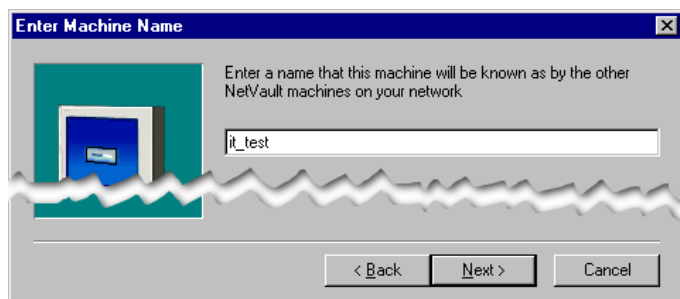


13. Select the desired **Setup Type** for the desired type of installation:

- Custom NetVault System
- NetVault Client System
- NetVault Server System

14. Click **Next** to open the **Enter Machine Name** dialog box:

15. Enter the desired NetVault **Machine Name**. This name does not have to be the same as the actual computer's machine name, but



it is recommended that the NetVault machine name be the same as the computer name.

**NOTE:** Machine names are alpha/numeric strings of any length. Avoid using capital letters, spaces (substitute underscores for these, as shown in the example above) and punctuation (especially hyphens) when defining machine names.

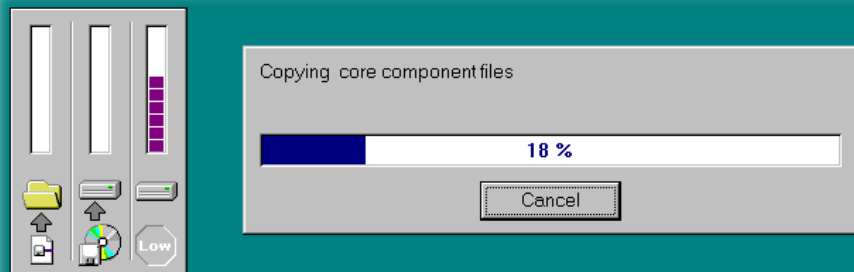
16. Click **Next** to open the **NetVault Password** dialog box:

17. Enter the desired **NetVault Password** information in both fields. With the values set properly, click **Next**.



**NOTE:** This NetVault Security Password allows access to the machine being installed on to other NetVault servers in the domain. This information should be secured so that only the NetVault Domain Administrators for your system have access to it. This password can be changed and security can be disabled using the NetVault Configurator. Please see *Chapter 6: Uninstalling NetVault 6.5.x* on page 49 for more information.

18. The process will begin and the InstallShield progress meter will appear:

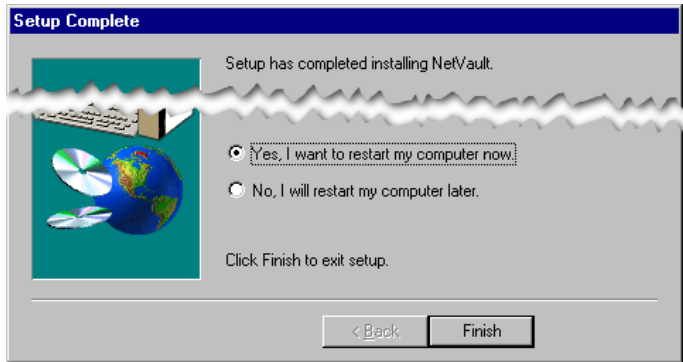


19. When the installation is complete, the **Setup Complete** dialog box will open:

20. Select the desired option by clicking the appropriate button:

- **Yes, I want to restart my computer now.**
- **No, I will restart my computer later.**

21. Click **Finish**.



**NOTE:** It is recommended that the machine be restarted. Some NetVault files require updating with a reboot in order to function properly.

