

Open NerveCenter 3.8

Upgrading to NerveCenter™ 3.8

UNIX and Windows

December 2002

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OpenService, Inc.
110 Turnpike Road, Suite 308
Westborough, MA 01581
Phone 508-366-0804
Fax 508-366-0814
<http://www.open.com>

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Upgrading from NerveCenter 3.6 or 3.7

This section describes how to upgrade NerveCenter™ 3.6 or 3.7 (UNIX or Windows) to NerveCenter 3.8.

Note To upgrade from versions prior to NerveCenter 3.6, contact OpenService for upgrade instructions.

Table 1-1. Contents

Section	Description
<i>Overview of the Upgrade Process</i> on page 2	Lists the steps involved in upgrading to NerveCenter 3.8.
<i>Setting Up Your Environment</i> on page 4	Provides checklists for UNIX and Windows environments to make sure you've met all the prerequisites for installation.
<i>Stopping NerveCenter Applications, Services, and Processes</i> on page 6	Describes how to check for running processes and shut down applications, services, and processes on UNIX and Windows.
<i>Exporting Your Data</i> on page 7	Describes how to export your data from the database using SerializeDB on UNIX and Windows.
<i>Backing Up Your NerveCenter Data and Files</i> on page 9	Describes what files you should back up on UNIX and Windows before you upgrade.
<i>Removing NerveCenter 3.6 or 3.7</i> on page 11	Helps you decide whether to remove your existing NerveCenter and describes how to uninstall NerveCenter.
<i>Installing NerveCenter 3.8</i> on page 13	Describes how to install NerveCenter on UNIX and Windows.
<i>Upgrading and Restoring Your Data</i> on page 16	Describes how to upgrade your database (Windows) and other tasks related to the upgrade process.

Overview of the Upgrade Process

This book should be used in conjunction with *Installing NerveCenter*.

NerveCenter comes with two tools that you can use to modify or upgrade your NerveCenter database:

- ♦ **DBWizard**—Creates or converts a NerveCenter Access or SQL database. This utility is available only for Windows users.
- ♦ **SerializeDB**—Transfers data between the NerveCenter database and a serialized file. This tool is useful for backing up and restoring database information. SerializeDB also allows you to convert databases used on one platform (for example, Windows) to another (for example, UNIX). This tool is available on both Windows and UNIX.

Whether upgrading from NerveCenter v3.6 or v3.7, the following table summarizes the upgrade process for UNIX and Windows:

Table 1-2. Upgrade at a Glance

Platform	Summary
UNIX	You should stop all processes and back up or copy your files to a safe location.
Windows	<p>You should stop all processes, export (serialize) your database, and back up or copy your files to a safe location.</p> <p>You must manually upgrade the database as follows:</p> <ul style="list-style-type: none"> ♦ SQL Server—After installing NerveCenter 3.8, run an upgrade script on the database. ♦ MS Access—Before installing NerveCenter 3.8, serialize your database. After installing NerveCenter 3.8, import the file you serialized to the new database.

Caution You must serialize your Access database before you install NerveCenter 3.8.

When you upgrade NerveCenter, you go through the following process:

1. Set up your environment.
2. Stop all NerveCenter applications, services (Windows), and processes.
3. Export any data you want to save.

Caution You must serialize your Access database before you install NerveCenter 3.8.

4. Back up or copy to a safe location any files you want to save.

5. Remove the old NerveCenter installation.

Note Because of the change to the installation path, you must move all important files to a safe location and uninstall your old version of NerveCenter.

6. Run the installation script (UNIX) or Setup (Windows).
7. Upgrade or restore the data and files you want to use with NerveCenter.

Caution NerveCenter 3.8 components are not compatible with older NerveCenter components. For example, a 3.7 NerveCenter client will not connect with a NerveCenter 3.8 server. You must upgrade all NerveCenter components at the same time, including integration components such as ovpa, semsopca, and paserver.

