Open NerveCenter™ 3.8.08

Release Notes

Windows and UNIX

February 2004

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Open NerveCenter *Release Notes*

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Contents

NerveCenter v3.8.08

Open NerveCenter™ is a proactive event correlation application that intelligently filters network events, automates corrective actions, and forwards important events to a network management platform.

NerveCenter 3.8.08 contains all fixes from release 3.8.04 through 3.8.07, new fixes, and all prior hotfixes. A site can move directly to this patch release from any NerveCenter 3.8 release, patch, or hotfix.

Please read *Fixes and Enhancements* on page 21 for information about what the NerveCenter 3.8.08 corrects.

Welcome to OpenService

NerveCenter is now a product of OpenService, Inc., a provider of network security management solutions, located in Westborough, MA. In NerveCenter™ 3.8.08, labels in both the software and documentation that used to contain Veritas have been changed to Open, OpenService, or OSI. In addition, directory paths and registry entries have be redefined to reflect this new ownership.

The directory structure changes and registry changes make it necessary for any customer upgrading to the v3.8.08 version of NCserver to also load the Client, the Administrator and all other binaries. All supporting binaries of NerveCenter™ 3.8.08 should be installed. Failure to do so will result in an unsupported configuration.

Read This First

Disclaimer. These release notes are for use with NerveCenter v3.8.08 and supersede all existing documentation.

Compatibility

These sections describe NerveCenter v3.8.08 compatibility issues.

MIB

Open has taken over the Enterprise OID of 78, so there is no change in the NerveCenter MIB in the transition of NerveCenter from Veritas to Open.

Earlier NerveCenter Versions

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.

Attempts to connect older versions of the NC Client or NC Administrator to the NC server are not supported.

Unix Path

New installs of NerveCenter install into /opt/OSInc on Unix.

Operating Systems

HP-UX

- HP-UX 10.20
  - Most recent General Release Patches for HP-UX 10.20 Workstations

Note The setup script recommends you install the patch PHSS_10053. This patch is no longer available and has been replaced with PHSS_16585.

- HP-UX 11.0 with the following recommended patches:
  - Most recent General Release Patches

Note For HP-UX 10.20 and 11.0 you must increase file handles to 200.

Solaris

- Solaris 7 with the following recommended patch:
  - Most recent Recommended Patch Level for Solaris 7
- Solaris 8 with the following recommended patch:
  - Most recent Recommended Patch Bundle for Solaris 8

Caution NerveCenter no longer functions after applying the Solaris Recommended Patch Bundle for Solaris 8 dated June 27, 2003. The following error message appears in the ncserver.log file in the /tmp directory located in NerveCenter home directory.

Assertion failed: 0, file ../lnk/throw.cc, line 366

If you have not yet installed this patch bundle, you can comment out patch 109147-24 from the patch_order file that is processed by the install_cluster script. If you have installed this patch bundle, back out patch 109147-24. For further information about patch 109147-24, please visit Sun's website.

Note Unix installations require X-Windows software with Motif or CDE to run the following NerveCenter components: Client, Administrator, and SerializeDB.

An X server must be installed but does not have to be running to run the following NerveCenter components: Server, Command Line Interface (CLI), Importutil, and IPSweep.

The DISPLAY variable must point to a valid X display for the following NerveCenter components: Client, Administrator, IPSweep, and SerializeDB

Windows

- Windows XP Professional with the following recommended service pack:
  - Service Pack 1
- Windows 2000 Professional and Server with the following recommended service pack:
  - Service Pack 3
- Windows NT 4.0 Workstation and Server with the following recommended service pack:
  - Service Pack 6a

NerveCenter is also compatible with the following:

- MS SQL 7.0
- MS SQL Server 2000

Note If NerveCenter uses a SQL Server database, the database must be case insensitive.

- Microsoft Access
- ODBC 3.5 and 3.6

Network Management Platforms

NerveCenter v3.8.08 can be used as a stand-alone system or in conjunction with the following network management platforms:

- HP OpenView Network Node Manager 5.0x
- HP OpenView Network Node Manager 6.x
- IBM NetView 7.13 (Solaris and AIX 5.1)
- HP OpenView IT/Operations A.04.00
- CA Unicenter TNG 2.1

Note If NerveCenter uses a SQL Server database, the database must be case insensitive, the default. CA Unicenter users should be aware that Unicenter uses a case sensitive SQL Server. Therefore, when integrating NerveCenter with CA Unicenter a separate SQL Server database should be used.

- Tivoli TME 10
- Micromuse Netcool/OMNIbus 3.3

Note For integration to be complete, Netcool/OMNIbus must include the NerveCenter probe provided by Micromuse (nc probe version 64 rev 1). For more information, contact your Micromuse representative.

Perl

This version of NerveCenter uses version 5.8.0 of Perl on both UNIX and Windows.

The new version of Perl offers many new modules for use in your Perl scripts. For more details about how the new Perl version may affect existing Perl subroutines, see *Perl 5.8.0* on page 14.

Web Servers

This version of NerveCenter is compatible with the following web servers:

- Apache 1.3.x and 2.0.x for Solaris and HP-UX
- Microsoft Internet Information Server (IIS) 4.0 (Windows NT and 2000)Web Browsers

The following web browsers can be used with the NerveCenter Web Collector:

- Microsoft Internet Explorer 5.5 and 6.0 (Windows only)
- Netscape Navigator 4.7x and 7.x (Windows and UNIX)

To use the Open NerveCenter online documentation, you may use the following browsers:

- Internet Explorer 4.0, 5.0 or 6.0.
- Netscape Navigator 4.5, 6.x, or 7.0.

Crystal Reports

Crystal Reports has been removed from the Windows version of NerveCenter. There are preset reports available for you to select from, but you cannot generate your own reports.

System Requirements

Following is a table listing the minimum hardware configuration required for the system running NerveCenter v3.8.08. The figures assume the machine is running the base operating system and NerveCenter only.

Table 1. Minimum System Hardware Configuration

UNIX	Windows
64MB RAM for server	256MB RAM for server; Intel Pentium Processor; 166 MHz
48MB RAM for client	128MB RAM for client
145MB disk space	80MB disk space
Color monitor, 1024 x 768, 256 colors	Color monitor, 1024 x 768, 256 colors

Caution The process /usr/sbin/rpcbind must be running on UNIX systems for the NerveCenter Server to start.

Note HP-UX systems also require 25 MB RAM in the /tmp directory.

Installation

Installation instructions for NerveCenter can be found in the book *Installing NerveCenter* available at the root of the CD as `install.pdf`.

Caution Before installing NerveCenter v3.8.08, you should read the sections *New Features* and *Outstanding Issues* for important information about behaviors that require additional explanation.

For other information about NerveCenter see the online documentation and the online help.

