



**Citrix NetScaler 10.1 Quick Start
Guide: MPX
8005/8015/8200/8400/8600/8800
Platform**

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Quick Installation and Configuration

Welcome to the Citrix NetScaler Application Delivery product line.

Please review the following information before proceeding with installation of the MPX appliance.

Before you Begin

Verify that the following components and accessories are included:

- ◆ One NetScaler MPX appliance
- ◆ One accessory kit that contains:
 - One RJ-45 to DB-9 adapter
 - One 6 ft RJ-45/DB-9 cable
 - One power cable

Note: For Brazilian customers, Citrix does not ship a power cable. Use a cable that conforms to the **ABNT NBR 14136:2002** standard.

- ◆ One standard 4-post rail kit

Note: If the kit that you received does not fit your rack, contact your Citrix sales representative to order the appropriate kit.

Note: 1G SFP and 10G SFP+ transceivers are sold separately. Contact your Citrix sales representative to order transceivers for your appliance. Only transceivers supplied by Citrix are supported on the appliance.

Citrix NetScaler MPX 8005, MPX 8015, MPX 8200, MPX 8400, MPX 8600, and MPX 8800

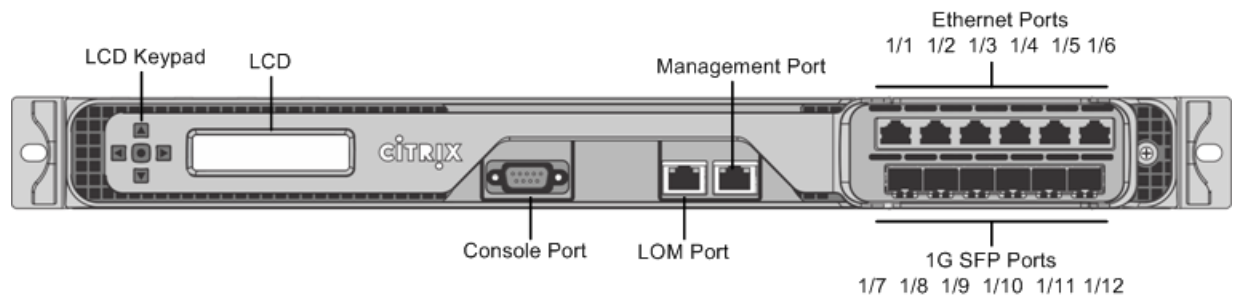
The Citrix NetScaler models MPX 8005, MPX 8015, MPX 8200, MPX 8400, MPX 8600, and MPX 8800 are 1U appliances. Each model has one quad-core processor and 32 gigabytes (GB) of memory. The MPX 8005/8015/8200/8400/8600/8800 appliances are available in two port configurations:

- ◆ Six 10/100/1000Base-T copper Ethernet ports and six 1G SFP ports (6x10/100/1000Base-T copper Ethernet ports + 6x1G SFP)

- ◆ Six 10/100/1000Base-T copper Ethernet ports and two 10G SFP+ ports (6x10/100/1000Base-T copper Ethernet ports + 2x10G SFP+)

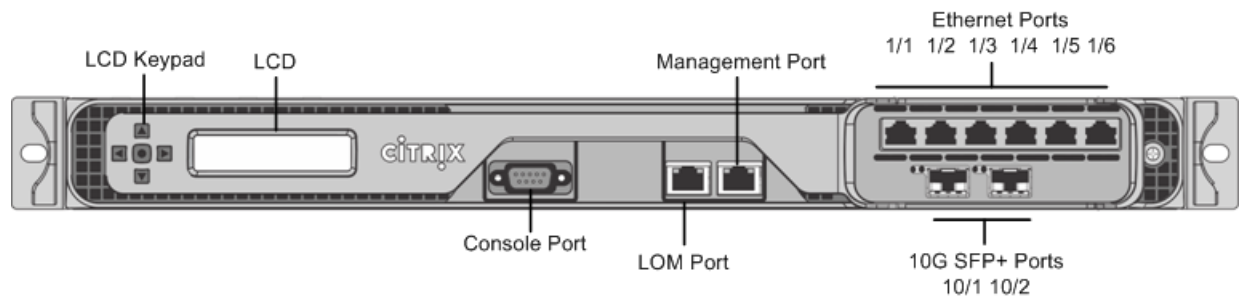
The following figure shows the front panel of the MPX 8005/8015/8200/8400/8600/8800 (6x10/100/1000Base-T copper Ethernet ports + 6x1G SFP) appliance.