The following sections describe these steps in detail:

- ♦ *Setting Up Your Environment* on page 4
- ♦ *Stopping NerveCenter Applications, Services, and Processes* on page 6
- ♦ *Exporting Your Data* on page 7
- ♦ *Backing Up Your NerveCenter Data and Files* on page 9
- ♦ *Removing NerveCenter 3.6 or 3.7* on page 11
- ♦ *Installing NerveCenter 3.8* on page 13
- ♦ *Upgrading and Restoring Your Data* on page 16

Setting Up Your Environment

Use the following checklists to set up your environments before you upgrade NerveCenter.

Note NerveCenter 3.8 supports the SNMP v3 protocols. If you intend to manage SNMP v3 agents, you must use NerveCenter as your trap source. This means that the Microsoft or OpenView trap services must be turned off and disabled on your system. Though these services may be running for v3.6 or v3.7, you must disable them prior to installing NerveCenter 3.8 if you want to manage SNMP v3 agents.

If you need detailed instructions for doing any of the following, see *Installing NerveCenter*.

Table 1-3. Checklist for Preparing Your UNIX Environment Before Upgrading

Items to Check

- The machines on which I am upgrading NerveCenter meet the system requirements for this release (see the *Release Notes*).
 - I can access and write to the directory in which I want to upgrade NerveCenter.
 - I am logged in as root.
 - I have created the `ncadmins` and `ncusers` groups, and the `nervectr` user, who is a member of `ncadmins`. (These groups should already exist on your system because they were required for the existing version of NerveCenter.)
 - If I am installing on HP-UX, I have made sure that HP Services, `nfile`, and `maxfiles` are configured appropriately.
 - If I am integrating NerveCenter with HP OpenView, then I should do one of the following:
 - ◆ If I want to manage SNMP v3 agents, I must disable `ovtrapd`. OpenView should be running on this machine.
 - ◆ If I do not intend to manage SNMP v3 agents, OpenView and `ovtrapd` should be running on this machine.
 - If I am integrating NerveCenter with Tivoli TME, it is installed on this machine.
 - If I am integrating NerveCenter with a Web server, I am familiar with the server's location and configuration files.
-

Table 1-4. Checklist for Preparing Your Windows Environment Before Upgrading

Items to Check

- The machines on which I am upgrading NerveCenter meet the system requirements for this release (see the *Release Notes*).
- If I am going to use a SQL database, the correct version of SQL Server as stated in the *Release Notes* is installed and running.
- If I am going to use an SQL database, I have an account with system administrator (sa) rights.
- I can access and write to the directory in which I want to upgrade NerveCenter.
- I am logged in as Administrator or a member of the Administrators group.
- If I am installing the server on Windows, the machine on which I am installing it has a fixed IP address.
- If I want NerveCenter to manage SNMP v2c or v3 agents, then the Microsoft SNMP trap service must be turned off and disabled on the installation machine. The Microsoft SNMP service must be installed, but it does not have to be running.
- If I am integrating NerveCenter with HP OpenView, then I should do one of the following:
 - ◆ If I want to manage SNMP v3 agents, I must disable ovtrapd. OpenView should be running on this machine.
 - ◆ If I do not intend to manage SNMP v3 agents, OpenView and ovtrapd should be running on this machine.
- If I am integrating NerveCenter with CA Unicenter TNG, it is installed on this machine.
- If I am integrating NerveCenter with a Web server, I am familiar with the server's location.

After you determine that you have met the prerequisites for upgrading, go on to the next step. See *Stopping NerveCenter Applications, Services, and Processes* on page 6.

Stopping NerveCenter Applications, Services, and Processes

Before you upgrade, you should stop all of your NerveCenter applications, services, and processes.

Note Do this before you export and back up your data and files so you can be sure that you preserve the most current information.

❖ To shut down NerveCenter applications and processes on UNIX:

1. Exit (don't just minimize) any applications that are visible.
2. Stop any NerveCenter or Wind/U processes that are running.

Some possible processes you might need to stop include ncserver, ovpa, paserver, webcollector, trapper, client, and ncadmin.

See your UNIX documentation if you need more detailed instructions. If you reboot the machine before you complete the upgrade process, any daemon processes will restart automatically.