Additional Step for First-time, OVPA-only Installs

For a first-time, OVPA-only install, users must add one or both of the following two lines to their local `/etc/services` file (or the `/etc/services` file on the NIS server, if running NIS):

```
nl-nc-opc-adapt 6028/tcp
nl-nc-plat-adapt 6024/tcp
```

The first line applies to Operations Center and ITO adapters. The second line applies to OpenView platform adapters. Editing the services file requires root privileges on the host platform.

If you are making these changes on an NIS server, you will need to run 'make services' from the `/var/yp` directory to push the changes out to NIS clients.

These entries tell the platform adapters which TCP port to open for communications with NerveCenter Servers. If the required entry or entries is absent, the platform adapter will exit on startup with an Accept Socket Error.

Upgrading to NerveCenter v3.8.08

Caution If you are upgrading from a previous version of NerveCenter, you need to manually edit some Poll Conditions. For details and instructions, see *Correcting Poll Conditions* on page 29.

If you are upgrading from NerveCenter 3.7.23 or a prior, see *Upgrading from NerveCenter 3.7.23 or Previous Version* on page 7.

If you are upgrading from NerveCenter 3.8.04 or 3.8.05, see *Upgrading from NerveCenter 3.8.04 or above* on page 9.

Caution As with any software upgrade, you should always back up your NerveCenter data before proceeding with an upgrade. For UNIX this includes backing up your node file. For both UNIX and Windows users, the following data should be backed up: changes to MIB files, log files, models, and any other user data. For more information, refer to the books *Upgrading to NerveCenter 3.8* and *Installing NerveCenter*.

Upgrading from NerveCenter 3.7.23 or Previous Version

Due to the change in directory structure, you must perform a fresh installation of NerveCenter 3.8.

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.

1. (Unix only) Back up your node file.
2. Export your models, nodes, etc.

Caution MS Access Database users must serialize the database before upgrading to NerveCenter 3.8.

3. Make copies of MIB files, log files, models, NerveCenter database and other user data.
4. Uninstall your old version of NerveCenter.

Caution Because of the installation directory change, you must uninstall your old version of NerveCenter.

5. Install NerveCenter 3.8.

6. Copy saved files to new directories as described in Table 2:

Table 2. 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 *Upgrading to NerveCenter 3.8*		
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 You must upgrade your database before you can use a database from a prior version of NerveCenter.		

A fresh installation of NerveCenter on UNIX platforms installs to /opt/OSInc.

For information about upgrading to NerveCenter v3.8.08, refer to the books *Upgrading to NerveCenter 3.8* and *Installing NerveCenter*.

Note All NerveCenter versions prior to and including 3.6 are no longer supported.

Upgrading from NerveCenter 3.8.04 or above

When upgrading from NerveCenter 3.8.04 or above, you can follow the instructions in *Upgrading to NerveCenter 3.8* and *Installing NerveCenter* to install a completely new version, or you can install over your existing version of NerveCenter.

❖ To install NerveCenter 3.8.08 over an existing NerveCenter 3.8 installation (UNIX):

1. Run the installation script as described in *Installing NerveCenter*.

   If you are installing over an existing version, the script asks where you want to install NerveCenter and displays the current directory.

2. Accept the current directory as your installation directory and press Enter.

   The script then asks whether you want to upgrade the existing files or install and leave the existing files untouched. For a typical upgrade, you would choose the first option—to upgrade files to NerveCenter 3.8.

3. Choose the upgrade option and press Enter.

   The script then lists the components currently installed. You can add more components to your installation by typing the corresponding letter for each.

4. Choose any additional components by typing the corresponding letter for each and pressing Enter. If you don't want additional components, just press Enter.

   The script continues to display the currently-installed options with each prompt. Make changes as appropriate for your upgrade.

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

❖ To install NerveCenter 3.8.08 over an existing NerveCenter 3.8 installation (Windows):

1. Run the installation program as described in *Installing NerveCenter*.

2. 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.

Upgrade Information for MS-Access Users

Caution Windows users that run NerveCenter with an MS-Access database must serialize their data *before* upgrading to NerveCenter™ 3.8.08, because version 3.8 of the SerializeDB utility does *not* serialize version 3.6 data.

❖ **To upgrade to NerveCenter v3.8.08 with an MS-Access database:**

1. Before starting the NerveCenter upgrade, serialize your NerveCenter MS-Access database using SerializeDB.
2. As with any software upgrade, back up your database.
3. Uninstall your old version of NerveCenter.
4. Install NerveCenter v3.8.08.
5. Use DBWizard to create a NerveCenter v3.8.08 database and to load the serialized file you created in step 1.

For more information, refer to *Upgrading to NerveCenter 3.8*.

Serial Numbers (License Keys)

The serial number (license key) you will need to operate NerveCenter depends on the following scenarios:

- If you have just purchased or are evaluating NerveCenter, please use the serial number provided by your Open representative.
- If you are on maintenance and are upgrading to NerveCenter 3.8, your existing serial number (license key) will continue to work.
- If you are a current NerveCenter user but not on maintenance, you will need to purchase an upgrade with maintenance by calling the Open Customer Administration Services group at 1-888-886-1085 ext. 3.

Note Four characters are not used in NerveCenter serial numbers. These characters are: 0 (zero), 1 (one), 5 (five), and Q.

Note WebCollector connections to a NerveCenter Server do not require an additional client connection license.

Technical Support

Problems may be reported to Technical Support via e-mail or telephone:

- Support mailbox:

  ncsupport@open.com

- Telephone:

  1-888-886-1085

  Outside of the US and Canada: 1-508-599-2000 ext. 1

- Open's web site:

  http://www.open.com/

  The Support section of Open's website provides access to technotes and the current release's documentation.

  Open customers with active maintenace contracts also have access to patches, binaries and other downloads.

New Features

This chapter descibes the many new features of NerveCenter 3.8.

Table 2-1 lists the new features found in NerveCenter 3.8.04. These features are described in the following sections:

- *Perl 5.8.0*
- *DBI Modules*
- *IfEntry_LogToDBI*
- *Correlation Expressions*
- *SNMP Stack Upgrade*
- *ncdb2html.pl*
- *Sample Perl Scripts*
- *OVPA*

Table 2-1. New Features in NerveCenter 3.8.04

Feature	Description
New Perl version	The NerveCenter Perl interpreter has been updated to Perl v5.8. The new Perl version adds many new modules you can include in your Perl subroutines. For details about the new modules, see *Perl 5.8.0* on page 14.
DBI module	Perl v5.8 includes a DBI module, enabling you to include SQL queries to databases in your Perl code. For details about the Perl DBI module, see *DBI Modules* on page 15.
IfEntry_LogtoDBI behavior model	This new behavior model collects ifEntry metrics and logs them to a database. For details about the IfEntry_LogtoDBI behavior model, see *IfEntry_LogToDBI* on page 16.
Correlation expressions	NerveCenter 3.8.04 has a new wizard to automatically generate alarm diagrams from boolean expressions. See *Correlation Expressions* on page 16 for instructions on how to use the new Correlation Wizard.