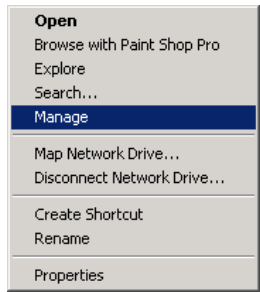
## Microsoft Windows 2000

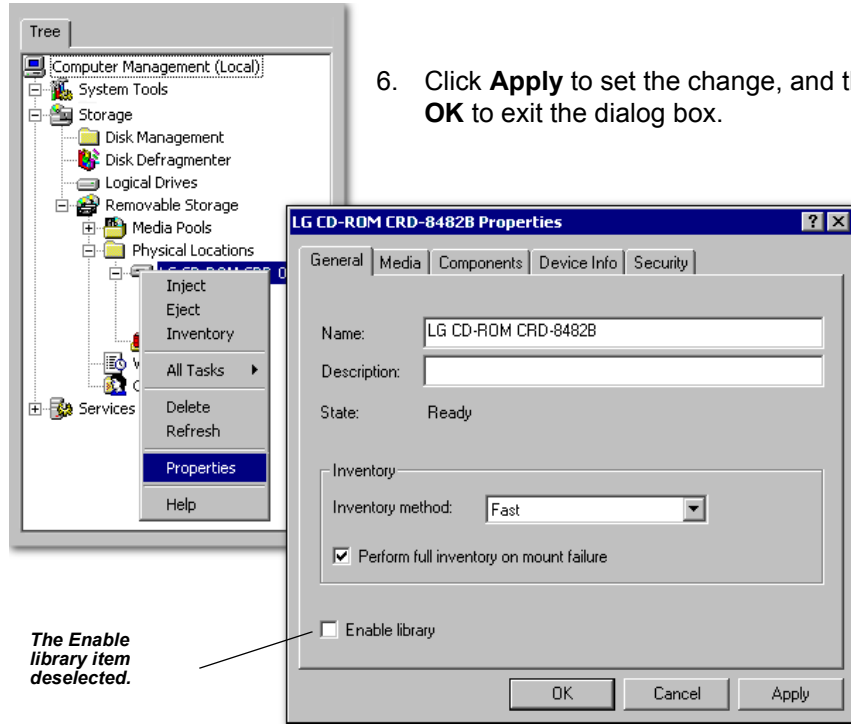
**IMPORTANT** Prior to installing NetVault 6.5.x on a Microsoft Windows 2000 machine, it is necessary to configure the operating system in order to allow certain functions of NetVault to run properly.

### Configuring a Microsoft Windows 2000 Machine

Devices or libraries being added to a Windows 2000 operating system cannot be under the control of the **Windows 2000 Remote Storage Manager**. To remove the library from the **Remote Storage Manager** control, follow the steps below:

1. With Windows 2000 running and the desktop visible, right-click My Computer on your desktop.
2. Choose **Manage** from the pop-up menu, as shown in the figure at right:
3. Navigate through each level of the tree until the desired device is displayed.
4. Right-click on the device and choose **Properties** from the pop-up menu.
5. In the Properties dialog box that is revealed, and the General Tab selected, click on the **Enable library** checkbox in order to de-select it





- Click **Apply** to set the change, and then **OK** to exit the dialog box.

- With this complete, it is now possible to install NetVault 6.5.x.

### ***Installing NetVault 6.5.x***

Other than the details listed below, the installation procedure for Windows 2000 is almost exactly the same as the process discussed in the previous section, *Microsoft Windows NT4* on page 15.

- Insert the CD into the CD-ROM drive. Locate and run the **setup.exe** file. The file should be located as follows:

- `<cd drive>\w2k\setup.exe`

### **Microsoft Windows 95/98 Client**

Other than the details listed below, the installation procedure for a Windows 95/98 Client system is almost exactly the same as the process discussed in the previous section, *Microsoft Windows NT4* on page 15.

- Insert the CD into the CD-ROM drive. Locate and run the **setup.exe** file. The file should be located as follows:

- `<cd drive>\win9x\disk1\setup.exe`

## NCR UNIX SVR 5.4 MP-RAS 03

To install the NetVault 6.5.x software to an NCR UNIX SVR 6.4 MP-RAS 03 system, follow the procedure detailed below:

1. Mounting the CD-ROM: Mount the CD-ROM using the following commands (assuming the mount point “/cdrom” already exists):
  - `su root`
  - `mount -r -F cdfs <CD-ROM device node> /cdrom`
2. Installing the NetVault Software:
  - a. Log on as root.
  - b. Run the command:
    - `pkgadd -d /cdrom/ncr/simage` (for NetVault Server installation), or
    - `pkgadd -d /cdrom/ncr/cimage` (for NetVault Client installation).

**NOTE:** Once the software is installed, use the nvconfigurator to set the security password to allow access from other NetVault servers and clients.

## SCO OpenServer 5

To install the NetVault 6.5.x software to a SCO Open Server 5 system, follow the procedure detailed below:

1. Mounting the CD-ROM: Mount the CD-ROM using the following commands (assuming the mount point “/cdrom” already exists):
  - `su root`
  - `mount -r <CD-ROM device node> /cdrom`
2. Installing the NetVault Software:
  - a. Log on as root.
  - b. Run the command:
    - `cd /cdrom/scoopen5/`
    - `./install nvdist.`

**NOTE:** Once the software is installed, use the nvconfigurator to set the security password to allow access from other NetVault servers and clients.

## SCO UnixWare 2.1.3

To install the NetVault 6.5.x software to a SCO UnixWare 2.1.3 system, follow the procedure detailed below:

1. Mounting the CD-ROM: If the CD-ROM does not mount automatically, mount it using the following commands (assuming the mount point “/cdrom” already exists):
  - `su root`
  - `mount -F cdfs -o ro <CD-ROM device node> /cdrom`
2. Installing the NetVault Software:
  - a. Log on as root.
  - b. Run the command:
    - `cd /cdrom/uware213`
    - `cp * /tmp`
    - `cd /tmp`
    - `chmod +x install`
    - `./install nvdist`

**NOTE:** Once the software is installed, use the nvconfigurator to set the security password to allow access from other NetVault servers and clients.