Your NerveCenter applications and processes have been stopped. You can now back up any files you want to preserve. See *Backing Up Your NerveCenter Data and Files* on page 9.

❖ To shut down NerveCenter applications and services on Windows:

1. Exit (don't just minimize) any applications that are visible.
2. Stop any NerveCenter services that are running by doing the following:
 - a. From the Control Panel, open the Services applet.
 - b. For each NerveCenter service that is running, select the service and then select **Stop**.
 - c. Exit the Services applet.

If you reboot the machine before you complete the upgrade process, any services that are configured to start automatically will do so.

3. Stop any other processes that are running.

Some possible processes you might need to stop include ovpa, paserver, and webcollector. You can use the Windows Task Manager to view processes that are still running.

You can also use the Task Manager to end processes that are running on your user desktop, but not on the service desktop. See step 2 to stop services.

Your NerveCenter applications and processes have been stopped. You can now export any data you want to preserve. See *Exporting Your Data* on page 7.

Exporting Your Data

After you stop all of your NerveCenter applications, services, and processes, you can export your data using SerializeDB from the graphical user interface (GUI) or from the command line. SerializeDB resides in the NerveCenter *installation/bin* directory.

Caution If you are using an Access database on Windows, you must serialize your existing database before you upgrade to NerveCenter 3.8. If you do not serialize your database before installing NerveCenter 3.8, you will need to reinstall the old version of NerveCenter to serialize your database.

If you are using SQL Server on Windows, you do not need to serialize your existing database to upgrade to NerveCenter 3.8. However, we recommend that you do so as a precaution. Exporting your data is important because it provides a backup of the contents of your database.

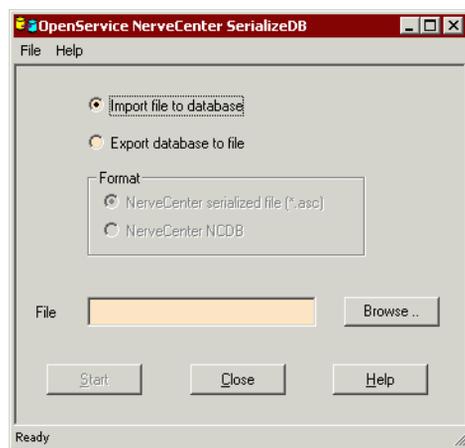
On UNIX, you don't need to serialize your database, but you should back up the database by moving it to a safe location outside the NerveCenter install path. For details, see *Backing Up Your NerveCenter Data and Files* on page 9.

Caution You must stop the NerveCenter Server before you export, or you could lose data.

❖ **To export your data using the SerializeDB GUI:**

1. From the Start menu, select SerializeDB from the NerveCenter program group.

Note Use the version of SerializeDB that corresponds to the version of NerveCenter that is currently installed. For example, if you are upgrading from NerveCenter 3.6, use the SerializeDB that was shipped with and installed with NerveCenter 3.6.



2. Select the Export database to file radio button.

3. Select the NerveCenter serialized file (*.asc) radio button.
4. Do one of the following:
 - ♦ In the File field, type the name of the file to be created by SerializeDB for the exported data. (SerializeDB creates the file in your current working directory unless you type a fully-qualified name that includes a path.)
 - ♦ To overwrite an existing file, select **Browse** and select the serialized file (ASC) to overwrite. As an example, you might want to select `NCEXPORT36.asc` and store your data in that file. That file will be preserved during the upgrade.
5. When the Select Data Source dialog box is displayed, select the NerveCenter data source used for the NerveCenter database you're serializing. Then, select **OK**.

If SerializeDB cannot export the data successfully, an error message is displayed. Otherwise, your NerveCenter data has been exported to the file you specified.

Tip You can also export the database from the command line in the `bin` folder:

```
serializedb -f backupfile.asc -o dbtofile -r (SQL or Access) or  
serializedb -f backupfile.asc -o dbtofile  
-c "DSN=datasourcename;UID=userID;PWD=password" (SQL only)
```

You can now back up any files you want to preserve. See *Backing Up Your NerveCenter Data and Files* on page 9.