Table 2-1. New Features in NerveCenter 3.8.04 (continued)

Feature	Description
SNMP stack upgrade	NerveCenter 3.8.04 includes a new SNMP stack, which improves performance and adheres more closely to industry standards. For details about the new SNMP stack, see *SNMP Stack Upgrade* on page 17.
MIB compiler	NerveCenter 3.8.04 has a new MIB compiler. For details on how the new compiler impacts your existing MIB files, see *MIB Compiler* on page 17.
AutoDoc script	NerveCenter 3.8.04 includes a Perl script which converts your NerveCenter database into HTML. For details, see *ncdb2html.pl* on page 20.
Sample Perl scripts	Sample code that may be useful in implementing NerveCenter in your environment is included in NerveCenter 3.8. For more information about the sample perl scripts, see *Sample Perl Scripts* on page 20.
OVPA	The OpenView Platform Adapter has been revised. For more information about changes to OVPA, see *OVPA* on page 20.

Perl 5.8.0

The NerveCenter Perl interpreter has been upgraded to Perl version 5.8.0. This upgrade makes many more modules available to you for use in your Perl code used in trap mask functions, Perl subroutines, and poll conditions. Some of the modules now available are:

- Carp
- Constant
- DirHandle
- Fcntl
- Digest::MD5
- Net::FTP
- Net::SNMP
- CGI
- Cwd
- Exporter
- Data::Dumper
- IO::Socket
- Net::SMTP
- Net::POP3

For information about Perl version 5.8.0, including new modules and how to use them and code depreciations which might affect your existing Perl code, see the Perl document *perldelta* for version 5.8.0. The document *perldelta* is available in the Perl distribution or from web sites about Perl such as http://dev.perl.org.

DBI Modules

Perl version 5.8.0 includes a Database Interface (DBI) module, enabling you to access databases. With the ability to use databases, you can expand the actions NerveCenter can perform, including:

- Event enrichment—match strings from traps to meaningful statements, for example you can map `ifIndex.3` to `Portland Frame Relay Circuit` so that alerts are understood quickly.
- Archive polled values for performance reporting
- Query databases for historical information on current events
- Access asset data, customer data, inventory and other information

NerveCenter 3.8 comes with the following DBD modules:

- HPUX:
  - DBD MYSQLPP-0.03
- Solaris
  - DBD MYSQLPP-0.03
- Windows
  - DBD MYSQLPP-0.03
  - DBD ODBC-0.43

There will be a tools and utilities CD-ROM containing additional DBD modules.

This sample DBI code is from a poll condition that collects ifEntry statistics from an interface. These statistics may be written to a database for archiving and performance reporting.

```
use DBI;

use constant DBUSER=> 'dbuser';
use constant DBPASS=> 'dbpass';

#
# Establish the collection
#
my $dsn = "dbi:mysqlPP:database=nervecenter:hostname=localhost";
my $dbh = DBI->connect($dsn, DBUSER, DBPASS);

if (defined( $dbh )) {
   my $ifIndex = ifEntry.ifIndex ;
   my $ifInOctets = delta( ifEntry.ifInOctets );
   my $ifOutOctets = delta( ifEntry.ifOutOctets );
   my $ifSpeed = ifEntry.ifSpeed ;
   my $timestamp = time();
```

```
    $dbh->do( 'insert into ifentry_table values ( ' .
        $dbh->quote( $NodeName ) . ',' .
        $dbh->quote( $ifIndex ) . ',' .
        $dbh->quote( $ifInOctets ) . ',' .
        $dbh->quote( $ifOutOctets ) . ',' .
        $dbh->quote( $ifSpeed ) . ',' .
        $dbh->quote( $timestamp ) . ')' );

    $dbh->disconnect;

    FireTrigger( "DBI_OK" );
} else {
    FireTrigger( "DBI_NoConnect" );
}
```

For details about using the DBI module, see your Perl documentation.

IfEntry_LogToDBI

NerveCenter 3.8 also ships with a new behavior model, IfEntry_LogToDBI, which utilizes the new DBI module. For details about the IfEntry_LogToDBI behavior model, see the *Behavior Models Cookbook*.

Correlation Expressions

NerveCenter 3.8 provides an additional method for Alarm Definition creation, the Correlation Expression window. Correlation expressions allow the definition of alarm diagrams based on Boolean expressions. The correlation expressions do not apply in every situation, but in cases where multiple combinations of events need to be detected and acted upon, the correlation expressions save tremendous amounts of time, both in alarm diagram designing and building.

For details about creating correlation expressions, see Chapter 11, *Using Alarms* in *Designing and Managing Behavior Models*.

SNMP Stack Upgrade

NerveCenter 3.8 comes with a new SNMP stack. This new stack improves performance and adheres more closely to industry standards and RFCs. All polling and MIB compilation use this new SNMP Stack. The stack upgrade involves three visible changes to NerveCenter:

- *MIB Compiler*
- *traprcv*
- *NerveCenter Trap Service*

MIB Compiler

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*.

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. For details, see *Upgrading to NerveCenter 3.8*.

Adding MIB definitions

The MIB compiler (mibcomp) compiles the MIB definitions referenced in a text file. You can add references to this file to control what definitions are compiled into the NerveCenter MIB.

Caution 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`.

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`.

Caution 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.

You can tell the difference between a SMIv1 module and an SMIv2 module by searching the *.asn1 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 *.asn1 named in the SMIv2 area of mibcomp.txt causes an error. Any use of MAX-ACCESS within a *.asn1 named in the SMIv1 area of mibcomp.txt causes an error.

traprcv

The `traprcv` command displays the SNMP Trap messages received by the NerveCenter Trap service. This utility can be useful when debugging behavior models.

On UNIX, you must be a member of the ncadmins group to use `traprcv`.

`Traprcv` prints standard output messages in the command window where it is running about the notifications it has received.

`Traprcv` can receive the following traps and informs:

- SNMPv1 Traps
- SNMPv2c Traps
- SNMPv2c Informs
- SNMPv3 Traps
- SNMPv3 Informs

Caution Only use traprcv when your trap source is NerveCenter.

❖ **To use `traprcv`:**

- From a Windows or UNIX shell command prompt, type:

  `traprcv`

  The command returns `Waiting for traps`. Whenever a trap is received, `traprcv` prints the contents of the trap to the window or session.

  There are no arguments for `traprcv`.

Troubleshooting

If you receive the error message `Could not initialize ARL application`, the NerveCenter trap service is not running. Restart the NerveCenter trap service by running the command ncstart on UNIX or selecting NerveCenter Service from the Start Menu on Windows.