## SCO UnixWare 7

To install the NetVault 6.5.x software to a SCO UnixWare 7 system, follow the procedure detailed below:

1. Mounting the CD-ROM: If the CD-ROM does not mount automatically, mount it using the following commands (assuming the mount point “/cdrom” already exists):
  - `su root`
  - `mount -F cdfs -o ro <CD-ROM device node> /cdrom`
2. Installing the NetVault Software:
  - a. Log on as root.
  - b. Run the command:
    - `cd /cdrom/uware7`
    - `pkgadd -d /cdrom/uware7/simage` *(for NetVault Server installation), or*
    - `pkgadd -d /cdrom/uware7/cimage` *(for NetVault Client installation).*

**NOTE:** Once the software is installed, use the nvconfigurator to set the security password to allow access from other NetVault servers and clients.

## SGI IRIX 6.2 and 6.5

To install the NetVault 6.5.x software to a SGI IRIX 6.2/6.5 system, follow the procedure detailed below:

1. Mounting the CD-ROM: If the CD-ROM does not mount automatically, mount it using the following commands (assuming the mount point “/cdrom” already exists):
  - `su root`
  - `mount -t iso9660 <CD-ROM device node> /cdrom`
2. Installing the NetVault Software:
  - a. Log on as root.
  - b. Run the commands:
    - `cd /cdrom/irix`
    - `./install nvdist`

## Sun Solaris 2.5.1 (SPARC)

To install the NetVault 6.5.x software to a Sun Solaris 2.5.1 (SPARC) system, follow the procedure detailed below:

1. Mounting the CD-ROM: If the Solaris Volume manager is running, the CD-ROM is mounted automatically when it is inserted into the drive. The mount point is “/cdrom/cdrom0”.

Alternatively, it is possible to mount the CD-ROM using the following commands (assuming the mount point /cdrom/cdrom0 already exists):

  - `su root`
  - `mount -r -F hsfs <CD-ROM device node> /cdrom/cdrom0`
2. Installing the NetVault Software:
  - a. Log on as root.
  - b. Run the command:
    - `pkgadd -d /cdrom/cdrom0/sol125/simage`  
*(for NetVault Server installation), or*
    - `pkgadd -d /cdrom/cdrom0/sol125/cimage`  
*(for NetVault Client installation).*

**NOTE:** Once the software is installed, use the nvconfigurator to set the security password to allow access from other NetVault servers and clients.



## Sun Solaris 2.6, 7 and 8 (SPARC)

To install the NetVault 6.5.x software to a Sun Solaris 2.6/7/8 (SPARC) system, follow the procedure detailed below:

1. Mounting the CD-ROM: If the Solaris Volume manager is running, the CD-ROM is mounted automatically when it is inserted into the drive. The mount point is "/cdrom/cdrom0".
1. Alternatively, it is possible to mount the CD-ROM using the following commands (assuming the mount point /cdrom/cdrom0 already exists):
  - `su root`
  - `mount -r -F hsfs <CD-ROM device node> /cdrom/cdrom0`
2. Installing the NetVault Software:
  - a. Log on as root.
  - b. Run the command:
    - `pkgadd -d /cdrom/cdrom0/solaris/simage`  
(for NetVault Server installation), or
    - `pkgadd -d /cdrom/cdrom0/solaris/cimage`  
(for NetVault Client installation).

**NOTE:** Once the software is installed, use the nvconfigurator to set the security password to allow access from other NetVault servers and clients.

## Sun Solaris 7, 8 (Intel x86)

To install the NetVault 6.5.x software to a Sun Solaris 7,8 (Intel x86) system, follow the procedure detailed below:

1. Mounting the CD-ROM: If the Solaris Volume manager is running, the CD-ROM is mounted automatically when it is inserted into the drive. The mount point is "/cdrom/cdrom0". Alternatively, it is possible to mount the CD-ROM using the following commands (assuming the mount point /cdrom/cdrom0 already exists):
  - `su root`
  - `mount -r -F hsfs <CD-ROM device node> /cdrom/cdrom0`
2. Installing the NetVault Software:
  - a. Log on as root.
  - b. Run the command:
    - `pkgadd -d /cdrom/cdrom0/solintel/simage`  
(for NetVault Server installation), or
    - `pkgadd -d /cdrom/cdrom0/solintel/cimage`  
(for NetVault Client installation).

**NOTE:** Once the software is installed, use the nvconfigurator to set the security password to allow access from other NetVault servers and clients.

## Calculating NetVault Database (NVDB) Size Requirements

When the NetVault server software is installed, the installation includes a NetVault Database directory (db or nvdb) containing four sub-directories:

- **Install** - Very small directory. Contains the **modules** binary file detailing which modules are installed).
- **Keys** - Very small directory. Contains licence key files for the main software and any plugins or APMs installed.
- **MediaDatabase** - This directory grows to be rather large with use of NetVault. Holds records for media and backups performed.
- **ScheduleDatabase** - Small directory (generally less than 10 Mbytes in size) Holds records for all backup and restore jobs).

The only portion of the database for which size requirements are an issue is the **MediaDatabase**. The NetVault Administrator of a particular NetVault domain must estimate the anticipated size of the database to properly allocate adequate disk space for growth. To calculate the space requirements, the following information is necessary:

- **The approximate number of files and directories being backed up in the NetVault Domain** (i.e. on the NetVault server and all NetVault clients).