Backing Up Your NerveCenter Data and Files

Before you upgrade, you should back up, or simply move, your data and any files that you might have customized or that you want to preserve for any reason.

Caution You must back up all files before upgrading NerveCenter. Consider all files you have customized for your business or your environment.

When copying or moving files, place them in a safe location that is out of the NerveCenter install path.

❖ To back up your data:

- ◆ Copy or move the files you want to preserve (including your serialized database, exported MOD files, and so on) to a safe directory.

Now you remove NerveCenter. See *Removing NerveCenter 3.6 or 3.7* on page 11.

The following table lists the files that you should consider backing up.

Table 1-5. Files to Back Up Before Upgrading

File Name	Default Location	Description
*.ncdb and *.node	<i>installation_path/db</i>	The files that made up the NerveCenter database on UNIX.
Microsoft Access database (*.mdb) or Microsoft SQL Server database	<i>installation_path/db</i>	On Windows, the database is either a Microsoft Access database or a Microsoft SQL Server database.
*.asc, *.idb files	<i>installation_path/db</i> <i>installation_path/bin</i>	Any serialized database files or database installation preference files.
*.mod, *.txt files	<i>installation_path/model</i> (Windows) <i>installation_path/models</i> (UNIX)	The files that NerveCenter generates when you export a model.
*.mib, mibcomp.txt, ASN.1 files	<i>installation_path/mib</i> (Windows) <i>installation_path/mibs</i> (UNIX)	The NerveCenter MIB and any files used to compile additional MIB definitions into the NerveCenter MIB.
Any text file you created that contains parenting information (pc.dat, for example)	Not applicable	If you have used the downstream alarm suppression models, you may have created a text file that lists the nodes in your network and their parents.

Table 1-5. Files to Back Up Before Upgrading (continued)

File Name	Default Location	Description
ovpa.lrf and any other network management platform files you might have customized	<i>installation_path/ovpa</i> (UNIX) <i>HP_OV_directory/lrf</i> (Windows) <i>platform_directory</i>	If NerveCenter is integrated with a network management platform, you may have customized some files (such as the LRF file used with HP OpenView).

Removing NerveCenter 3.6 or 3.7

Caution You must uninstall your old version of NerveCenter before installing NerveCenter 3.8.

❖ **To remove NerveCenter on UNIX:**

1. `cd` to `install_directory/nc/install`.

2. Type the following and then press Enter:

```
./uninst.sh
```

3. Specify your preferences at the prompts.

The script removes NerveCenter, using the preferences you specified.

4. If you manually set up any environment variables to point to the NerveCenter installation directory, change them to point somewhere else.

5. If you are removing NerveCenter from this machine completely, delete the `ncusers` and `ncadmins` users and groups, including the `nervectr` user.

6. If you are removing NerveCenter web support completely and the Web server is on a different machine, reconfigure the server to remove references to NerveCenter. See *Managing NerveCenter* for details.

Your next step is to install NerveCenter 3.8. See *Installing NerveCenter 3.8* on page 13.

❖ **To remove NerveCenter on Windows:**

1. From the **Start** menu, select **Uninstall NerveCenter**.
2. Select **OK** when asked whether you are sure you want to remove NerveCenter.
3. If Seagate Crystal Reports is installed on this machine, it will be removed as well. Select **Yes** when asked whether you want to completely remove the selected application and all of its components.

Note Seagate Crystal Reports is not installed with NerveCenter 3.8.

4. When the **Remove Programs From Your Computer** dialog box is displayed, select **OK**.
5. If **UnInstallShield** was not able to remove all of the files, open the **NerveCenter** directory and evaluate whether you want to keep the files.
6. If you had a **SQL** database, do the following on **SQL Server**:
 - a. Delete or clear the **SQL** database.
 - b. Delete the data and log devices used with the database.
 - c. Delete the files used by the data and log devices.
7. You may want to manually remove current user entries that are not automatically removed from the configuration settings. However, if you remove them and then reinstall later, users will have to reconfigure their autoconnect preferences, filter settings, and so on.