NerveCenter Trap Service

NerveCenter™ 3.8.08 has a new trap service, which replaces the 'nctrapper' from prior releases. There should be no noticeable difference to you as a user, except when switching your trap source from NerveCenter Trap service to MS Trap service or from MS Trap service to NerveCenter Trap service. For more details about changing the NerveCenter trap source, see Chapter 5, *Managing the NerveCenter Server* in *Managing NerveCenter*.

Caution If you use NerveCenter as your trap source, you must make sure OpenView's ovtrapd (on UNIX and Windows) is disabled and that the MS Trap Service (on Windows only) is disabled.

Note When viewing processes on UNIX, the trap service is called `brassagt`. It runs whenever you have NerveCenter's server (`ncserver`) running *regardless* of your selection of trap source.
When viewing processes on Windows, the NerveCenter SNMP Service runs as `brassagt.exe`. It runs whenever you have NerveCenter's server (`ncserver.exe`) running regardless of your selection of trap source.

The NerveCenter trap service logs errors and warnings to `/var/tmp/ncsnmp.log` (UNIX) or the Event Log (Windows).

ncdb2html.pl

Included in NerveCenter 3.8 is a utility that will convert *.ncdb and *.node files to HTML, so that you can easily know what NerveCenter objects are in your database. For details on using ncdb2html.pl see Chapter 12, *Managing the Database* in *Managing NerveCenter*.

Sample Perl Scripts

Included in the NerveCenter 3.8 distribution is sample code that may be useful in implementing NerveCenter. The sample code requires modifications to work in your environment.

- **`syslogd.pl`**—Located in the in the *installation*`/Sample/syslog` directory, this Perl script binds to UDP port 514 and processes incoming syslog messages as they arrive. These syslog events are then converted into an SNMP trap and can be forward to NerveCenter for processing. To make this script work for your environment, you need to update the portion of the script that specifies the SNMP host, agent, community string, port, etc. Included in the directory is a sample behavior model providing a trap mask to receive the traps generated by syslogd.pl, as well as a simple Alarm Diagram to transition when a trigger is fired.
- **`logreader.pl`**—Located in the *installation*`/Sample/logfile` directory, this script reads specified log files and converts log lines to traps. As files are rotates or truncated, the script attempts to reopen the file. To make this script work for your environment, you need to update the portion of the script that specifies the SNMP host, agent, community string, port, etc. as well as the portion of the script that specifies the input files. Included in the directory is a sample behavior model providing a trap mask to receive the traps generated by logreader.pl, as well as a simple Alarm Diagram to transition when a trigger is fired.
- **`trapexp.pl`**—Located in the *installation*`/Sample/trapexp` directory, this Perl script is a simple trap exploder. It binds to UDP port 162 and collects traps as they arrive. The datagrams may be resent to other management stations. You need to specify the list of trap destinations and port numbers for this script to operate in your environment.

  In order to use this script on a machine running an application that also listens for traps on port 162, such as NerveCenter or OpenView, you must modify the script to listen to a port other than 162.

OVPA

The OpenView Platform Adapter (OVPA) has been revised. There should be no noticeable difference to you as a user in the performance of OVPA, but the command options have changed. For details about the new options, see *Integrating NerveCenter with a Network Management Platform*, or Appendix C, *Controlling NerveCenter from the Command Line* in *Managing NerveCenter*. On UNIX machines you can view the OVPA man page.

Fixes and Enhancements

This chapter describes all the fixes and enhancements to NerveCenter 3.8.08 and includes the following sections:

- *NerveCenter 3.8.08*
- *NerveCenter 3.8.07*
- *NerveCenter 3.8.06*
- *NerveCenter 3.8.05*

NerveCenter 3.8.08

Table 3-1 lists significant fixes and enhancements included in NerveCenter v3.8.08.

Table 3-1. Fixes and Enhancements in NerveCenter 3.8.08

Enhancement/Problem	Description	Win	HP-UX	Solaris
ncserver	Audit Trail enhancement. Audit trail for node, poll, mask, alarm, opcmask, perlsub now logs to C:\Program Files\OpenService\NerveCenter\Log on Windows, and /opt/OSInc/userfiles/logs/ on Unix. The following actions are logged into the file: ◆ Node: add/delete/update manage/unmanage propertyGroup suppress/unsuppress autodelete/no autodelete ◆ Alam: add/update/delete/on-off ◆ Poll: add/update/delete/on-off ◆ Mask: add/update/delete/on-off ◆ OpcMask: add/update/delete/on-off ◆ PerlSub: add/update/delete ◆ PropertyGroup: add/update/remove ◆ Property: add/remove	✓	✓	✓
14472	Corrected ncserver.exe handling of failed 'client' login attempt.	✓		
14092	Corrected SNMP and ICMP error reponse handling. Polling now correctly handles cases where an ICMP error reply is returned. Functionality now matches NerveCenter 3.7.	✓	✓	✓
14870	Improved SNMP and ICMP polling throughput. Performance now matches throughput levels from in NC3.8.06. Performance had been slowed in NC3.8.06B and NC3.8.07 in order to prevent stability issues in the request/response processing.	✓	✓	✓
ncserver	Corrected check of Authentication Mode selection when polling SNMPv3 agents.	✓	✓	✓

Table 3-1. Fixes and Enhancements in NerveCenter 3.8.08 (continued)

Enhancement/Problem	Description	Win	HP-UX	Solaris
ovpa	Improved connection error handling within ovpa.exe.	✓	✓	✓
13763	Improved "debug" ncserver.exe trace messages. Tracing did not include messages for informs sent to OpenView.	✓	✓	✓
ncserver.exe paserver.exe	Support built-in enterprise scope trigger INFORM_CONNECTION_UP/DOWN when paserver connection is up or down. Only Enterprise-scope alarms are affected	✓	✓	✓
mibcomp	Improved mibcomp to avoid non-deterministic passing of internal files into final merge process.	✓	✓	✓
mibcomp	Added `-verbose` command-line switch to mibcomp.	✓	✓	✓
mibcomp	Re-introduced handling for NerveCenter 3.7 MIB file handling and generation. ◆ ncserver.exe can read the MIB file produced from either the NerveCenter 3.8 mibcomp or NerveCenter 3.7 mibcomp. ◆ Mibcomp.exe from NerveCenter 3.7 has been added to the release as mibcomp37.exe. Refer to the description of mibcomp from the NerveCenter 3.7 documentation for usage instructions.	✓	✓	✓
mibcomp	Updated mibcomp37.exe to support newer UTC Timestamp format. Newer MIB modules use the format "YYYYMMDD..." instead of the prior format "YYMMHHDD..." to state the year. The mibcomp.exe released in all versions of NerveCenter 3.7 does not support the newer four-position year field. The mibcomp37.exe for NerveCenter 3.8.08 allows the four-position year field.	✓	✓	✓

Table 3-1. Fixes and Enhancements in NerveCenter 3.8.08 (continued)

Enhancement/Problem	Description	Win	HP-UX	Solaris
trapgen	Trapgen.exe only allowed users to enter varbind types in lower case. This has been relaxed to allow upper or lower case letters for naming varbind types. The "INTEGER" in the following trapgen command can now be "Integer", "integer", "INTEGER", "INTeGeR", etc.: "trapgen -v1 nms 1.3.6.1.4.178 nms 6 1 1212 1.3.6.1.4.1.78.1.1 INTEGER 33".	✓	✓	✓
14565	Correct the ".ncdb" file produced by ncserver.exe or Serializedb.exe and then read by ncserver.exe and importutil.exe. Lines being written to the output ".ncdb" file were being split every 512 characters.	✓		

NerveCenter 3.8.07

Table 3-2 describes all Fixes and Enhancements in NerveCenter 3.8.07.