**NOTE:** Each file and directory backed up requires on average 60 bytes for an index entry in the NetVault Database.

- **How many generations of each file are being kept** - Each generation is a separate instance of a file or directory backup. For example, if the same file is backed up seven times, using default backup settings, there are *seven generations* of the file held on media and *indexed in the NetVault Database*. By default, backups have an infinite life (i.e. the number of generations increases for every backup, causing the NetVault Database to continuously grow in size). Most systems cannot handle this amount of storage requirement, so one of the NetVault Administrator's tasks is to ensure that a suitable **Backup Life** is applied to each backup (a setting found in the **Advanced Options** tab of the NetVault **Backup** window). For more information on **Backup Life**, please see the *Backup Life (Backup Only)* section of *Chapter 16: Using Advanced Features* on page 274 of the *NetVault 6.03 Administrator's Guide*. Below is an example of calculating the NetVault Database size requirements:

- If 200,000 files and 15,000 directories are backed up once, approximately 13 Megabytes is required for NetVault Database indexing. If the same files and directories were backed up three times, 39 Megabytes would be required, and so on.

Under normal circumstances, it is reasonable to set a **Backup Life** option of **Discard after 7 Full Backups** (for backups using the File System plugin).

With this option set, only seven generations of files/directories are retained for a particular backup selection within the NetVault Database. On the eighth backup, the first backup set of files/directories is discarded and removed from the NetVault Database index. Below is a formula for estimating the space requirements (in bytes) for a number of machines:

<i>Approximate number of files and directories backed up per machine</i>	X	<i>Approximate number of generations to be kept using Backup Life options</i>	X	<i>Number of machines backed up</i>	X	60
--	---	---	---	-------------------------------------	---	----

**IMPORTANT NOTES:**

1. For some types of backup (e.g. online backup of some databases) it is necessary to keep a very large number of generations. Consult BakBone Technical Support (for contact information, please see the NetVault Administrator's Guide) if space considerations are likely to be an issue.
2. Some Backup Life settings may not clearly indicate the likely number of generations. For example, when choosing the 'Discard after 25 weeks' setting, the number of generations kept depends on how many times you actually do this backup within the 25 week period.



SECTION 2:

# **Licensing, Uninstallation and Other Procedures**



**Licensing NetVault**

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## Licenses for NetVault Version 6.5.x

Once installed, the NetVault software is operational for **45 DAYS**. To license the software, locate the relevant machine IDs, and contact BakBone Customer Support. A License Key will be issued which then needs to be installed. Each of the above mentioned steps is detailed below:

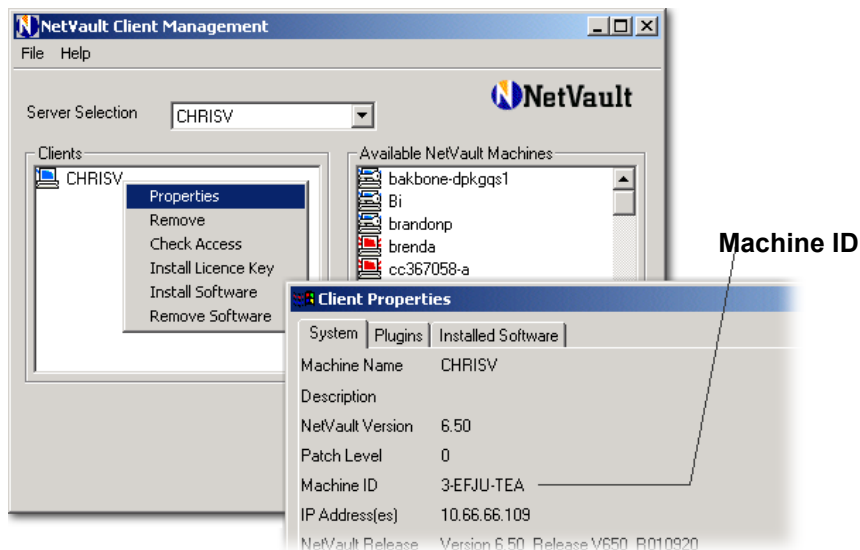
### Locating Machine IDs

To get the IDs of your NetVault machine (normally the NetVault server):

1. Open the NetVault **Client Management** window by clicking the **Client Management** button on the command toolbar (or by selecting **Client Management** from the **Administration** pull-down menu).
2. Select the desired machine from the **Clients** list and right click on it.

**NOTE:** In order to view details on a given NetVault Client, it must first be added to the relevant NetVault Server (the machine being used for this process). For complete details on adding a NetVault Client, please see *Adding a NetVault Client* on page 111 of the *NetVault 6.03 Administrator's Guide*.

3. Choose **Properties** from the pop-up menu to reveal the **Client Properties** dialog box. The Machine ID is displayed in the **System** tab.



## Requesting a NetVault 6.5.x License Key

To request a NetVault License Key, it is necessary to contact BakBone Technical Support and provide the following information:

- **Machine ID of NetVault Server and any APMs** - Provide the Machines ID gained in the process detailed above for the NetVault Server as well as any applicable Application Plugin Modules installed on that machine.
- **Machine ID of NetVault Clients and any APMs** - A NetVault Client system (one on which the Client version of the software is installed), is not licensable. Although, any NetVault APMs installed on the system are. Provide the Machine ID(s) for these NetVault Clients as well as the name(s) of the Application Plugin Module(s) installed.