Your next step is to install NerveCenter 3.8. See *Installing NerveCenter 3.8* on page 13.

Installing NerveCenter 3.8

Now that you have set up your system, stopped any processes that might have been running, exported and backed up your data, and removed the older version of NerveCenter, you can install NerveCenter 3.8.

You must upgrade all components at the same time. For example, you cannot use a NerveCenter 3.6 Client with the NerveCenter 3.8 Server.

Note For more detailed installation instructions, refer to the *Installing NerveCenter* guide.

❖ To install NerveCenter 3.8 on UNIX:

1. Mount the NerveCenter 3.8 CD-ROM.

On HP-UX, use the following command:

```
mount -F cdfs -o cdcase CDROMdevice localMountpoint
```

For example,

```
mount -F cdfs -o cdcase /dev/dsk/c0t2d0 /cdrom
```

2. `cd` to *mountpoint*/BIN.

3. If you are going to do a silent install (in other words, use `ncinput` to specify your installation options), do the following steps. Otherwise, skip to step 4.

- a. Open `ncinput` in a text editor.
- b. Edit `ncinput`, using the examples in the file as a guide.
- c. Save `ncinput` to your local system.
- d. From the `bin` directory, type one of the following (replacing *path* with the location of your `ncinput` file). Then, press Enter.
 - ♦ `./INSTALL.SH path/ncinput` (Solaris)
 - ♦ `./INSTALL.SH\;1 path/ncinput` (HP)

The script installs NerveCenter, using the options you specified in `ncinput`. Skip to step 5.

4. Run the NerveCenter install script:
 - a. Type one of the following. Then, press Enter.
 - ♦ `./INSTALL.SH` (Solaris)
 - ♦ `./INSTALL.SH\ ; 1` (HP)
 - b. Specify your installation options at the prompts.

The script displays a default with each prompt. Choose the appropriate responses for your installation.
5. The script installs NerveCenter, using the options you specified. If you had any problems, look at the `ncinst_log` file (in the directory where you installed NerveCenter), review the options and any error messages, fix the problem, and rerun the installation script.

After Setup has completed successfully, you are ready to start NerveCenter.

❖ **To install NerveCenter 3.8 on Windows:**

1. If you are going to do a silent install (in other words, use `setup.iss` to specify your installation options), do the following steps. Otherwise, skip to step 2.
 - a. Create a source directory and copy all of the installation files from the CD-ROM to the source directory.
 - b. Open `setup.iss` in a text editor and edit it, using the examples in the file as a guide.
 - c. Save `setup.iss`.
 - d. At a command prompt, `cd` to the source directory.
 - e. Type the following; then, press Enter.

```
setup -s
```

Setup installs NerveCenter, using the options you specified in `setup.iss`. Skip to step 3.
2. If you are going to use the installation wizard:
 - a. In the Control Panel, select **Add/Remove Programs**.
 - b. Select **Install**.
 - c. Insert the NerveCenter CD-ROM and select **Next**.

The NerveCenter Setup program should start automatically. If it does not, an error message tells you that Windows was unable to locate the installation program. If this occurs, select the **BROWSE** button to locate the setup.exe file on the NerveCenter CD.

- d. Select **Finish** to start the installation.
- e. Specify your installation options when the installation wizard prompts you for them.
If you are installing over an existing version, Setup displays the currently-installed options. If not, Setup displays a default with each prompt.

Note When asked whether you want DBWizard to set up your database after installation, leave the default selection of **No**.

Setup installs NerveCenter, using the options you specified.

- 3. If you had any problems, look at the Event Log, review the options and any error messages, fix the problem, and rerun Setup.

Though the Windows Setup has completed successfully, you are not yet ready to start using NerveCenter. See *Upgrading and Restoring Your Data* on page 16 for tasks you need to do to finish the upgrade.

