



7.0 NETVAULT

u p g r a d e g u i d e

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NetVault Upgrade Guide ver. 1.0

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BakBone Software

10145 Pacific Heights Boulevard, Suite 500 ♦ San Diego, California 92121 ♦ 858.450.9009

7.0 NETVAULT

upgrade guide

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Upgrading to NetVault 7.0

1.0.0 Introduction

This guide is set up for the sole purpose of upgrading to NetVault version 7.0. Upgrading is a relatively simple procedure, but certain guidelines and proper procedures, both of which are contained in this guide, should be reviewed prior to attempting an upgrade. It is also important to note that this guide **does not** offer instructions for performing a new install or removal of existing NetVault software. For detailed instructions on these procedures, please see the *NetVault Administrator's Guide*.

Note: Unless otherwise noted, all references in this guide to the NetVault Administrator's Guide refer to NetVault 7.0's version of this guide.

1.0.1 Upgrade Overview

It is possible to upgrade any version of NetVault 6.x to NetVault 7.0 and the same procedures apply for all 6.x versions. A few general rules regarding the upgrade of an entire NetVault domain, include:

- A NetVault Server can only support clients of the same version as itself, or older. It can not, however support clients running a newer version of the software (e.g. A NetVault Server running version 6.x can not control a client running NetVault version 7.0).
- When upgrading it is important to upgrade the NetVault Server to version 7.0 **before** upgrading any clients.
- A machine running a 6.x version of the NetVault GUI **can not** domain control a NetVault 7.0 server. Therefore, if NetVault's domain control functionality is being used, the machine controlling the NetVault Server will require an upgrade as well.

Note: Of the points made above all are important, but it is critical that the NetVault Server be upgraded first, before any clients.

1.1.0 Upgrading to NetVault 7.0

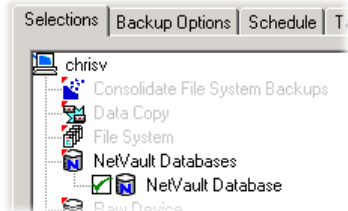
The following sections detail the procedures involved in upgrading to NetVault 7.0

1.1.1 Pre-Upgrade Procedure

To protect from an upgrade failure it is very important to first make a successful backup of the NetVault Database (i.e. via the **NetVault Databases Plugin**). As part of the upgrade to version 7.0, the existing database is enhanced and therefore can not be used with a NetVault 6.x installation (as it is unaware of the

Figure 1-1:
Using the
NetVault
Databases
Plugin to
backup the
existing
NetVault
Database
before an
upgrade

new format). Hence the only way back to a NetVault 6.x installation after an unsuccessful upgrade is to first, uninstall the failed upgrade, and then re-install the previous version of NetVault 6.x. This would then be followed by restoring the last NetVault 6.x Database backup in order to recover the database. For details on completing a backup of the NetVault Database with the *NetVault Databases Plugin*, please see the relevant version's *NetVault Administrator's Guide*.



1.1.2 Upgrade Procedure

Based on the Operating System in use, run the install program as usual, (as described in *Chapter 2: Installation of the NetVault Administrator's Guide*). The installation software will scan the system for an existing installation of NetVault, and once found a prompt will appear noting that NetVault is already installed and ask to upgrade the existing version to NetVault 7.0. Once confirmed, the upgrade procedure will begin and use the existing directories for the current NetVault 6.x installation.

Note: The upgrade process can take some time as the database needs to be enhanced to the new NetVault version 7.0 format. As part of this conversion, the ownership of all jobs is changed to the user “**default**”. This is required for NetVault’s new Access Control functionality (and in no way disrupts access to existing jobs).

1.1.3 Post Upgrade Procedure

As noted in the previous section, a backup of the NetVault Database (i.e. NetVault’s internal database) made with NetVault 6.x can not be restored to a NetVault 7.0 installation because this database has changed format. Given this, it is important that the first job after a successful upgrade to version 7.0 is a backup of the NetVault Database (i.e. via the NetVault Databases Plugin) in order to create a fail safe for it.