Table 3-2. Fixes and Enhancements in NerveCenter 3.8.07

Enhancement/Problem	Description	Win	HP-UX	Solaris
Perl	FireTrigger Perl function enhanced to include a delay time. See *FireTrigger* on page 26 for details.	✓	✓	✓
Perl	AddNode Perl function added. See *AddNode* on page 26 for details.	✓	✓	✓
BUG13547	Trapgen hangs at command line.	✓	✓	✓
13682	ovpa is exiting.	✓	✓	✓
13820	Unmanaged node in HPOV can cause ovpa core dump.		✓	
mibcomp	Windows mibcomp.bat not using 'ignore' switch to 'mgrtool.exe'.	✓		
mibcomp	Windows mibcomp.bat fails if including more than 125 mibs.	✓	✓	✓
ncserver	ncserver crashes for SNMP/ICMP response timing window "pure virtual function called".	✓	✓	✓
ncserver	ncserver "-logenum" implementation to match that from NerveCenter 3.6.	✓	✓	✓
ncserver	ncserver crashes if brassagt (NerveCenter SNMP Service) not running.	✓	✓	✓
ncserver	ovpa memory leak on HPUX.	✓	✓	✓

FireTrigger

The FireTrigger Perl function accepts an optional fourth parameter, delay time. The delay time specifies the number of seconds to wait prior to executing the indicated trigger. You can use the new FireTrigger function everywhere the existing FireTrigger can be used and the behavior is consistant throughout.

New Syntax:

```
FireTrigger( "trigger name", [subObject], [node], [delay time] );
```

The time delay can be any number between 0 and 2,147,483,647 and indicates the number of seconds to wait.

To specify a delay time without a subobject or node name, use default value placeholders:

```
FireTrigger( "myTrigger", $DefaultSubobject, $NodeName, 12 );
```

AddNode

There is a new Perl function, AddNode, which enables you to add a NerveCenter managed node from a Perl function.

To use within a mask perl trigger function:

```
AddNode( “node name” );
```

- The node name may be any valid string enclosed in quotes to identify the node.
- The address assigned to the node is the IP address of the trap origination agent.
- The node property group is assigned based on the enterprise ID indicated by the trap.
- The node community string is assigned based on the community indicated by the trap.
- The node is marked as ‘managed’ and ‘not suppressed’
- The SNMP version of the node is assigned based on the version of the trap received. A version 1 trap creates a version 1 node, a V2C trap creates a V2C node.
- No action is taken if a node of the same name already exists in the node list. No validation that the node name doesn’t already exist is performed at compile time.

To use within a perl poll condition:

```
AddNode( "node name" );
```

- The node name must be a valid IP address enclosed in quotes.
- The address assigned to the node is the address specified for the node name.
- The node property group is assigned to the "NCDefaultGroup"
- The node community string is assigned the community string of the node for which the poll condition was executed.
- The node is marked as 'managed' and 'not suppressed'
- The SNMP version of the node is assigned the version of the node for which the poll condition was executed.
- No action is taken if a node of the same name already exists in the node list. No validation that the node name doesn't already exist is performed at compile time.

To use within an alarm call perl subroutine action:

```
AddNode( "node name" );
```

- The node name must be a valid IP address enclosed in quotes.
- The address assigned to the node is the address specified for the node name.
- The node property group is assigned to the "NCDefaultGroup"
- The node community string is assigned the default V1 community string value ("public").
- The node is marked as 'managed' and 'not suppressed'
- The SNMP version of the node is V1.
- No action is taken if a node of the same name already exists in the node list. No validation that the node name doesn't already exist is performed at compile time.

NerveCenter 3.8.06

Table 3-3 describes all Fixes and Enhancements in NerveCenter 3.8.06.

Table 3-3. Fixes and Enhancements in NerveCenter 3.8.06

Problem	Description	Win	HP-UX	Solaris
ovpa	Ovpa supports integration with Netview 7.13 on Solaris and AIX 5.1.			✓
polls	Four polls—IfErrorRates, IfLoadRates, TcpConnectionMon, and TcpRetransStatus—have a mistake in the Poll condition which can overload your syslog or event manager. This perl error is corrected in build 3.8.06 if you perform a complete installation. **Note** If you are upgrading from a previous version of NerveCenter, because the upgrade does not overwrite existing poll conditions, models, etc., you must manually correct the poll conditions in the affected polls. See *Correcting Poll Conditions* on page 29.	✓	✓	✓
BUG13338 mibcomp	Error reporting in mibcomp enhanced.	✓	✓	✓
Documentation	Documentation errors fixed in online documentation and PDFs.	✓	✓	✓
SRV12664/BUG12666 ncserver	nervecenter.xml file would sporadically disappear with machine reboot.	✓	✓	✓
MSC12773 ovpa	If ovpa reported that it lost connection to a downstream ncserver server, the wrong IP address was given.	✓	✓	✓
SRV12703 ncserver	Bottleneck in Inform queue.	✓		
BUG13297 ovpa	Ovpa not loading on all nodes.	✓	✓	✓

NerveCenter 3.8.05

Table 3-4 describes all Fixes and Enhancements in NerveCenter 3.8.05.

Table 3-4. Fixes and Enhancements in NerveCenter 3.8.05

Problem	Description	Win	HP-UX	Solaris
ERR11920/BUG11999 ncserver	ncserver exiting	✓	✓	✓
OPV12048/BUG12231ovpa	Updates not being passed between NNM and NC3.8.05	✓	✓	✓
SRV11650/BUG11651 ncserver	ncserver not polling nodes correctly	✓	✓	✓
SRV12332/BUG12334 ncserver	Send Trap action does not pass the correct variables	✓	✓	✓
SRV12340/BUG12341 ncserver	send trap action to $NCHostName ends up on all NC Hosts	✓	✓	✓
SRV12335/BUG12336 ncserver	Memory growth in NC3.8.04	✓	✓	✓
SRV12337/BUG12338 & BUG12239 ncserver	ovpa core dumping on NC3804 Solaris8			✓
ERR11863 mibcomp	Problems with 3.8 mibcomp	✓	✓	✓
ARC12416/ART12513 ncserver	Action Router usage yields CATAGORY 1 ERROR in messages file	✓	✓	✓
GEN09610/BUG09817 & BUG12531 client	Cannot reset alarms to ground via GUI in 3721, 3722	✓	✓	✓

Correcting Poll Conditions

Four polls have a mistake in the Poll condition which can overload your syslog or event manager.