### Contacting BakBone Technical Support

BakBone Software is dedicated to providing friendly, expert advice to NetVault product customers. Our highly trained professionals are available to answer your questions, offer solutions to your problems and generally help you make the most of your NetVault purchase. Log on to our web site, or contact our Helpdesk, for more information.

**BakBone Software Web Site:** <http://www.bakbone.com>

Helpdesk Support Lines	
Region	Contact
North America	Tel: 1.877.955.BONE (955.2663) e-mail: support@bakbone.com
Europe	Tel: +44.1202.244727 ● +44.1202.244728 e-mail: support@bakbone.co.uk
Asia Pacific Rim	Tel: +81.3.5908.3517 e-mail: support@bakbone.co.jp

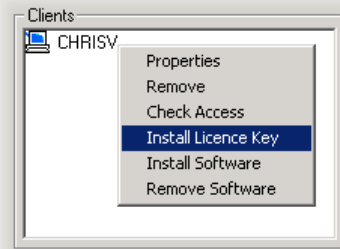
### Installing a License Key

A NetVault License Key is valid only for the Machine ID for which it is issued. License Keys are e-mailed (or faxed) directly to the customer. It is recommended that the key be copied directly from the e-mail into the **Enter Key String** box to avoid possible errors. To install a license key, follow the procedure detailed below:

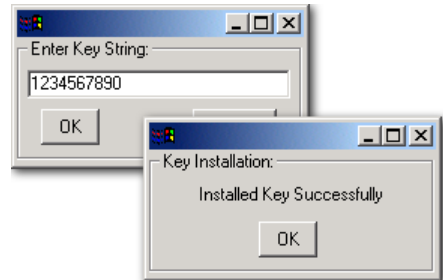
1. Open the NetVault **Client Management** window by clicking the **Client Management** button on the command toolbars (or by selecting **Client Management** from the **Administration** pull-down menu).

2. Select the desired machine from the **Clients** list and right click on it.

**NOTE:** In order to view details on a given NetVault Client, it must first be added to the relevant NetVault Server (the machine being used for this process). For complete details on adding a NetVault Client, please see *Adding a NetVault Client* on page 111 of the *NetVault 6.03 Administrator's Guide*.



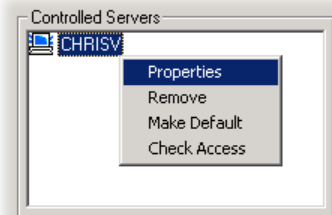
3. Select **Install License Key** from the pop-up menu.
4. The **Enter Key String** dialog box will appear.
5. Input the new key information (or simply copy the new key information from the e-mail, if applicable) into the **Enter Key String** box and click **OK**.
6. If the license key is installed successfully, a message dialog box appears. Click on **OK** to exit this box and return to the Client Management window.
7. Click **OK** to complete the license key installation.



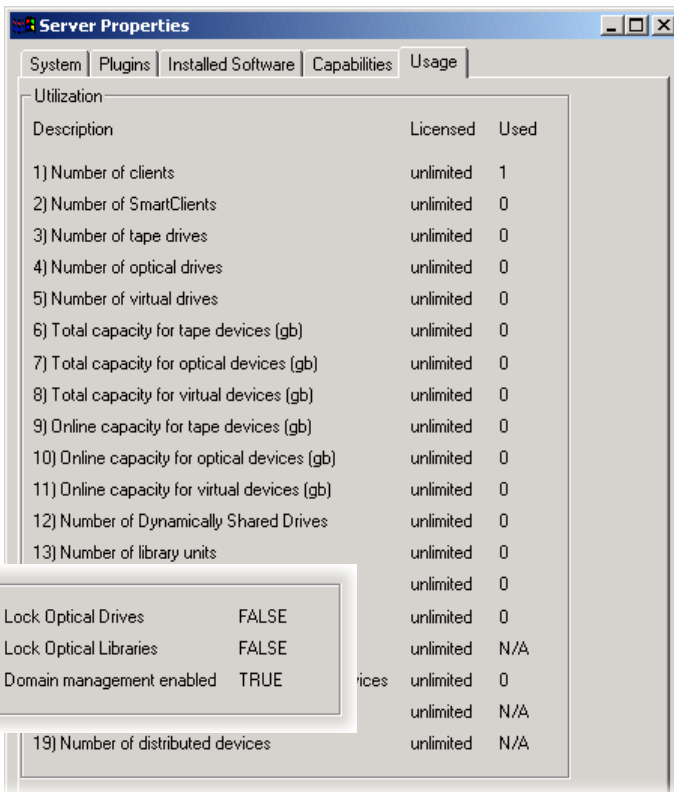
## License Usage Screen

Once NetVault is successfully installed, a **Usage** window can be accessed via the **Domain Management** section of NetVault that allows a user to view several aspects pertaining to licensing. This tab will note what is licensed and what licensed items are in use. This can be helpful in keeping various licenses up to date. To access this screen, perform the following actions:

1. Launch NetVault
2. From the **Administration** pull-down menu, select **Domain Management**.
3. In the **Controlled Servers** window, right-click on the desired server and select **Properties** from the pop-up menu.
4. In the window that appears, select the **Usage** tab. The **Usage** window will be displayed and is broken down into two frames:



- Utilization** - This frame shows 19 different items associated with licensing. Each item shows its license status as well as its usage status.
- Flags** - This frame shows the lock status (True or False) of various drives and libraries (e.g. Tape and Optical) as well as whether or not Domain Management and Heterogeneous Client are enabled.



