

Installation and Upgrade Guide

CA NetVoyant

Version 7.1



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Chapter 1: Introduction

CA NetVoyant (NetVoyant) provides SNMP-based performance metrics for managing network infrastructure, devices, and services. Using data collected from devices such as routers, switches, and servers, NetVoyant summarizes and condenses data into easy-to-understand, web-based reports.

This document describes the steps for the following tasks:

- Installing the software for a new installation of NetVoyant version 7.1 and subsequent service packs
- Upgrading the software in an existing installation to NetVoyant version 7.1 and subsequent service packs

Chapter 2: System Requirements

This section contains the following topics:

[Supported Operating Systems](#) (see page 9)

[Supported Web Browsers](#) (see page 9)

[Adobe Applications](#) (see page 9)

[Hardware Requirements for a Distributed System](#) (see page 10)

[Hardware Requirements for a Standalone System](#) (see page 11)

Supported Operating Systems

Servers that host NetVoyant components are supported on the following Microsoft operating systems.

- Windows Server 2008 R2
- Windows Server 2003 64-bit
- Windows Server 2003 Web Edition
- Windows Server 2003 Standard Edition

Install the version of IIS that ships with the operating system.

Supported Web Browsers

The NetVoyant console is supported on Microsoft Internet Explorer versions 6, 7, and 8. Other browsers or versions may work but have not been tested with NetVoyant.

Adobe Applications

Adobe Acrobat Reader and Flash Player are required to view reports, charts, and the product documentation.

- Install the latest version of Acrobat Reader from <http://get.adobe.com/reader/>.
- Install the latest version of Flash Player from <http://get.adobe.com/flashplayer/>.

Hardware Requirements for a Distributed System

In a *distributed* system, the Master server and poller are installed on separate servers or virtual machines.

Master Server

CA has tested NetVoyant on servers with the following specifications. CA supports the Master server installed on servers from any vendor, if the servers conform to these specifications, at minimum:

- Intel E5520 Xeon quad-core 2.66 GHz, 1333 MHz FSB processor
- 12 GB RAM
- Six 146-GB SAS hard drives in RAID 5 configuration
- Hard disk space:
 - 30 GB on the C: drive
 - 300 GB on the D: drive
- One 10/100/1000 Mbps Ethernet RJ-45 port

Poller

CA has tested NetVoyant on servers with the following specifications. CA supports the poller installed on servers from any vendor, if the servers conform to these specifications, at minimum:

- Intel E5520 Xeon quad-core 2.66 GHz, 1333 MHz FSB processor
- 3 GB of RAM
- Three 146-GB SAS hard drives in RAID 5 configuration
- Hard disk space:
 - 30 GB on the C: drive
 - 300 GB on the D: drive
- One 10/100/1000 Mbps Ethernet RJ-45 port

Hardware Requirements for a Standalone System

In a *standalone* system, the Master console and poller are installed on the same server or virtual machine.

CA has tested NetVoyant on servers with the following specifications. CA supports NetVoyant installed on servers from any vendor, if the servers conform to these specifications, at minimum:

- Intel E5520 Xeon quad-core 2.66 GHz, 1333 MHz FSB processor
- 12 GB RAM
- Six 146-GB SAS hard drives in RAID 5 configuration
- Hard disk space:
 - 30 GB on the C: drive
 - 300 GB on the D: drive
- One 10/100/1000 Mbps Ethernet RJ-45 port

Chapter 3: Installing NetVoyant Software

This section contains the following topics:

[Installation Prerequisites](#) (see page 13)

[Install NetVoyant in a Distributed System](#) (see page 14)

[Install NetVoyant in a Standalone System](#) (see page 15)

Installation Prerequisites

Before you install NetVoyant, perform the following tasks:

- Open the following ports:
 - TCP ports 900, 3308, and 9601 through 9608 between the Master server and all remote poller servers. Open these ports bi-directionally.
 - Ports 80 and 443 (optional if SSL is implemented) for web service calls.
- Disable the following types of third-party software on all servers:
 - Anti-virus
 - Anti-spyware
 - Server monitoring and maintenance tools such as SMS, SUS, or MoM
- Restart all servers to ensure that available Microsoft Windows patches are applied.
- Obtain the NetVoyant installation files from [CA Technical Support](#).
- Extract or copy the following files to the servers on which you want to install the software:
 - netvoyant-7.1.x-win32-i586.exe
 - netvoyant-post-1.1.x.exe
- Allow the netvoyant-7.1.x-win32-i586.exe file to run. For more information, see [Allow an Executable to Run](#) (see page 25).

Install NetVoyant in a Distributed System

Distributed systems are those with separate servers for the NetVoyant Master server and remote pollers. As a best practice, install pollers close to the devices you want to monitor, to reduce polling latency.

Follow these steps:

1. Double-click the netvoyant-7.1.x-win32-i586.exe file to run it on the Master server:
 - a. Click Next on the introduction dialog.
 - b. Click Yes to accept the EULA.
 - c. Enter your name and company name in the fields provided.
 - d. Click Yes for a new installation.
 - e. Select NetVoyant at the version to install.
 - f. Accept the defaults on the components dialog.
 - g. Install the software to the d:\ drive, which is the default location.
 - h. Accept the default for the program folder name.
 - i. Select Yes to allow NetVoyant to start automatically when the server is restarted.
 - j. Click Next to start the installation.
 - k. Click Cancel when prompted to restart the server.
2. Double-click the netvoyant-post-1.1.x.exe file to run it on the Master server.
 - a. Click Next to accept defaults.
 - b. Restart the server when prompted.
3. Repeat steps 1 and 2 on each polling server.
4. Verify a successful installation:
 - a. Access the NetVoyant user interface:
 - Type **http://localhost/nv** in the Address field of your browser. The NetVoyant login page opens.
 - b. Log in with the following credentials:
 - User name: nvadmin
 - Password: nv
 - c. Click the services tab and verify that services are in a Running state.

Your system is now ready for configuration. For more information, see the *CA NetVoyant Administrator Guide*.

Install NetVoyant in a Standalone System

A standalone NetVoyant system contains one NetVoyant server that hosts the NetVoyant web interface, Master server, and poller.

As a best practice, install the server close to the devices you want to monitor, to reduce polling latency.

Follow these steps:

1. Double-click the netvoyant-7.1.x-win32-i586.exe file to run it.
 - a. Click Next on the introduction dialog.
 - b. Click Yes to accept the EULA.
 - c. Enter your name and company name in the fields provided.
 - d. Click Yes for a new installation.
 - e. Select NetVoyant as the version to install.
 - f. Accept the defaults on the components dialog.
 - g. Install the software to the d:\ drive, which is the default location.
 - h. Accept the default for the program folder name.
 - i. Select Yes to allow NetVoyant to start automatically when the server is restarted.
 - j. Click Next to start the installation.
 - k. When prompted to restart the server, click Cancel.
2. Double-click the netvoyant-post-1.1.x.exe file to run it.
 - a. Click Next to accept defaults.
 - b. Restart the server when prompted.
3. Verify a successful installation:
 - a. Access the NetVoyant user interface:
 - Type **http://localhost/nv** in the Address field of your browser. The NetVoyant login page opens.
 - b. Log in with the following credentials:
 - User name: nvadmin
 - Password: nv
 - c. Click the Services tab and verify that services are in a Running state.

Your system is now ready for configuration. For more information, see the *CA NetVoyant Administrator Guide*.

Chapter 4: Upgrading NetVoyant Software

Important: An upgrade from version 6.1 contains minor database architecture changes. This upgrade can take from several minutes to several hours to complete, depending on the size of the NetVoyant database. Plan the timing of your upgrade accordingly.