This perl error is corrected in NerveCenter 3.8.06 if you perform a complete installation.

The upgrade process does not overwrite existing models, polls, etc., to preserve any modifications you may have made. In order to correct the Poll Conditions, you must manually edit the affected polls. You only need to edit these polls if you are upgrading from a previous version of NerveCenter.

The following polls have errors in the Poll Condition:

- IfErrorRates
- IfLoadRates
- TcpConnectionMon
- TcpRetransStatus

❖ To correct affected Poll Conditions:

1. From the NerveCenter client's Admin menu, choose Poll List.

   The Poll List window is displayed.

2. Select a poll from the poll list.

   Remember, the polls you need to correct are IfErrorRates, IfLoadRates, TcpConnectionMon, and TcpRetransStatus.

3. Select the Open button

   NerveCenter displays the Poll Definition window.

4. Select the Poll Condition tab.

5. NerveCenter displays the Poll Condition page.

6. Edit the Poll Condition as described in the following sections:

   - *IfErrorRates* on page 31
   - *IfLoadRates* on page 32
   - *TcpConnectionMon* on page 33
   - *TcpRetransStatus* on page 34

7. Select the Save button to save your poll.

IfErrorRates

To correct the Poll Condition for IfErrorRates, add the bold lines to the Poll Condition.

```
        my $all_errors = (delta( ifEntry.ifInErrors )+delta(
        ifEntry.ifInDiscards )+
        delta( ifEntry.ifOutErrors )+delta( ifEntry.ifOutDiscards ));
        my $total_traffic = (delta( ifEntry.ifInErrors )+delta(
        ifEntry.ifInDiscards )+
        delta( ifEntry.ifInUcastPkts )+delta( ifEntry.ifInNUcastPkts )+
        delta( ifEntry.ifOutUcastPkts )+delta( ifEntry.ifOutNUcastPkts ));
        my $data_to_log = ifEntry.ifDescr ; # get ifDescr for logging
-->     if ( $total_traffic != 0 )
-->     {
        if ($all_errors / $total_traffic > .05)
        {
        FireTrigger("HighErrorRate");
        }
        elsif (($all_errors / $total_traffic <= .05) and
        ($all_errors / $total_traffic >= .01))
        {
        FireTrigger("MediumErrorRate");
        }
        elsif ($all_errors / $total_traffic < .01)
        {
        FireTrigger("LowErrorRate");
        }
-->     }
```

Note Do not forget to add the closing curly bracket (}) as the last line.

IfLoadRates

To correct the Poll Condition for IfLoadRates, add the bold lines to the Poll Condition.

```
        my $traffic = (delta( ifEntry.ifInOctets ) + delta(
        ifEntry.ifOutOctets ));
        my $capacity = (elapsed * ( ifEntry.ifSpeed * .125));
        my $log_data = ifEntry.ifDescr ; # Get ifDescr for logging
-->     if ( $capacity != 0 )
-->     {
        if ( ifEntry.ifType in (6,7,8,9,11,12,13,15,26,27))
        {
        if ($traffic / $capacity > .01)
        {
        FireTrigger("HighLoad");
        }
        elsif (($traffic / $capacity <= .01) and
        ($traffic / $capacity >= .001))
        {
        FireTrigger("MediumLoad");
        }
        elsif ($traffic / $capacity < .001)
        {
        FireTrigger("LowLoad");
        }
        }
        elsif (!( ifEntry.ifType in (6,7,8,9,11,12,13,15,24,26,27)))
        {
        if ($traffic / $capacity > .75)
        {
        FireTrigger("HighLoad");
        }
        elsif (($traffic / $capacity <= .75) and
        ($traffic / $capacity >= .10))
        {
        FireTrigger("MediumLoad");
        }
        elsif ($traffic / $capacity < .10)
        {
        FireTrigger("LowLoad");
        }
        }
-->     }
```

Note Do not forget to add the closing curly bracket (}) as the last line.

TcpConnectionMon

To correct the Poll Condition for TcpConnectionMon, add the bold lines to the Poll Condition.

```
-->     my $tcpMaxConn = tcp.tcpMaxConn;
-->     if ( $tcpMaxConn != 0 )
-->     {
        my $tcp_conn = ( tcp.tcpCurrEstab / $tcpMaxConn );
        if ( tcp.tcpMaxConn != -1)
        {
        if ($tcp_conn < .90)
        {
        FireTrigger("tcpConnOk");
        }
        elsif ($tcp_conn >= .90 and $tcp_conn <= .95)
        {
        FireTrigger("tcpConnHigh");
        }
        elsif ($tcp_conn >= .96 and $tcp_conn <= .98)
        {
        FireTrigger("tcpConnVeryHigh");
        }
        elsif ($tcp_conn > .98)
        {
        FireTrigger("tcpConnSaturated");
        }
        }
-->     }
```

Note Do not forget to add the closing curly bracket (}) as the last line.

TcpRetransStatus

To correct the Poll Condition for TcpRetransStatus, add the bold lines to the Poll Condition.

```
-->     my $tcpOutSegsDelta = delta( tcp.tcpOutSegs );
-->     if ( $tcpOutSegsDelta != 0 )
-->     {
        my $tcp_retrans = ( delta( tcp.tcpRetransSegs ) / $tcpOutSegsDelta );
        if ($tcp_retrans <= .02)
        {
        FireTrigger("tcpRetransNorm");
        }
        elsif ($tcp_retrans > .02 and $tcp_retrans >= .05)
        {
        FireTrigger("tcpRetransMed");
        }
        elsif ($tcp_retrans > .05)
        {
        FireTrigger("tcpRetransHigh");
        }
-->     }
```

Note Do not forget to add the closing curly bracket (}) as the last line.

Outstanding Issues

The table below lists all the known problems in NerveCenter v3.8.08.