## **Installing NetVault Plugins or APM's**

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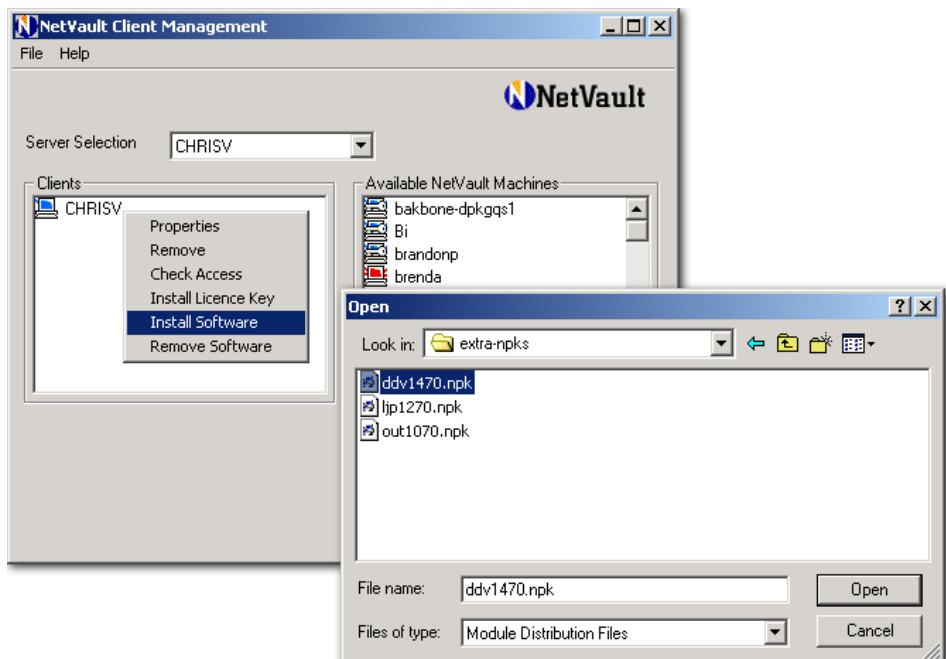
## Installing NetVault Plugins and APM's

NetVault plugins and APM's are installed and removed from the NetVault **Client Management** window. A NetVault plugin or APM can be installed on any client of the NetVault server appearing in the **Server Selection** list.

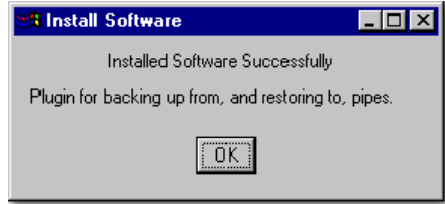
**NOTE: NOTE:** NetVault software includes a number of plugins which are automatically installed. They are the **Consolidated Backups, Data Copy, Consolidated File System Backups** and **Raw Device** plugins. If any of these plugins are deleted, NetVault must be reinstalled in order to get them back. APM's can be installed and uninstalled as desired.

### Installing a Plugin or APM

1. Open the NetVault **Client Management** window by clicking the **Client Management** button on the command toolbar (or by selecting **Client Management** from the **Administration** pull-down menu).
2. Select the desired client in the **Clients** list.
3. Right-click and choose **Install Software** from the pop-up menu.
4. In the window that appears, navigate to and select the appropriate installation software (see the figure on the following page).

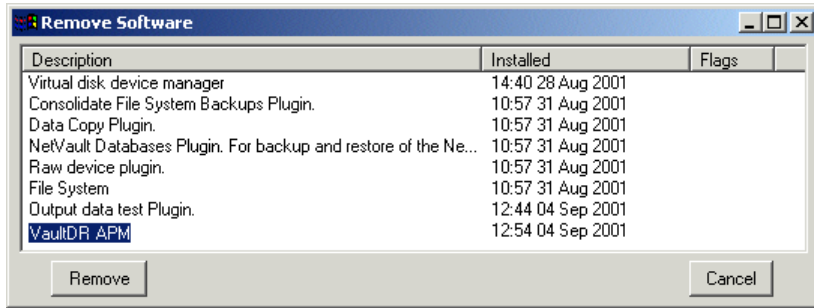
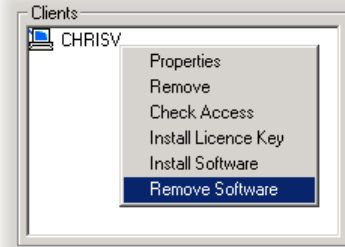


5. Click **Open** to begin the installation process. When the installation is complete, a successful installation message appears in the **Install Software** dialog box.