Upgrading and Restoring Your Data

On UNIX, you don't need to upgrade your database after installing v3.8 over v3.6 or v3.7. NerveCenter upgrades your existing database files (.ncdb and .node). If you want to revert to the default database that ships with NerveCenter v3.8, you can use `nervecenter38.ncdb` (by importing the `ncexport38.asc` serialized file).

On Windows, you do all or a combination of the following tasks depending on your NerveCenter configuration before and after the upgrade.

1. Restore the files you backed up to their appropriate directories as described in Table 1-6.

Table 1-6. Upgrading to NerveCenter 3.8 File Migration

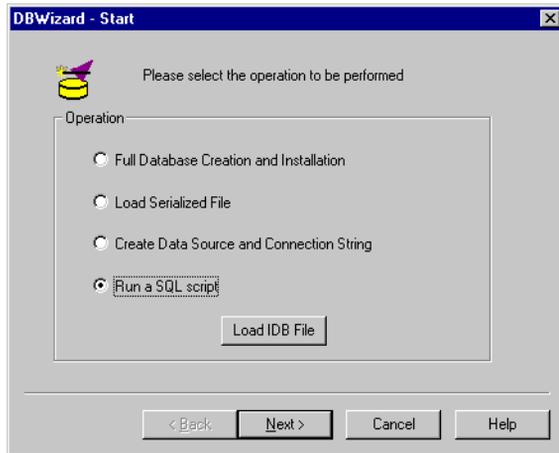
File Type	Old Location	NerveCenter 3.8 Location
MIB files	Windows: \Program Files\VERITAS\NerveCenter\Mib Unix: /opt/VRTSnc/Mibs	Windows: \Program Files\OpenService\NerveCenter \Mib Unix: /opt/OSInc/Mibs

Caution NerveCenter 3.8 has a new MIB compiler. All MIB files need to be recompiled before NerveCenter 3.8 can use them. For details see Chapter 2, *Upgrading MibComp.txt*.

Log files	Windows: \Program Files\VERITAS\NerveCenter\Log Unix: /opt/VRTSnc/Log	Windows: \Program Files\OpenService\NerveCenter \Log Unix: /opt/OSInc/Log
Models	Windows: \Program Files\VERITAS\NerveCenter\Model Unix: /opt/VRTSnc/Model	Windows: \Program Files\OpenService\NerveCenter \Model Unix: /opt/OSInc/Model
Database	Windows: \Program Files\VERITAS\NerveCenter\DB Unix: /opt/VRTSnc/DB	Windows: \Program Files\OpenService\NerveCenter \DB Unix: /opt/OSInc/DB

Caution Because the `installation_path` in NerveCenter 3.8 has changed to `/opt/OSInc/`, you may need to revise models, Perl scripts, or other files that reference the NerveCenter directory.

2. To upgrade a Microsoft SQL database on Windows, do the following:
 - a. From the **Start** menu, select DBWizard from the NerveCenter program group.



- b. In the DBWizard Start dialog box, select the Run a SQL script button, and then select Next.

The ODBC Data Source dialog box is displayed.
 - c. Provide a name for your data source in the ODBC Data Source Name field, and then select Next.

The SQL Server Information dialog box is displayed.
 - d. In the appropriate fields, supply the host name, user ID, password, and SQL database name, and then select Next.

The NerveCenter Paths and Files dialog box is displayed.
 - e. Select an SQL script to run, based on what version of NerveCenter you are upgrading from:
 - ◆ If you are upgrading from NerveCenter 3.6:

In the NC SQL Script File Name field, choose the `From36to37.sql` script.
The script is located in the NerveCenter installation\Db folder.
 - ◆ If you are upgrading from NerveCenter 3.7:

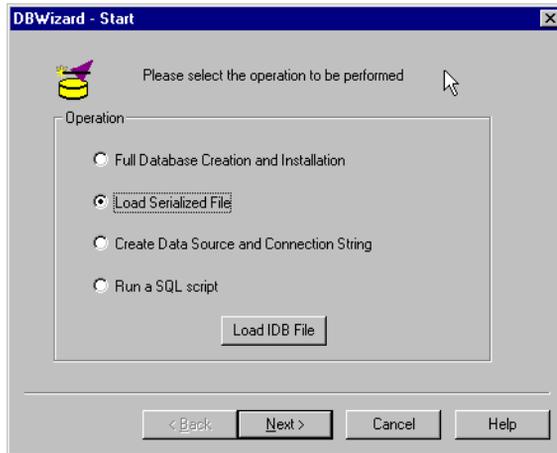
In the NC SQL Script File Name field, choose the `From37to38.sql` script.
The script is located in the NerveCenter installation\Db folder.