Figure 1-1. Citrix NetScaler MPX 8005/8015/8200/8400/8600/8800 (6x10/100/1000Base-T copper Ethernet ports + 6x1G SFP), front panel



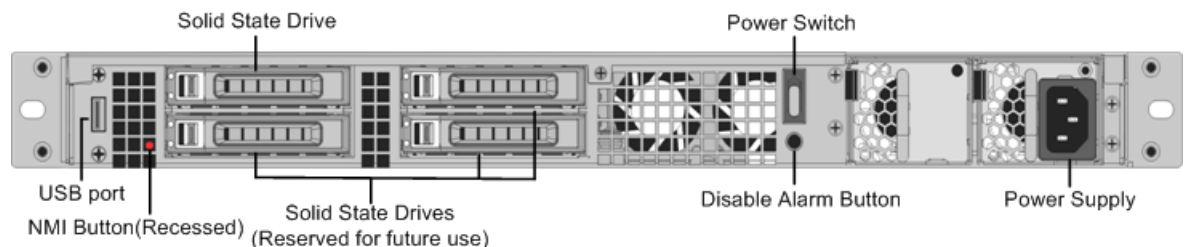
The following figure shows the front panel of the MPX 8005/8015/8200/8400/8600/8800 (6x10/100/1000Base-T copper Ethernet ports + 2x10G SFP+) appliance.

Figure 1-2. Citrix NetScaler MPX 8005/8015/8200/8400/8600/8800 (6x10/100/1000Base-T copper Ethernet ports + 2x10G SFP+), front panel



The following figure shows the back panel of the MPX 8005/8015/8200/8400/8600/8800 appliance.

Figure 1-3. Citrix NetScaler MPX 8005/8015/8200/8400/8600/8800 appliance, back panel



Configuration Requirements

Determine the following information for performing the initial configuration.

- ◆ NetScaler IP address (NSIP): The management IP address of the appliance. The default NSIP address is 192.168.100.1.
- ◆ Subnet IP address or Mapped IP address: The IP address used by the appliance to represent the client when communicating with a server.
- ◆ Default gateway: The IP address of the router that forwards traffic out of the appliance's subnet. The default gateway should be in the same subnet as the NSIP address.
- ◆ Root password: The root user (nsroot) has full administrative privileges on the appliance. The root password is used to authenticate the root user. The default root password is nsroot. You can change this password during initial configuration of the appliance.

Installation

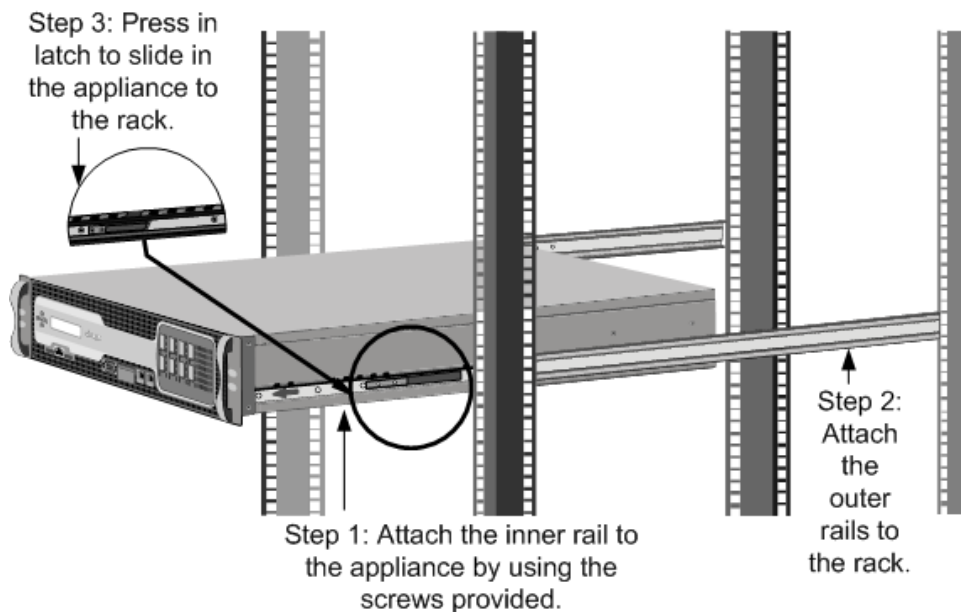
Installation involves rack-mounting the appliance, installing transceivers (if available), and connecting the appliance to the network and a power source.