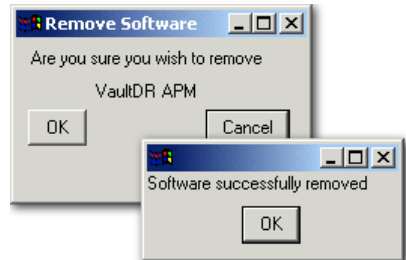


## Removing a Plugin or APM

1. Access the **Client Management** window as described in the installation procedure above.
2. Right-click on the NetVault server in the **Clients** list to reveal the pop-up menu and select **Remove Software** (as shown in the figure at right).
3. Select the desired APM to remove from the displayed list and click the **Remove** button (in the figure below, the **VaultDR Offline APM** has been selected).



4. A dialog box will appear asking for confirmation of the remove command. Click on **OK** to proceed (or **Cancel** to abort). Clicking **OK** results in the removal of the software and a confirmation message will appear. Click **OK** to close this dialog box and return to the **Client Management** window.





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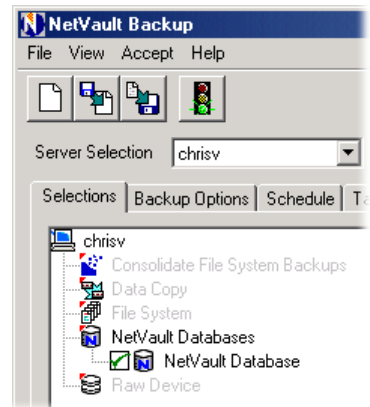
## Upgrading NetVault

Upgrading NetVault depends on the NetVault version being upgraded from. Licensing is also an issue when upgrading the NetVault software. Please see *Chapter 3: Licensing NetVault* on page 31 for complete information. Use the following as general guidelines only.

**IMPORTANT NOTE:** Whenever upgrading NetVault from any version, it is **always** necessary to upgrade the installation on the NetVault Server **before** any Clients.

### Pre-Upgrade

Prior to an upgrade of NetVault it is recommended that the current NetVault Database is backed up using the **NetVault Databases** plugin. This is recommended in the event that an upgrade is unsuccessful. That way, the older version of NetVault can be re-installed and the original database can be recovered. For complete details on the use of this plugin, please see the *NetVault Administrator's Guide*.



### Upgrading from NetVault 6.0.3, 6.5.0 or 6.5.x

Run the install program as if attempting a new install. This process is dependent on the O/S. (For details on installation per O/S, please see *Chapter 2: Installation Procedures per O/S* on page 11):

1. The installation program will recognize that NetVault is already installed and the relevant software modules will be automatically updated.
2. There should be no problem regarding existing backup jobs or media created under Version 6.0.1.

### Upgrading from NetVault 6.0.1 to 6.5.2

Run the install program as if attempting a new install. This process is dependent on the OS. (please see *Chapter 2: Managing NetVault Software of the NetVault 6.03 Administrator's Guide*):

1. The installation program will recognize that NetVault is already installed and the relevant software modules will be automatically updated.
2. There should be no problem regarding existing backup jobs or media created under Version 6.0.1.
3. Two new plugins are installed in a sub-directory of NetVault6: (1) the **Data Copy** plugin (for copying backups or backup sets from one item of media to another), and (2) the **Consolidated File Server Backups** plugin (which consolidates a Full

backup and a number of incremental backups into a single backup saveset). These two new plugins are extras which can be installed into the active software and have no effect on what was done under Version 6.0.1.

**NOTE:** The plugins mentioned above are available for install and should be located in the `..\NetVault6\Packages` directory (where “..” represents the installation location for the NetVault 6.5.x software).

## Upgrading from Earlier versions of NetVault to NetVault 6.5.2

If using a version of NetVault earlier than the ones mentioned above (e.g. versions 6.0.0 and earlier), please contact BakBone Technical Support. For complete details on contacting Technical Support, please see the *Contacting BakBone Technical Support* section of *Chapter 3* on page 34.

## General Guidelines for Upgrading NetVault

- Backup the NetVault Database to a specific, identifiable item of media using the Target Media By MID option.
- Make sure that enough time is available to do the upgrade and that everything is working properly before important backups need to be run.
- Leave all normally used devices physically connected to the NetVault server (or client) machines and added to NetVault. This ensures that the device configuration data is properly upgraded.

## Common Upgrade Problems and Solutions

When upgrading NetVault software installed using **pkgadd** (e.g. NCR MP-RAS and Solaris), the system may not allow the upgrade (an example of this situation is displayed in displayed on the following page).

- In the file `/var/sadm/pkg/install/admin/default` (on an NCR MP-RAS box), there is a line that affects **pkgadd** upgrade:

If...	Requirement...
<b>instance=unique</b>	It is necessary to remove and then re-add a package.
<b>instance=overwrite</b>	It is possible to upgrade without removing and then re-adding a package.

## Post Upgrade

Once an upgrade has completed successfully, it is strongly recommended that a backup of the new NetVault Database be created (in order to replace the pre-upgrade backup explained previously – see the section *Pre-Upgrade* on page 43). The database created during an upgrade is a mix of new elements as well as ones from the previous NetVault

installation. Therefore, if the current NetVault database is lost, this backup can be used to restore it, while also maintaining compatibility with the new version of NetVault.