- f.** Select Next.
The Finish dialog box is displayed.
- g.** To create a SQL database with the settings that you just specified, check the **Create and Execute InstallDB** checkbox.

Note If you need to create multiple databases on different machines, check the **Create InstallDB command file with name** checkbox, and provide a file name in the text box. DBWizard will create an IDB file that saves the settings you used in this installation. You can then load this new IDB file into the wizard when you run it on the other machines.

- h.** Select Next.
The Status dialog box is displayed.
- i.** Verify that the settings are correct, and then select **Finish**. If necessary, you can use the **Back** button to return to the previous dialog boxes and make corrections.
The wizard proceeds to create the NerveCenter database.
- j.** When the upgrade is complete, select **OK**.
- k.** If you are upgrading from NerveCenter 3.6, repeat steps 1 through 9, this time choosing **From37to38.sql** in step 4.

3. To upgrade a Microsoft Access database on Windows, do the following:
 - a. From the **Start** menu, select **DBWizard** from the NerveCenter program group.



- b. Select **Load Serialized File** and then select **Next**.
 - c. Enter the information about your database when you are prompted by the wizard. Provide the name of the database you are using for NerveCenter (NCAccess.mdb).

When asked to supply the serialized database file, browse and locate the serialized file you created in *Exporting Your Data* on page 7. Typically, this would be NCEXport36.asc or NCEXport37.asc.
 - d. In the **Finish** dialog box, select **Create and Execute InstallIDB** and then select **Next**.
 - e. Select **Finish**.

If **SerializeDB** cannot run the script successfully, an error message is displayed. Otherwise, your NerveCenter data has been upgraded.
4. If necessary, edit the `ovpa.lrf` file (for example, if you run `ovpa` with particular switches).

Caution `ovpa` has been revised with new arguments. See *Integrating NerveCenter with a Network Management Platform* for details about the changes.

5. Start your NerveCenter processes. See *Managing NerveCenter* if you need help.

Upgrading MibComp.txt

2

NerveCenter 3.8 has a new MIB compiler, `mibcomp.bat` (Windows) and `mibcomp.sh` (UNIX). This new compiler is SMIV2 compliant and uses a new `mibcomp.txt` file that is also SMIV2 compliant. The commands to compile a MIB have changed slightly.

For details on using the new MIB Compiler, see Chapter 13, *Managing Management Information Bases (MIB)* in *Managing NerveCenter*.

New Requirements

The new MIB compiler has two new requirements to compile the `MibComp.txt` file:

1. If a MIB module depends on information in another MIB module you must reference it before the module that requires the information in `mibcomp.txt`. That is, if `mymibA` depends on `mymibB`, you must include `mymibB` before `mymibA` in `mibcomp.txt`.
2. All SMIV1 compliant MIB modules must be included in `mibcomp.txt` before the line
* * * End of SMIV1 / SNMPv1 MIB Modules * * *
All SMIV2 compliant MIB modules must be referenced after this line.

Dependencies

If dependant MIB module references are out of order, you receive an error similar to the following:

```
8: standard-v2/rfc1573b.asn1 mgrtool.exe: process_data(), Couldn't
find parent: interfaces
mibcomp: unable to compile and resolve standard-v2/rfc1573b.asn1
```

In this example, `rfc1573b.asn1` depends upon another MIB to define *interfaces*. You must find the mib that defines *interfaces* and include it before `rfc1573b.asn1` in `mibcomp.txt`. To find a MIB that defines *interfaces*, you search the other MIB modules looking for the following:

```
interfaces OBJECT IDENTIFIER ::= { mib-2 2 }
```

Now you can name the file that contains this line, in this case `rfc1213.asn1`, before `rfc1573b.asn1`.