Note: The appliances illustrated in the installation instructions might not represent the actual NetScaler appliance.

Rack Mounting the Appliance

The appliance is shipped with rack-rail hardware. This hardware consists of two inner rails that you attach to the appliance, one on each side, and a rack-rail assembly that you attach to the rack. The following figure illustrates the steps involved in mounting the Citrix NetScaler appliance to a rack.

Figure 1-4. Rack Mounting the Appliance



Appliance Precautions

- ◆ Determine the placement of each component in the rack before you install the rail.
- ◆ Install the heaviest appliance first, at the bottom of the rack, and then work upward. Distribute the load on the rack evenly. An unbalanced rack is hazardous.
- ◆ Allow the power supply units and hard drives to cool before touching them.
- ◆ Install the equipment near an electrical outlet for easy access.
- ◆ Mount equipment in a rack with sufficient airflow for safe operation.
- ◆ For a closed or multiple-unit rack assembly, the ambient operating temperature of the rack environment might be greater than the ambient temperature of the room. Therefore, consider the lowest and highest operating temperatures of the equipment when making a decision about where to install the appliance in the rack.

Rack Precautions

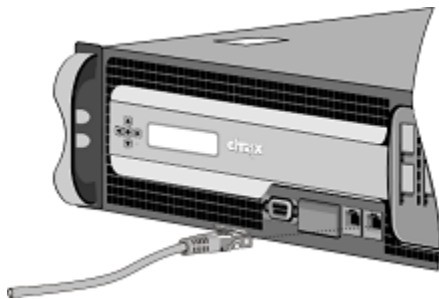
- ◆ Make sure that the leveling jacks on the bottom of the rack are fully extended to the floor, with the full weight of the rack resting on them.
- ◆ For a single-rack installation, attach a stabilizer to the rack.
- ◆ For a multiple-rack installation, couple (attach) the racks together.
- ◆ Always make sure that the rack is stable before extending a component from the rack.
- ◆ Extend only one component at a time. Extending two or more simultaneously might cause the rack to become unstable.

- ◆ The handles on the left and right of the front panel of the appliance should be used only for extending the appliance out of the rack. Do not use these handles for mounting the appliance on the rack.

Connecting a NetScaler Appliance to the Network

Connect the interfaces on the appliance to the network ports on the appropriate switches by using Ethernet/fiber optic cables.

Figure 1-5. Connecting a Citrix NetScaler appliance to the network



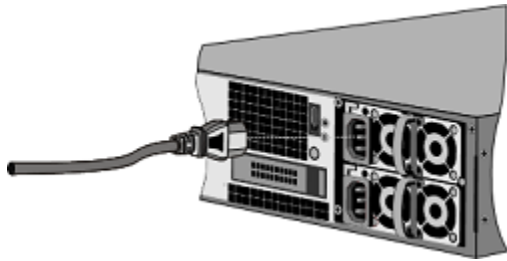
Warning: Connecting multiple network ports to the same switch or VLAN can result in a network loop.

Note: By default, the NetScaler MPX appliance is configured to use auto-negotiation. When you install a NetScaler appliance for the first time, be sure to configure your other equipment to use auto-negotiation for the ports that are connected to the NetScaler appliance. After initial logon and configuration, you can choose to disable auto-negotiation.

Connecting an Appliance to a Power Source

Connect the power cable to one of the inlet receptacles on the back of the appliance and connect the other end of the power cable to a power outlet. If your appliance has more than one power supply, repeat this process. All models function properly with a single power supply, except the MPX 22040/22060/22080/22100/22120 platform which needs two power supplies for proper operation. The extra power supply on some models serves as a backup. The Citrix logo and LCD on the front of the NetScaler illuminate after the appliance starts, and the LCD indicates the operational status of the appliance.