1.1.3.a Post Upgrade for 64-bit NetVault Users Only

BakBone Software no longer provides a 64-bit version of NetVault for any platforms. NetVault was made available as a 64-bit application to support 64-bit versions of databases. From NetVault version 7.0 onwards, a 32-bit NetVault Core can support 64-bit plugins, therefore providing 64-bit database support.

As well, NetVault APMs/Plugins designed to work in a 64-bit environment have been changed to work in this new environment. So, if any of the following plugins are being used in a 64-bit NetVault environment they will need to be upgraded once the NetVault Core software has been upgraded version 7.0

64-bit Plugin	Operating System	Required Version for Use
Oracle APM	Linux	N/A
	Solaris (Sparc)	Release 3.0
	Windows 2000	N/A
	Windows NT	N/A
Informix APM	Linux	N/A
	Solaris (Sparc)	Release 2.9
	Windows 2000	N/A
	Windows NT	N/A
DB2 APM	Linux	N/A
	Solaris (Sparc)	Release 2.0
	Windows 2000	N/A
	Windows NT	N/A

Note: The parameters set above **do not apply** to **Tru64**. BakBone will still develop its NetVault Core to work in a 64-bit environment for this Operating System.

1.1.3.b Post-Upgrade of Additional NetVault APMs/Plugins

Existing versions of the following plugins **do not** function properly with NetVault 7.0. (e.g. those installed and used with NetVault 6.5.3 and older) and must be upgraded. They are included in the list below:

- **Lotus Notes APM** - This applies to all supported Operating Systems **except** Windows 2000/NT.
- **Snapshot Manager APM** (for use with the **NDMP Plugin** for Network Appliance Filers).
- **NetWare Thin Client Plugin**

To receive an upgraded version of these plugins that function properly with NetVault 7.0, please contact BakBone Technical Support (for contact information, see the section *Technical Support* on page 14).



1.1.3.c **Post-Upgrade Summary**

- 1. Backup the NetVault 6.x Database
- 2. Run the install program
- 3. Backup the NetVault 7.0 Database.
- 4. Upgrade APMs/Plugins as required (as indicated in the previous sections).

1.2.0 **Additional Configuration Instructions**

This section provides configuration information specific to various Operating Systems and Database applications that need to be performed prior to using NetVault 7.0 in the named environment.

1.2.1 **CLI based Backups/Restores with Oracle/Informix**

To enable off-server Command Line Interface (CLI) invoked backups and restores using **onbar** (Informix) / **rman** (Oracle), a tool needs to be run on the NetVault Server to enable these plugins with the security clearance required. This tool is available in the “**../NetVault6/util**” directory after a successful upgrade and its features are detailed in the table below:

CLI Command	Specifics
nvpluginaccess	Description:
	Use this command to enable off-server CLI invoked backups and restores (but not actually perform them).
	Syntax:
	nvpluginaccess -client [client] -account [account] -password [password]
	<ul style="list-style-type: none">■ -client: The name of the NetVault Client that the plugin to be used is installed on (e.g. the NetVault name of the machine).■ -account: Pertains to Access Control account used to log on to the NetVault Server (if applicable). If Access Control is not in use, input “default” for this value.■ -password: Also used for Access Control, the password associated with the account input (if applicable). If Access Control is not in use, do not use this switch.

Once the command has been issued properly, it will invoke a prompt requesting the desired plugins that the specified client is to have access to.

Note: This tool needs to be run for *each client* with the **Informix** or **Oracle APM** installed.

1.2.2 Reboot Recommendations for Windows 2000/NT

For the most predictable results, it is best to reboot a Windows NT/2000 machine after an upgrade to ensure newly replaced files (e.g. “.dll” files) are being used rather than the old cached ones.

If a reboot is not possible or desirable the following procedure may help reduce the chances of these files being cached and causing a problem.