Table 4-1. Outstanding Issues in NerveCenter™ 3.8.08

Issue	Description	Win	HP-UX	Solaris
Compatibility issue between 3.8 and previous releases	NerveCenter™ 3.8.08 is incompatible with previous releases of NerveCenter. There are changes to the software that prevent this version from interpreting with earlier releases of NerveCenter installed on other machines. Update all systems to v3.8.08.	✓	✓	✓
The browser path must be entered correctly the first time NC is installed	When installing the NerveCenter Client and or the NCadmin the user is asked for a path to the browser. If this is not entered the during the first installation a subsequent installation will not correct the problem. The workaround is to uninstall and reinstall with the correct path the first time. (NerveCenter 3.7 and 3.8)	✓	✓	✓
Installation of NCserver only on NT or Win2k results in message about registry permission	If you install the NerveCenter Server without the client and/or the ncadmin on either Win2k or NT then you will see two dialog boxes complaining about not being able to set registry permissions for the NC admins group and the NC users group respectively. This will not affect the behavior of the product. (NerveCenter 3.7 and 3.8)	✓		
SerializeDB import file types operate on both file types but only one is selected	The NerveCenter utility, SerializeDB, has an Import file to database option that enables you to import only `.asc` file types; however, SerializeDB will allow you (incorrectly) to also select `.ncdb` file types for import without displaying an error. Some users might incorrectly think that the `.ncdb` file SerializeDB allowed them to select was actually imported. (NerveCenter 3.7 and 3.8)	✓		

Table 4-1. Outstanding Issues in NerveCenter™ 3.8.08 (continued)

Issue	Description	Win	HP-UX	Solaris
Error message displays when disconnecting from a remote Server	When disconnecting a NerveCenter Client from a remote connection to a Windows server running an Access database, the following error message displays on the Client: `Can't remove system datasource` This message has no effect on the NerveCenter database; no data is lost. (NerveCenter 3.7 and 3.8)	✓		
Severities of nodes in node list do not show highest severity of current alarms	Nodes appearing in the node list should reflect the highest severity level of all of the alarms that have transitioned for that node. For example, if an alarm transitions a node to a Critical Severity but then another alarm transitions the node to a Minor Severity, then the aggregate severity for the node that appears in the node list should be Critical. In reality, the aggregate severity of the node in the node list changes to Minor. NerveCenter does not correctly track terminal states of alarms when those states have no outbound transitions. The workaround is to: ◆ Create a mask with a simple trigger called No_op. ◆ Save the mask and turn it off. ◆ In all affected alarms, add a transition to the last state in the diagram. The new transition should loop back to that state on the No_op trigger (i.e., the *from* and *to* states should be the same). (NerveCenter 3.7 and 3.8)	✓	✓	✓
ncstop script does not stop NerveCenter process	You can run the ncstart script and the ncserver process will start, but when you run the ncstop script, the ncserver process will not stop. This is because after startup, ownership of the ncserver process changes to `nervectr`. To kill a process, you must be either "root" or the owner of that process (in this case the `nervectr` user). (NerveCenter 3.7 and 3.8)		✓	✓

Table 4-1. Outstanding Issues in NerveCenter™ 3.8.08 (continued)

Issue	Description	Win	HP-UX	Solaris
Configuration settings lost during upgrades	When upgrading from NerveCenter 3.6 or 3.7 to 3.8 on UNIX systems, users (other than root) lose their Client and Administrator settings. The NerveCenter installation script does not translate user settings in the registry to an XML file, so things like autoconnect servers, alarm filters, and so on are lost for any users other than root.		✓	✓

Unable to access Netscape and online docs after installing NerveCenter	Prior to installing NerveCenter, Netscape Communicator 4.75, will run. After installing NerveCenter and running the `ncenv` environment script Netscape Communicator will no longer start. Instead, you now get the following error messages:
	`/usr/lib/dld.sl: Unresolved symbol: fpsetmask(code) from /opt/netscape/netscape`
	`/usr/lib/dld.sl: Unresolved symbol: fpsetmask(code) from (dns helper)`
	You cannot load online documentation from the client. The solution is to remove `/usr/lib` from the `SHLIB_PATH` environment variable.This was put there by our ncenv script.
	(NerveCenter 3.7 and 3.8)
			✓	

Server logs incorrect data for subobjects that are only partially supported in a polled agent's MIB	When NerveCenter polls an agent for more than one columnar object in a table—and the first of these objects has more instances in the table than the secondary object has—then "ghost" data for the missing instances of the second columnar object is logged to the log file if you have a Log-to-File action on the polling transition. The workaround is to create an alarm that will transition out of ground on the table's index. In this way the user can poll (either separately or together) for the other attributes (outErrors, ifdescr) and use SNMPNOSUCHNAME to determine when the poll has reached the end of a row. (NerveCenter 3.7 and 3.8)	✓	✓	✓

Table 4-1. Outstanding Issues in NerveCenter™ 3.8.08 (continued)

Issue	Description	Win	HP-UX	Solaris
NetCool probe reports "Seagate Nerve Center" instead of Open NerveCenter	The NetCool probe reports NerveCenter informs to NetCool as coming from Seagate NerveCenter instead of Open NerveCenter. This is a NetCool problem.			✓
IIS 4.0 issue with Web Collector.	The path to the NerveCenter CGI files is always defaulted to `/program files/openservice/nervecenter` even if the user installs NerveCenter using a different path. As a result, the user is unable to connect to the Webcollector. This only happens on a machine running Microsoft Internet Information Server (IIS). (NerveCenter 3.7 and 3.8)	✓		
NerveCenter events are not relayed to OpenView	When NerveCenter is configured for SNMP v3 support and is installed co-resident with OpenView, OpenView does not successfully receive inform events from NerveCenter. This occurs because OVTrapD must be disabled before NerveCenter can support SNMP v3 communication, and NerveCenter uses ovtrapd to relay inform events to OpenView. However, if NerveCenter is configured to send `SYMBOL_ONLY` or `EVENT_AND_SYMBOL` updates to OpenView, symbol color changes are successfully sent to OpenView. (NerveCenter 3.7 and 3.8)	✓	✓	✓

NerveCenter terminates with an error when the NerveCenter Service is stopped	When the NerveCenter Service is stopped, it terminates and sends the following message to the Windows desktop:
	`ncserver.exe - Application Error`
	`The instruction at "0x7800d0b9" referenced memory at "0x00000005". The memory could not be "written".`
	`Click on OK to terminate the application`
	(NerveCenter 3.7 and 3.8)
		✓		

Table 4-1. Outstanding Issues in NerveCenter™ 3.8.08 (continued)

Issue	Description	Win	HP-UX	Solaris
Open modal dialog boxes appear to restrict activity in Client	On UNIX, NerveCenter Client appears to lock up if you are editing an alarm transition and click elsewhere within the main window while the alarm transition dialog box is still open. If you're running CDE, modify the GUI settings from the toolbar. Select Window settings, turn off "Allow primary windows on top," then respond Yes to restarting your window manager. The dialog box now remains on top, forcing you to make any changes you need and select OK before attempting to use other elements. (NerveCenter 3.7 and 3.8)		✓	✓
Using the import model browser	If you choose to instead link the model directory to another location, make sure the other location is not a parent directory of NerveCenter (`/opt` and `/opt/OSInc` by default). If this occurs, NerveCenter Client's browse feature (off of the Import Objects and Nodes dialog) will not be able to browse to your models, popping up an error dialog reading 'no files found'. (NerveCenter 3.7 and 3.8)		✓	✓
Log To Database log maintenance is not working correctly	Truncation of records from the log tables is not occurring at a reasonable point. (NerveCenter 3.7 and 3.8)	✓		
CLI incorrectly displays node severity information	The NerveCenter Command Line Interface (CLI) incorrectly retrieves information about node severity. The information displayed through the CLI does not match severity information displayed in the NerveCenter Client's Node List window. (NerveCenter 3.7 and 3.8)	✓	✓	✓

