

Shunra's NetworkCatcher records actual network conditions, enabling the import of the data into a virtual network model to recreate production conditions. This data is used to accurately assess and analyze the performance of distributed applications using Shunra's technology.

- Measure network conditions such as latency, packet loss, bandwidth availability across any given network topology.
- Monitor production links around the globe, for up to 25 concurrent networks for a duration of up to one month
- Identify and analyze the best, typical and worst network conditions in which to emulate application response time
- Easy to use web-based interface
- Enable recording of network statistics according to customized schedules



For complete instructions refer to the NetworkCatcher Installation Guide.

## Installing NetworkCatcher Server

### Prerequisites

MSMQ with HTTP Support, which also requires:

- Internet Information Services (IIS) v6.0 - 7.5
- Windows Process Activation Service

Refer to the Microsoft Knowledgebase for instructions.

<http://msdn.microsoft.com/en-us/library/aa967729.aspx>

Ensure that the following are selected (may vary according to the operating system):

- ASP.NET
- HTTP support
- Dynamic Content Compression

The following components will be installed as part of the installation if they are not already installed on your machine:

- Microsoft .NET Framework 4.0 Full
- Microsoft Visual C++ 2005 SP1 Redistributable package
- WinPcap

### System Requirements

The minimum requirements for the Network Catcher Server (includes Web Server and Agent components):

**Processor:** 1 GHZ (32 bit or 64 bit)

**Memory:** 2 GB RAM

**Free Hard Disk Space:** 100 GB of free disk space (includes space for recordings)

**Network Adapter:** Ethernet, Network Interface Card, Wi-Fi, Cellular Cards, Virtual NICs

**Browser:** Internet Explorer 7.0 or 8.0 (32-bit)

**Operating Systems** MS Windows (English versions only):

- Server 2003 SP2 (32/64 bit)
- Server 2003 R2 SP2 (32/64 bit)
- Server 2008 SP2 (32/ 64 bit)
- Server 2008 R2 (64-bit)

**Firewall:** Open for TCP port 80 and/or 443

**To install the NetworkCatcher Server:**

- As Administrator, run NC.Server.Setup.exe and follow the instructions in the wizard.

### To uninstall the NetworkCatcher Components

Note that you must remove all three components separately:

- NetworkCatcher Web Server
- NetworkCatcher Agent
- NetworkCatcher Server

In the Control Panel, double-click the Add/Remove programs icon, select Shunra VE NetworkCatcher component, and click the Change/Remove button. Follow the on-screen instructions.

Or run NC.<component>.Setup.exe and select Remove; follow the instructions in the wizard.

### Installing NetworkCatcher Agent

The NetworkCatcher Agent is installed as part of the NetworkCatcher Server. For peer-based recording, also install the NetworkCatcher Agent on the Target machine.

### Prerequisites

The following components will be installed as part of the installation if they are not already installed on your machine:

- Microsoft .NET Framework 4.0 Full
- Microsoft Visual C++ 2005 SP1 Redistributable package
- WinPcap

### System Requirements

The minimum requirements for the Network Catcher Agent are:

**Processor:** 1 GHZ (32 bit or 64 bit)

**Memory:** 1 GB RAM recommended

**Free Hard Disk Space:** 1 GB of free disk

**Network Adapter:** Ethernet, Network Interface Card, Wi-Fi, Cellular Cards, Virtual NICs

**Operating Systems:** MS Windows (English versions only) :

- Server 2003 SP2 (32/64 bit) 2003 R2 SP2 (32/64 bit)
- Server 2008 SP2 (32/ 64 bit) Server 2008 R2 (64-bit)

- XP Professional SP3 (32 bit) SP2 (64 bit)
- Windows 7 (32/64 bit)

**Firewall:** Open for TCP port 80 and/or user-defined port number

## To install the NetworkCatcher Agent

As Administrator, run NC.Agent.Setup.exe file and follow the instructions in the wizard. For instructions regarding Remote Agent Deployment and other installation issues, refer to the NetworkCatcher Installation and Upgrade Guide.

## To uninstall VE Network Catcher Agent:

- In the Control Panel, double-click the Add/Remove programs icon, select Shunra VE Network Catcher Agent, and click the Change/Remove button. Follow the on-screen instructions.
- Or run NC.Agent.Setup.exe and select Remove; follow the instructions in the wizard.

## Licensing

The NetworkCatcher comes with a 30 day trial license. To extend or upgrade the license, contact [license@shunra.com](mailto:license@shunra.com).

## Login

On the first login, use Administrator/Administrator as the user name and password, then change the username and/or password to restrict access.

## Creating Endpoints

An Endpoint represents a node in the network, either the Source Endpoint (the location from which you are measuring) or the Target (the destination to which you are measuring). The Source Endpoint must have a NetworkCatcher Agent installed. To conduct peer-

based measurements, an agent must be installed on both the Source and Target Endpoints.

### To create an Endpoint:

As an Administrator, from the Monitors page, select Endpoints and fill in the information. Note that the Address field can be the host name, URL or IP Address (IP Address is not recommended). Select "Agent Installed" if the NetworkCatcher Agent has been installed at this location; mandatory for Source Endpoints.

### To create a Monitor:

In the Monitors view, click the New Monitor icon, and define the settings. For a description of the metrics refer to the NetworkCatcher Manual. To begin measuring, click the **Run Monitor** button. Up to 25 monitors can run simultaneously (license dependent).

Click **Results** from the Monitors page to display runtime results of the selected monitor; by default the results of the most recent run are shown. You can view data from both current and previous runs.

## Analyzing Data

To quickly view specific time periods, select a time period in the Analyze section. For more detailed statistics, select Performance Statistics. By default, the results display Available Bandwidth and Round-trip Latency and Packet Loss. The Mean indicates the geometric mean for the selected period or the entire run; this value provides the most representative network conditions. The Highest and Lowest results are also shown, excluding the outermost results (rare occurrences) that can be used to test response time in the best and worst network conditions.



## Exporting Data

To conduct a network emulation using your actual network conditions, export recorded data from the NetworkCatcher in an .ntx file. Then, in Shunra's network appliance or desktop applications, import the file and emulate your network conditions with the recording. Refer to the NetworkCatcher Manual for particulars about the export settings.

### To export data:

In the Results page, click Analyze and Export below the graphs, and select Export. If you are conducting an emulation using Shunra's network appliance, you can export up to 90,000 samples.

## Setting Schedules

Use the Scheduler to start and end a Monitor's recordings at selected timetables.

### To set a Schedule:

1. When defining or editing a Monitor, select the Scheduling button.
2. Define the Start and End Times, Duration and set the recurrence if required.