Finding SMIV2 compliant MIB modules

You can tell the difference between a SMIV1 module and an SMIV2 module by searching the MIB file for “MAX-ACCESS”.

Sample SMIV1 SysUpTime definition	Sample SMIV2 SysUpTime definition
sysUpTime OBJECT-TYPE	sysUpTime OBJECT-TYPE
SYNTAX TimeTicks	SYNTAX TimeTicks
ACCESS read-only	MAX-ACCESS read-only
STATUS mandatory	STATUS current
DESCRIPTION	DESCRIPTION
“The time (in hundredths of a second) since the network management portion of the system was last re-initialized.”	“The time (in hundredths of a second) since the network management portion of the system was last re-initialized.”
::= { system 3 }	::= { system 3 }

Any use of ACCESS within a MIB file named in the SMIV2 area of mibcomp.txt causes an error. Any use of MAX-ACCESS within a MIB file named in the SMIV1 area of mibcomp.txt causes an error.

Upgrading MibComp.txt

If you are upgrading from a previous version of NerveCenter, and have a modified MIB, Open recommends that you modify the new NerveCenter 3.8 mibcomp.txt file with any modifications you have made.

However, you can modify your existing mibcomp.txt as to comply with the new MIB compiler requirements. Updating MibComp.txt has two major steps:

1. Revise MibComp.txt by deleting old and adding new *.asn1 files for NerveCenter to run properly.
2. Reorganize the *.asn1 files so that all SMIV2 compliant MIB modules to the appropriate place in MibComp.txt.

❖ **To revise MibComp.txt:**

1. Comment out or delete the following lines from the **rfc snmp v1 standard mibs** section of `mibcomp.txt`:

```
standard-v1/rfc1231.asn1
standard-v1/rfc1232.asn1
standard-v1/rfc1233.asn1
standard-v1/rfc1243.asn1
standard-v1/rfc1253.asn1
standard-v1/rfc1269.asn1
standard-v1/rfc1271.asn1
standard-v1/rfc1286.asn1
```

2. Comment out or delete the following lines from the **rfc snmp v2 standard mibs** section of `mibcomp.txt`:

```
standard-v2/rfc1573a.asn1
```

3. Add the following lines to the **rfc snmp v2 standard mibs** section of `mibcomp.txt`:

```
standard-v2/v2-smi.my
standard-v2/v2-tc.my
standard-v2/v2-mib.my
standard-v2/IANAifType-MIB.my
```

4. Comment out or delete the following lines from the **rfc snmp v3 standard mibs** section of `mibcomp.txt`:

```
standard-v3/rfc2571.asn1
standard-v3/rfc2572.asn1
standard-v3/rfc2573.asn1
standard-v3/rfc2574.asn1
standard-v3/rfc2575.asn1
```

5. Add the following lines to the **rfc snmp v3 standard mibs** section of `mibcomp.txt`:

```
standard-v3/v3-arch.my
standard-v3/v3-mpd.my
standard-v3/v3-tgt.my
standard-v3/v3-notif.my
standard-v3/v3-proxy.my
standard-v3/v3-usm.my
standard-v3/v3-acm.my
```

6. Add the following lines after the **NerveCenter mibs** section of `mibcomp.txt`:

```
# SNMP Research, Inc. MIBs (required)
#
vendors/snmp_research/snmp-res.asn1 # SNMP-RESEARCH-MIB (required)
#
# Hewlett-Packard. MIBs (required) -IF using NetView or OpenView
#
vendors/hp/hpov-nnm.my
```

❖ **To reorganize MibComp.txt:**

1. Search all the *.asn1 files for the following text:

```
MAX-ACCESS
```

2. Move all *.asn1 files that contain MAX-ACCESS after the following line:

```
# * * * End of SMIV1 / SNMPv1 MIB Modules * * *
```

Your MibComp.txt file should now compile with the new MIB compiler.