This section contains the following topics:

[Upgrade Prerequisites](#) (see page 17)

[Back Up the Database](#) (see page 18)

[Upgrade NetVoyant in a Standalone System](#) (see page 19)

[Upgrade NetVoyant in a Distributed System](#) (see page 20)

[Troubleshooting](#) (see page 21)

Upgrade Prerequisites

Before you upgrade NetVoyant, perform the following tasks:

- Ensure the NetVoyant servers you want to upgrade are running NetVoyant version 6.1.18, at minimum.
- Ensure that the amount of free disk space on each server is greater than the largest file in D:\netqos\mysql51\data\nms2
- Open the following ports:
 - TCP ports 900, 3308, and 9601 through 9608 between the Master server and all remote poller servers. Open these ports bi-directionally.
 - Ports 80 and 443 (optional if SSL is implemented) for web service calls.
- Backup the NetVoyant databases. For more information, see [Back Up the Database](#) (see page 18).
- Disable the following types of third-party software on all servers you want to upgrade:
 - Anti-virus
 - Anti-spyware
 - Server monitoring and maintenance tools such as SMS, SUS, or MoM
- Restart all servers to ensure that available Windows patches are applied.
- Obtain the NetVoyant upgrade files from [CA Technical Support](#).

- Extract or copy the following files to the servers you want to upgrade:
 - netvoyant-7.1.x-win32-i586.exe
 - netvoyant-post-1.1.x.exe
 - nvSyncPreview.exe
- Enable the netvoyant-7.1.x-win32-i586.exe file to run. For more information, see [Allow an Executable to Run](#) (see page 25).

Back Up the Database

Before upgrading your NetVoyant system, back up the database on all NetVoyant servers, including remote pollers.

Follow these steps:

1. Navigate to the Control Panel and click Administrative Tools, Services.
 - Stop all NetQoS services, including the NetVoyant Email Scheduler Service and NetVoyant Service Manager.
 - Stop the MySQL service.
 - Close the Services window.
2. Navigate to D:\netqos\mysql51\data\ in Windows Explorer.
3. Copy the \nms2 directory to a remote location to prevent data loss in the event of a hardware or operating system failure on the main server.

Tip: Use a mapped network drive or remote administrative share such as \\server\D\$\NetVoyantBackup.
4. Navigate to the Control Panel and click Administrative Tools, Services.
 - Start all NetQoS services, including the NetVoyant Email Scheduler Service and NetVoyant Service Manager.
 - Start the MySQL service.
 - Close the Services window.
5. Repeat steps 1 through 6 for each server you want to update.

Upgrade NetVoyant in a Standalone System

A standalone NetVoyant system contains one NetVoyant server that hosts the NetVoyant web interface, Master server, and poller.

Follow these steps:

1. Double-click the netvoyant-7.1.x-win32-i586.exe file to run it.
 - a. Click Cancel when prompted to restart the server.
 - b. Click Yes when prompted to perform a Database Consistency Check.

Note: The amount of time needed for the Database Consistency Check varies based on your database size. The consistency check takes about 10 minutes per 1 GB of database files. The size of your database is approximately the size of the D:\NetVoyant\db\nms2 folder that you backed up in [Back Up the Database](#) (see page 18).
 - c. Close the log file after the Database Consistency Check is complete. If you do not close the log file, the upgrade process fails.
 - d. Click Yes if prompted to retry the database move.

Note: The upgrade process may seem to be stalled when in fact critical database changes are occurring. A "Not Responding" message may appear. Do not end the upgrade or restart the server during this process. Doing so will invalidate the upgrade and cause undesirable results.