Figure 1-6. Connecting a Citrix NetScaler appliance to a power source



Note: If you want to upgrade to the latest release of the system software before proceeding, see "[Upgrading or Downgrading the System Software.](#)"

Electrical Safety Precautions

⚠ Caution: During installation or maintenance procedures, wear a grounding wrist strap to avoid ESD damage to the electronics of the appliance. Use a conductive wrist strap attached to a good earth ground or to the appliance. You can attach it to the connector beside the ESD symbol on the back.

Basic electrical safety precautions should be followed to protect yourself from harm and the appliance from damage.

- ◆ Be aware of the location of the emergency power off (EPO) switch, so that you can quickly remove power to the appliance if an electrical accident occurs.
- ◆ Use a regulated, uninterruptible power supply (UPS) to protect the appliance from power surges and voltage spikes, and to keep the appliance operating in case of power failure.
- ◆ Do not work alone when working with high voltage components.
- ◆ Always disconnect the appliance from power before removing or installing any component. First shut down the appliance, and then unplug the power cords of all the power supply units. As long as the power cord is plugged in, line voltages can be present in the power supply, even when the power switch is OFF.
- ◆ Do not use mats designed to decrease static electrical discharge as protection from electrical shock. Instead, use rubber mats that have been specifically designed as electrical insulators.
- ◆ Make sure that the power supply cords include grounding plugs and are plugged into grounded electrical outlets.
- ◆ Make sure that the power source can handle the appliance's maximum power consumption rating with no danger of an overload.
- ◆ A reliable ground must be maintained at all times. Therefore, the rack should be grounded. Pay particular attention to power supply connections other than the direct connection to the branch circuit (for example, connections to power strips).

Setting Up Connectivity

Connect the appliance to a management workstation or the network by using the NetScaler configuration utility, the command-line interface (CLI), or the LCD keypad.

Log on to the appliance as `nsroot`. For initial configuration, use `nsroot` as the administrative password. For subsequent access, use the password assigned during initial configuration.

Configuration Utility Setup

To set up the appliance by using the configuration utility, you need a management workstation or laptop configured on the same network as the appliance. To run the configuration utility, the Java RunTime Environment (JRE) version 1.4.2_04 or later must be installed on the workstation or laptop.

Note: The Setup Wizard automatically opens upon logon when the appliance is configured with the default IP address, when licenses are not installed on the appliance, and when either a mapped IP address or subnet IP address is not configured.

To configure the NetScaler by using the configuration utility

1. Connect the NetScaler to a management workstation or network.
2. Open a browser and type: `http://192.168.100.1`

Note: The NetScaler is preconfigured with the IP address 192.168.100.1.

3. In **User Name**, type `nsroot`.
4. In **Password**, type `nsroot`.
5. In **Deployment Type**, select **NetScaler ADC**.
6. In the **Setup Wizard**, click **Next** and follow the instructions in the wizard to configure the basic parameters, such as IP address, netmask, and gateway.
7. To confirm that the NetScaler is configured correctly, you can either ping the new NetScaler IP address (NSIP) or use the new NSIP to open the configuration utility in a browser.

CLI Setup

To set up the appliance by using the command-line interface (CLI), connect the 6-foot RJ-45/DB-9 serial cable to the console port. Access the command line with a terminal or terminal emulator with the following settings:

- ◆ Baud rate: 9600

- ◆ Data bits: 8
- ◆ Parity: None
- ◆ Stop bits: 1
- ◆ Flow control: None

Log on to the NetScaler with the following credentials:

User name: `nsroot`

Password: `nsroot`

To configure the NetScaler by using the command line interface

At the command prompt, type:

- ◆ `set ns config -ipaddress<IPAddress> -netmask<subnetMask>`
- ◆ `add ns ip<IPAddress> <subnetMask> -type<type>`
- ◆ `add route<network> <netmask> <gateway>`
- ◆ `set system user <userName> -password`
- ◆ `save ns config`
- ◆ `reboot`

Example

```
set ns config -ipaddress 10.102.29.60 -netmask
255.255.255.0
add ns ip 10.102.29.61 255.255.255.0 -type snip
add route 0.0.0.0 0.0.0.0 10.102.29.1
set system user nsroot -password
Enter password: *****
Confirm password: *****
save ns config
reboot
```

Note: For information about deploying a high availability (HA) pair, see "[Configuring High Availability](#)."