## Migrating the NetVault Server

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As an Operating System (O/S) introduces a new release and an upgrade to this release is to be performed on the NetVault Server machine, it is necessary to “move” the existing installation of NetVault to the new O/S. This process is referred to as **Migration**. To successfully accomplish this, follow either of the two procedures described below.

### Procedure One - With Backup

1. Conduct a backup of the **NetVault Database**, backing it up to tape. This is accomplished through the use of the **NetVault Database Plugin**. For complete details on this procedure, please see the *NetVault 6.03 Administrator's Guide (Chapter 9: Disaster Recovery)*.
2. With the backup complete, it is next necessary to **Stop** the NetVault services. This is accomplished through the **NetVault Configurator**:
  - a. Launch the **NetVault Configurator**.
  - b. Select the **Service** tab.
  - c. Click on the **Stop NetVault** button. Wait a few moments until the statement at the top of the tab reads “**Current State: Stopped**”.
  - d. Click on **OK** to exit the Configurator.
3. Uninstall NetVault - It is recommended that the procedure detailed in the section *Uninstalling NetVault 6.5.x* on page 49, be followed.
4. Upgrade the O/S as described in the relevant documentation.
5. Re-install NetVault (follow the instructions in this chapter based on the desired O/S).

**IMPORTANT NOTE:** When re-installing NetVault, ensure that the installation software used corresponds to the new O/S (e.g. Windows NT upgraded to Windows 2000 would require different NetVault installation software).

6. With NetVault installed and running, restore the following **NetVault Database** items using the **NetVault Database Plugin** (and *only* these items).
  - **Media Database**
  - **Schedule Database**
  - **Logs Database**

Again, for details on this process, please see the *NetVault 6.03 Administrator's Guide (Chapter 9: Disaster Recovery)*. This will overwrite the existing NetVault Database items, replacing them with those that were backed up.

## Procedure Two - No Backup

1. It is first necessary to **Stop** the NetVault services. This is accomplished through the **NetVault Configurator**:
  - a. Launch the **NetVault Configurator**.
  - b. Select the **Service** tab.
  - c. Click on the **Stop NetVault** button. Wait a few moments until the statement at the top of the tab reads "**Current State: Stopped**".
  - d. Click on **OK** to exit the Configurator.
2. Navigate to the NetVault Databases directory (..\NetVault6\db). Copy the following folders and paste them to safe location (e.g. to a networked machine's hard drive).
  - **Media Database**
  - **Schedule Database**
  - **Logs**

**NOTE:** The NetVault Database increases in size based on the number of operations that have been performed in NetVault since its initial install. Based on the size of these folders, this operation could take a considerable amount of time.

3. Uninstall NetVault - It is recommended that the procedure detailed in the section *Uninstalling NetVault 6.5.x* on page 49 be followed.

**IMPORTANT NOTE:** Prior to uninstalling NetVault, be sure to take note of the existing NetVault Server name. It is required later.

4. Upgrade the O/S as described in the relevant documentation.
5. Re-install NetVault (follow the instructions in this chapter based on the desired O/S).

### **IMPORTANT NOTES:**

1. When re-installing NetVault, ensure that the installation software used corresponds to the new O/S (e.g. Windows NT upgraded to Windows 2000 would require different NetVault installation software).
2. When re-installing NetVault, the NetVault Server must be given the same name as in the previous installation.

6. With NetVault re-installed, ensure that it is closed and Stop the NetVault services (see Step 1., above).
7. Copy the previously moved directories (**Media Database, Schedule Database and Logs**) to the new NetVault Databases directory (..\NetVault6\db).
8. Restart the NetVault services (perform the reverse of the procedure explained in Step 1, above). All previous jobs should be present once NetVault is opened.

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## Uninstalling NetVault 6.5.x

**CAUTION:** Uninstalling NetVault Software will remove all NetVault Database entries. This will result in loss of all backup *records* performed with NetVault. Note that actual data backed up will remain intact.

### Uninstalling NetVault from MS Windows NT/95/98/2000 Machines

1. Choose **Start > Programs > NetVault > Uninstall NetVault**.
2. InstallShield will remove the software, services, etc. When prompted, click **Yes** to remove the shared library files located in the %SystemRoot%\System32 directory, if desired. No other applications should be using these files.
3. Manually remove the ../NetVault6 installation directory.

### Uninstalling NetVault from Solaris or MP-RAS Machines

1. To remove the software (based on installation type), issue the following command:
  - NetVault Server: `pkgrm nv6server`
  - NetVault Client: `pkgrm nv6client`
2. Follow the on-screen instructions to remove the software.

### Uninstalling NetVault from other UNIX or Linux Installations

1. Use the `cd` command to navigate to the **NetVault installation** directory, then go to the <path>/netvault6/util directory.
2. Type the following command at the command prompt:
  - `./nvuninstall`
3. Follow the on-screen instructions to remove the software.



# NETVAULT v6.5.2

installation guide

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