1. If currently running, close **all** NetVault user interfaces, including **nvgui**, **nvpsview**, **nvconfigurator**.
2. Launch one session of the NetVault Configurator.
3. From the **Service** tab, select the **Stop** button to stop NetVault services.
4. Click on the **OK** button to enable the change and exit the Configurator.
5. Perform the upgrade (as detailed in the section *Upgrade Procedure* on page 6) and wait for it to fully complete.
6. Launch the NetVault Configurator again and restart the NetVault services (via the Start button of the Service tab).
7. Click on **OK** to close the Configurator.

Once this procedure has been completed and NetVault is opened, if it starts successfully, the upgrade can be assumed to have been successful and the new files are being used. If NetVault will not start then a reboot will be required.

1.3.0 Known Upgrade Issues

This section contains various issues with NetVault 7.0, their symptoms, causes and solutions (if applicable).

NetVault Server/Time Source Not Set on Upgraded Client	
Symptoms	<ul style="list-style-type: none">■ The GUI on a client will not start■ Device statistics from smart clients are stamped with the client's local time rather than the server's time. This can make it hard to interpret the statistics.
Cause	NetVault 7.0 clients require additional configuration information to allow them to know which servers they are attached to and to synchronize their time with the server. This information will be missing on an upgraded client.
Solution	From a GUI running on the NetVault Server, remove and re-add the client. The action of adding the client fills in both of these missing configuration items.

Two Copies of the Consolidate Plugin Appear in the backup window

Symptom	If upgrading from a version of NetVault prior to 6.5.3, once the upgrade completes, two consolidate plugins appear in the Backup window.
Cause	This occurs because the consolidation plugin was enhanced after version 6.5.2 to cope with more types of backups. It was renamed at this time, resulting in the two available plugins
Solutions	<ul style="list-style-type: none"> ■ Jobs defined using either plugin will actually run using the new version of the plugin, so no action is required. If one of the consolidation plugins is un-installed, both plugins will disappear from the NetVault Backup window. However this can be easily rectified by re-installing the NetVault 7.0 version of the plugin found in the NetVault packages directory (e.g. <code>..\NetVault6\packages\conXXXX.npk</code>). ■ If the upgrade has not yet been performed, this plugin can be un-installed from the existing 6.x version of NetVault prior to starting the upgrade. This will remedy the problem as only one version (the newer) will be installed with the upgrade.

Report CLI Syntax Differs from NetVault 6.x

Symptom	The NetVault 7.0 version of the command line tool “ nvreport ” fails to work when using the syntax of the NetVault 6.x version of the tool, typically with the error “ <i>You must specify one of 'templatename', 'templatefile' or 'class'.</i> ”
Cause	Reporting functionality has been enhanced for NetVault 7.0. These changes made it necessary to expand and modify the syntax for generating command line reports.
Solutions	<p>Please see <i>Chapter 13: The Reports Window</i> of the <i>NetVault Administrator's Guide</i> for a full description of reporting in NetVault 7.0. However, the following points can be used to get NetVault 6.x command line reports working with NetVault 7.0.</p> <ul style="list-style-type: none"> ■ Solution A: If nvreport was invoked specifying a report type as an argument, specify a report class rather than the report type. This means replacing the “-reptype <type-name>” or “-r <typename>” argument with a “-class <classname>” argument. The following table details NetVault 7.0 report classes that in most cases provide at least the same information as a NetVault 6.x report type:

Solutions
(cont.)

NetVault 6.x Report Type		NetVault 7.0 Report Class
Long Name	Short Name	Name
jobdefinitions	<i>jd</i>	defined jobs
jobhistory	<i>jh</i>	job history
advancedoptions	<i>ao</i>	advanced options
schedules	<i>sc</i>	schedule sets
backuptargets	<i>bt</i>	backup targets
selections	<i>se</i>	selection sets
drives	<i>dr</i>	drives
media	<i>me</i>	media
libraryslots	<i>ls</i>	library slots
librarydrives	<i>ld</i>	library drives
entryexitports	<i>ee</i>	entry/exit ports

Example:

NetVault 6.x - the following syntax would have been used:

```
nvreport -r jh
```

NetVault 7.0 - the following syntax would be used in its place:

```
nvreport -class "Job History"
```

- **Solution B:** If any user defined template files have been created for use with **nvreport**, make the following two changes (as shown on the following page).
 1. Change the "%REPTYPE <type>" line in the template file to a "%CLASS "<class>" line. The table from the previous point lists the report class that each report type should be changed to. For example, a NetVault6 template would have included the line.