Table 4-1. Outstanding Issues in NerveCenter™ 3.8.08 (continued)

Issue	Description	Win	HP-UX	Solaris
Paserver not designed to connect with OpenView	The NerveCenter Universal Platform Adapter (paserver) terminates when an OpenView Inform connection is made to it. The error is: `Run-time exception error; current exception: xalloc No handler for exception.` Paserver is not designed to handle OV informs, however, it is a very easy mistake to create the inform connection in the NerveCenter Administrator and forget to click the Netcool/Tivoli radio button. (NerveCenter 3.7 and 3.8)	✓	✓	✓
NerveCenter unable to support eight-bit character sets used for internationalization	UNIX platforms require applications to set the LANG variable to a national locale for applications to be able to support eight-bit characters used in languages such as French and Spanish. However, since all Open NerveCenter applications, and in particular, the ncserver process, does not run if the LANG variable is set to anything other than C, the variable binding information in a trap is not interpreted correctly when there are any eight-bit characters. (NerveCenter 3.7 and 3.8)		✓	✓
NerveCenter issues SNMP GETs for mismatches between a poll's base object and an alarm's subobject	NerveCenter issues SNMP GETs for polls even when there's a mismatch between a poll's base object and the associated alarm's subobject. When an alarm's subobject (SO) does not match the poll's base object, the relevant trigger fired from the poll will never match the alarm's SO. (NerveCenter 3.7 and 3.8)	✓	✓	✓
CLI displays duplicate server information	When using the NerveCenter Command Line Interface (CLI) and when more than one client is connected to the same server, issuing the command: `show server -c` causes NerveCenter to display information about the first server twice. (NerveCenter 3.7 and 3.8)	✓	✓	✓

Table 4-1. Outstanding Issues in NerveCenter™ 3.8.08 (continued)

Issue	Description	Win	HP-UX	Solaris
Client (sometimes) abnormally terminates and dumps core when attempting to edit an alarm	When attempting to edit an alarm, upon first opening the alarm the NerveCenter Client may crash and dump core. This does not happen all of the time, but it does happen often enough to be reproducible. (NerveCenter 3.7 and 3.8)		✓	
Client not properly notified of AutoClassification status on server startup	When the NerveCenter Server is auto classifying nodes at the time a NerveCenter Client connects, the connecting Client does not get an `Autoclassify in progress...` status bar message. (NerveCenter 3.7 and 3.8)	✓	✓	✓
Administrator SNMP Poll Port feature not working	On the NerveCenter Administrator's Ports page, the SNMP Poll Port field enables you to specify the default port on the node used to communicate with SNMP agents. This feature is not working in version 3.7 or v3.8.08.	✓	✓	✓
Repeated mouse clicking causes Client to abnormally terminate	When one performs actions in the NerveCenter Client that requires repeated mouse clicks, the Client can abnormally terminate. (NerveCenter 3.7 and 3.8)			✓
Custom severities are unreadable if light colors are chosen	NerveCenter uses white text automatically for all user-defined severities. If light colored backgrounds are chosen, severity text will not be readable. For pre-defined severities, NerveCenter is configured to use black text with light colored severities. (NerveCenter 3.7 and 3.8)	✓	✓	✓
No varbinds sent when ICMP_ERROR fired	When the trigger ICMP_ERROR is fired after an SNMP poll, the trigger does not include variable bindings, such as uctype and uccode, that might be useful for determining the cause of the error. Currently, the trigger is fired along with PORT_UNREACHABLE, NET_UNREACHABLE, and/or NODE_UNREACHABLE triggers. (Varbinds are included when the trigger is fired after an ICMP poll.) (NerveCenter 3.7 and 3.8)	✓	✓	✓

Table 4-1. Outstanding Issues in NerveCenter™ 3.8.08 (continued)

Issue	Description	Win	HP-UX	Solaris
Some ICMP_ERROR codes are incorrect	When the trigger ICMP_ERROR is fired, a few of the ICMP error codes are reported in log files with the type and code pasted together. For example, a uctype=5 and uccode=2 results in an error code of 52, whereas the error code should be 2. NerveCenter concatenates values for the following types and codes: ◆ uctype = 5 with error codes 0, 1, 2, and 3 ◆ uctype = 11 with error codes 0 and 1 ◆ uctype = 12 with error codes 0 and 1 If you attempt to match nl-ping-uctype=5 and nl-ping-uccode=2 in a Perl subroutine or poll condition, the condition is not matched because NerveCenter returns an incorrect value. (NerveCenter 3.7 and 3.8)	✓	✓	✓
Client Window menu lists non-existent untitled windows	Extra windows are listed in the NerveCenter Client's Window menu. Windows that are actually open are listed correctly after the extra ones. (NerveCenter 3.7 and 3.8)	✓	✓	✓
Ipsweep ignores Ctrl C	When running the ipsweep process, you must convert ipsweep to background (Ctrl Z) before you can kill the process. You can not stop ipsweep with the Ctrl C command. (Version 3.7 and earlier)	✓	✓	

Table 4-1. Outstanding Issues in NerveCenter™ 3.8.08 (continued)

Issue	Description	Win	HP-UX	Solaris
Variables listed in command actions must be preceded and followed by whitespace	When creating a command action for an alarm transition, you can not include a subobject variable after a base object. Placing a punctuation mark behind the base object variable causes that variable to be left out when processing the command. For example: `echo $NodeName $TriggerBaseObject.$TriggerInstance > /tmp/test` Should return something like the following: *NodeName* system.0 Actually, it returns the following: *NodeName* .0 Workarounds for this example are: `echo $NodeName $TriggerBaseObject $TriggerInstance $TriggerBaseObject >>/tmp/test1` `echo $NodeName $TriggerBaseObject '.' $TriggerInstance $TriggerBaseObject >>/tmp/test1` (NerveCenter 3.7 and 3.8)	✓	✓	✓
HyperHelp occasionally terminates the Client	In NerveCenter Client running against the Solaris 2.7 or 2.8 motif libraries, if you display help from the Help button, close help, then click the Help button again, sometimes HyperHelp will exit, shut down the Client, and log you out of CDE. HyperHelp 5.2 supports only XMotif1.2. (NerveCenter 3.7 and 3.8)			✓
Two clicks are required for commands in the Transition Definition dialog box	When creating a transition for an alarm definition, after you open the Transition Definition dialog box, you must click any button two times (New Action, OK, Cancel, Help) before the command is activated. (NerveCenter 3.7 and 3.8)			✓