2. Double-click the netvoyant-post-1.1.x.exe file to run it.
3. Restart the server when prompted.
4. Verify that services are in a Running state:
 - a. Open the NetVoyant user interface.
 - b. Click the Services tab and verify the state of each service.
5. Verify a successful upgrade:
 - a. Allow 60 minutes to pass.
 - b. Verify that new data for your interfaces appears in the NetVoyant user interface and the NetVoyant web reports.
 - c. Click Tools, Polling Monitor. Verify that the next poll cycle is within the next 15, 10, or 5 minutes, depending on your devices' polling rates. View the Polling Monitor during the first 15-minute poll cycle to verify the completed polls for devices.
 - d. Click the Groups tab and verify that your devices are populated.

The upgrade is successful when you see new data, when polls complete, and when devices are populated.

Upgrade NetVoyant in a Distributed System

Distributed systems are those with separate servers for the NetVoyant Master server and remote pollers.

Follow these steps:

1. Run nvSyncPreview.exe on the Master Server if you are upgrading from version 6.1.18.

In version 7.1, settings on the Master server should match those found on the pollers. The nvSyncPreview.exe tool generates a list of configuration items from each poller. Use this list in step 8.

2. Double-click the netvoyant-7.1.x-win32-i586.exe file to run it on the Master server:
 - a. Click Cancel when prompted to restart the server.
 - b. Click Yes when prompted to perform a Database Consistency Check.
Note: The amount of time needed for the Database Consistency Check varies based on your database size. The consistency check takes about 10 minutes per 1 GB of database files. The size of your database is approximately the size of the D:\NetVoyant\db\nms2 folder that you backed up in [Back Up the Database](#) (see page 18).
 - c. Close the log file after the Database Consistency Check is complete. If you do not close the log file, the upgrade process fails.
 - d. Click Yes if prompted to retry the database move.

Note: The upgrade process may seem to be stalled when in fact critical database changes are occurring. A "Not Responding" message may appear. Do not end the upgrade or restart the server during this process. Doing so will invalidate the upgrade and cause undesirable results.

3. Double-click the netvoyant-post-1.1.x.exe file to run it on the Master server.
4. Restart the server when prompted.
5. Repeat steps 2 and 3 on each polling server.
6. Verify that services are in a Running state:
 - a. Open the NetVoyant user interface.
 - b. Click the Services tab and verify the state of each service.
7. Verify a successful upgrade:
 - a. Allow 60 minutes to pass.
 - b. Verify that new data for your interfaces appears in the NetVoyant user interface and the NetVoyant web reports.

c. Click Tools, Polling Monitor. Verify that the next poll cycle is within the next 15, 10, or 5 minutes, depending on your devices' polling rates. View the Polling Monitor during the first 15-minute poll cycle to verify the completed polls for devices.

d. Click the Groups tab and verify that your devices are populated.

The upgrade is successful when you see new data, when polls complete, and when devices are populated.

8. Verify the settings in the user interface with the settings from the configuration list from step 1. Correct the settings in the user interface as necessary. Because the user interface is the single source for configuration of all of your pollers, settings on the pollers are overwritten by those from the user interface.

Troubleshooting

This topic provides solutions to problems you may encounter during the upgrade process.

For an error that is not specifically described in this topic, take the following steps:

1. Click Cancel to stop the upgrade process.
2. Restart the server that you are upgrading.
3. Start the upgrade process again.

Error message: Error Number -132 (or Error Number -115)

Symptom:

You receive the following error message during the upgrade process:

ComponentMoveData had the following error
Error Number -132 (or Error Number -115)

Solution:

1. Click Cancel in the upgrade dialog.
2. Disable all third-party software, such as anti-virus software. For more information, see [Upgrade Prerequisites](#) (see page 17).
3. Click Start, Control Panel, Administrative Tools, Services.
4. Restart the Windows Management Instrumentation service.
5. Repeat the upgrade process for a standalone or distributed system.

Error message: Not enough disk space available for upgrade

Symptom:

The upgrade process fails with an error message that indicates there is insufficient disk space to complete the upgrade.