LCD Keypad Setup

To set up the appliance by using the LCD keypad on the front panel of the appliance, press the "<" key on the keypad, and enter the following initial settings in the order shown:

1. Subnet mask

2. NSIP address
3. Gateway

The subnet mask, NSIP, and gateway values are saved in the configuration file. You can then use the NSIP to connect to the appliance remotely. For more information, see "[Hardware Installation](#)."

Note: For information about deploying a high availability (HA) pair, see "[Configuring High Availability](#)."

Changing the Administrative Password

The default user account is the administrative account, which provides complete access to all features of the Citrix NetScaler appliance. Therefore, to preserve security, the administrative account should be used only when necessary, and only individuals whose duties require full access should know the password for the administrative account. Citrix recommends changing the administrative password frequently.

In the configuration utility, you type the password. In the NetScaler command line, you are prompted to enter the password.

To change the administrative password by using the NetScaler configuration utility

1. On the **Configuration** tab, in the navigation pane, expand **System**, and then click **Users**.
2. In the **Users** pane, click the default user account, and then click **Change Password**.
3. In the **Change Password** dialog box, in **Password** and **Confirm Password**, type the password of your choice.
4. Click **OK**.

To change the administrative password by using the NetScaler command line

At the NetScaler command prompt, type: `set system user <userName> {-password }`

Configuring the LOM Port

For initial configuration of the lights-out management (LOM) port, connect to the port's default IP address and change it to the address that you want to use for remote monitoring and management. Also specify the administrator credentials and the network settings.

Note: The LEDs on the LOM port are unoperational by design on all MPX platforms, except MPX 22040/22060/22080/22100/22120.

To Configure the NetScaler LOM Port

1. Connect the NetScaler LOM port to a management workstation or network.
2. In a web browser, type: <http://192.168.1.3>.

Note: The NetScaler LOM port is preconfigured with the IP address 192.168.1.3 and subnet mask 255.255.255.0.

3. In the **User Name** box, type **nsroot**.
4. In the **Password** box, type **nsroot**.
5. In the **Configuration** tab, click **Network** and type values for the following parameters:
 - **IP Address**—IP address of the LOM port.
 - **Subnet Mask**—Subnet mask used to define the subnet of the LOM port.
 - **Default Gateway**—IP address of the router that connects the LOM port to the network.
6. Click **Save**.

Power Cycling the Appliance

You can remotely turn off the appliance and turn it back on. The result is similar to pressing the power button on the back panel of the appliance for less than four seconds. The appliance's software performs a graceful shutdown. All operations on the appliance are stopped, no new connections to the client or server are accepted, and all existing connections are closed.

To power cycle the appliance

1. In a web browser, type the IP address of the LOM port.
2. In the **User Name** and **Password** boxes, type the administrator credentials.
3. In the **Menu** bar, click **Remote Control**.
4. Under **Options**, click **Power Control**, and then click **Power Cycle System**.
5. Click **Perform Action**.

System Specifications

The following table summarizes the specifications of the NetScaler MPX 8005/8015/8200/8400/8600/8800 appliances.

Specifications	MPX 8005/8015/8200/8400/8600/8800
Processors	1 quad-core processor
Memory	32 GB
Number of power supplies	1
AC power supply input voltage, frequency, and current	100-240 VAC 50-60 Hz 2.5 A
Maximum power consumption	450 W
Heat dissipation	630 BTU per hour
Weight	32 lbs
Height	1U
Width	EIA 310-D for 19-inch racks
Depth	61 cm
Operating temperature (degree Celsius)	0-40
Humidity range (non-condensing)	5%-95%
Safety certifications	TUV
EMC & susceptibility	FCC (Part 15 Class A), CE, C-Tick, VCCI-A
Environmental compliance	RoHS, WEEE

Additional Information

A complete set of NetScaler documentation is available on Citrix eDocs at <http://support.citrix.com/proddocs/topic/netscaler/ns-gen-netscaler-wrapper-con.html>.

To contact Citrix Support, call 1-800-4-CITRIX (1-800-424-8749), or log on to MyCitrix at <http://www.citrix.com>. You will be asked for your hardware serial number as part of the support process.

Detailed instructions for contacting support can be found at: http://citrix.com/site/resources/dynamic/sup2nd/Citrix_HWS_SerialNO.pdf.

If you have comments or feedback on this documentation, please send email to nsdocs_feedback@citrix.com.