Solutions (cont.)

Example:

NetVault 6.x - the template would have included the line:

```
%REPTYPE jobhistory
```

NetVault 7.0 - the following line would be included in the template file in its place:

```
%CLASS "Job History"
```

2. Add the following line to each template:

```
%OUTPUTTYPE 0
```

- **Solution C:** Where **nvreport** is invoked specifying a template, use "-templatefile <path_to_template>" rather than "-t <path_to_template>" or "-template <path_to_template>"

- **Solution D:** For all other **nvreport** command line arguments, use the long version of the argument rather than the short version, e.g. use "-sort <sort_order>" rather than "-s <sort_order>". The following table lists the long and short versions or argument names:

Short Name	Long Name
F	Format
V	Server
S	Sort
I	Include
E	Exclude

- **Solution E:** If doing anything other than running the default report for a report type/class (e.g. "nvreport -r jobhistory"), some field names may need changing at any point a format, sort, include or exclude string is specified. This applies both to command line arguments and in template files. These changes are necessary because some fields have been renamed or replaced in NetVault 7.0. Typically, field name problems will return one of the errors in the table on the following page.

Solutions (cont.)

Report generation failed. The returned error was...

Failed when producing report: Failed to work out fields required by report (Cannot interpret fields required to output report)

Report generation failed. The returned error was...

Failed when producing report: Failed to work out fields required by report (Cannot interpret fields required to sort report)

Report generation failed. The returned error was...

Failed when producing report: Failed to work out fields required by report (Cannot interpret fields required for include filter)

Invoking "nvreport" Examples

Please see below for some examples of the different ways to invoke **nvreport** on NetVault 6.x and NetVault 7.0. In each case the NetVault 6.x syntax is listed before the NetVault 7.0 syntax:

Example 1:

- **NetVault 6.x:** nvreport -r jobdefinitions
- **NetVault 7.0:** nvreport -class "Defined Jobs"

Example 2:

- **NetVault 6.x:** nvreport -t files/templates/mytemplate
- **NetVault 7.0:** nvreport -templatefile files/templates/mytemplate

Example 3:

- **NetVault 6.x:** nvreport -r drives -I "%MACHINE = clientX" -s %DATELASTWRITTEN+
- **NetVault 7.0:** nvreport -class drives -include "%MACHINE = clientX" -sort %DATELASTWRITTEN

**Solutions
(cont.)****Template Set Up Example**

NetVault 6 template is first, and differences are highlighted in bold:

NetVault 6.x:

```
%REPTYPE media
%FORMAT "%NAME %GROUP%OFFSITELOCATION"
%EXCLUDE "%GROUP = accounts"
%SORT "%GROUP+ %NAME+"
```

NetVault 7.0:

```
%CLASS media
%OUTPUTTYPE 0
%FORMAT "%NAME %GROUP %OFFSITELOCATION"
%EXCLUDE "%MEDIAGROUP = accounts"
%SORT "%GROUP+ %NAME+"
```

1.4.0 Technical Support

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

1.4.1 Helpdesk Support Lines

Region	Contact
North America	Tel: 1.877.955.BONE (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
China	Tel: +86.10.6567.3331 e-mail: support@bakbone.com.cn
Korea	Tel: +82.2.515.1385 e-mail: koreasupport@bakbone.com

1.4.2 BakBone Software's Web Site

BakBone's web site can be reached at the following address:

<http://www.bakbone.com>