Solution:

Perform one or more of the following tasks:

- Empty the Recycle Bin.
- Empty the \Windows\Temp folder on the installation drive.
- Reboot the server.
- Run the installer from a different drive.

Error message: This appears to be a new installation of NetVoyant

Symptom:

You receive the following error message during the upgrade process:

This appears to be a new installation of NetVoyant. If this is correct, press Yes to continue, otherwise press No and contact NetVoyant support personnel to review your system.

Solution:

1. Download the following registry file to your NetVoyant system:
ftp://ftp.ca.com/pub/netqos/product_patches/NV/6.1/nv61to7reg.zip
2. Extract the nv61.reg file and copy it to the C:\ drive.
3. Double click the file and click Yes.
4. Click OK to acknowledge the completed task if prompted.
5. Repeat the upgrade process for a standalone or distributed system.

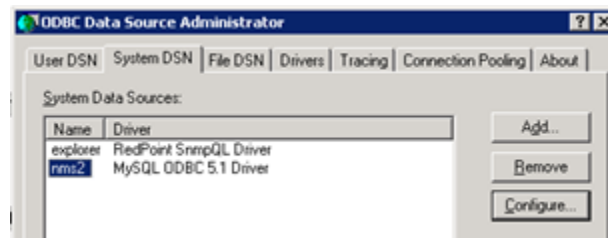
Error message: Database cannot be found

Symptom:

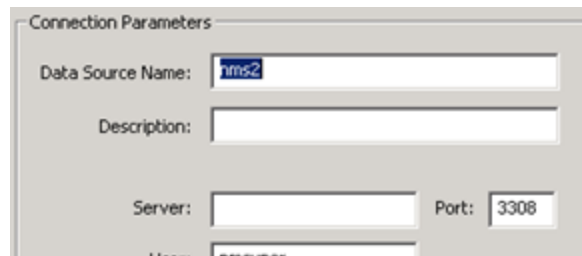
The upgrade installer warns you that the database cannot be found and that the previous installation does not exist, and prompts you to install a new copy of NetVoyant.

Solution:

1. Verify that the MySQL service is running:
 - a. Click Start, Control Panel, System and Security, Administrative Tools, Services.
 - b. Right-click the service and select Start if the service is not running.
2. Verify that ODBC uses the correct port for installing MySQL:
 - a. Double-click Data Sources (ODBC) in the Administrative Tools window. The ODBC Data Source Administrator dialog opens.
 - b. Click the System DSN tab.



- c. Select nms2 in the System Data Sources list.
- d. Click Configure.
The ODBC Data Source Configuration dialog opens.



- e. Type **3306** on the Port field.
- f. Click Test to verify the connection.
- g. If successful, click OK.
If the test fails, contact [CA Technical Support](#).

- h. Click OK to close the ODBC Data Source Administrator dialog.
3. Continue with the upgrade.

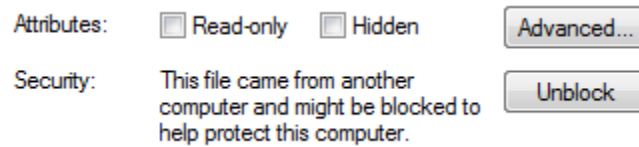
If the symptom is repeated, contact [CA Technical Support](#).

Appendix A: Allow an Executable to Run

Before installing or upgrading NetVoyant, enable the netvoyant-7.1.x-win32-i586.exe file to run.

Follow these steps:

1. Right-click netvoyant-7.1.x-win32-i586.exe and select Properties.
2. Click the General tab.



3. Click Unblock.
4. Click OK.

Appendix B: NetVoyant in a Virtual Environment

NetVoyant is supported in virtual environments.

- You can install NetVoyant on a virtual machine that conforms to the hardware requirements described in [System Requirements](#) (see page 9).
- To install the NetVoyant software on a virtual machine, follow the instructions in [Installing the Software](#) (see page 13).