Citrix ADC Quick Start Guide: MPX 9100T Platform

Copyright and Trademark Notice

Last Updated: October 2021

Table of Contents

Quick installation and configuration

Welcome to the Citrix ADC 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 ADC 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
- 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.

Citrix ADC MPX 9100T appliance

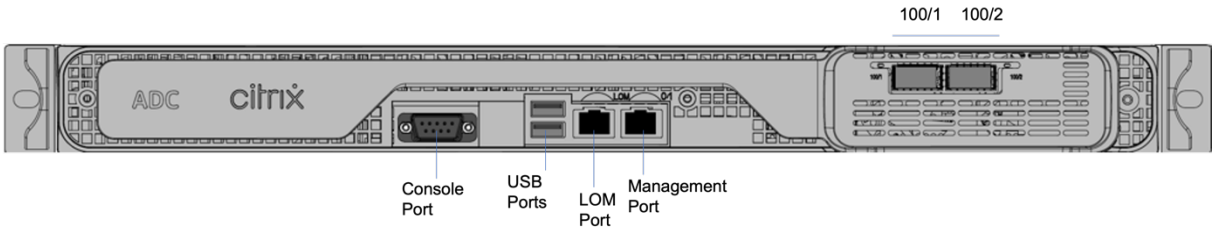
The Citrix ADC MPX 9100T appliance is a 1U appliance. This platform has a single 10-core processor and 64 gigabytes (GB) of memory.

For information on the software releases supported on the ADC hardware platforms, see https://docs.citrix.com/en-us/citrix-hardware-platforms/mpx/mpx-hardware-software-compatibility-matrix.html.

Front panel

The following figure shows the front panel of the MPX 9100T appliance.

Figure 1. Citrix ADC MPX 9100T, front panel



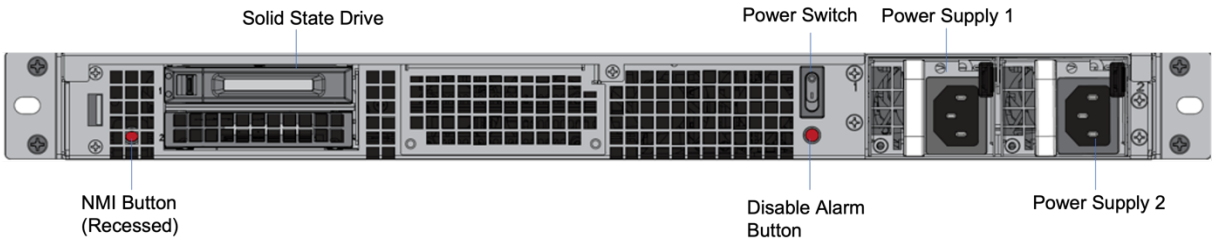
The Citrix ADC MPX 9100T appliance has the following ports:

- RS232 serial Console port.
- One 10/100/1000Base-T RJ45 copper Ethernet LOM port. Use this port to remotely monitor and manage the appliance independently of the ADC software.
- One 10/100/1000Base-T RJ45 copper Ethernet management port, numbered 0/1. This port is used to connect directly to the appliance for ADC administration functions.
- Two USB ports (reserved for a future release).
- Two 100G ports, numbered 100/1 and 100/2.

Back panel

The following figure shows the back panel of the MPX 9100T appliance.

Figure 2. Citrix ADC MPX 9100T, back panel



The following components are visible on the back panel of the MPX 9100T appliance:

- One 480 GB removable solid-state drive (SSD).
- Power switch, which turns power to the appliance on or off.
    - If the OS is functional, press the switch for less than two seconds to power down the system with a graceful shutdown.
    - If the OS is not responsive, press the and hold the power switch for more than 4 seconds to force the power off.
- Two power supplies, 100-240 VAC. Each power supply has an LED indicating its status, described in Connecting the appliance to a power source.
- Disable alarm button, press this button to silence the power alarm when one of two power supplies loses input power or when a power supply is malfunctioning.
- Non-Maskable Interrupt (NMI) Button, used at the request of Technical Support to initiate a core dump. To press this red button, which is recessed to prevent unintentional activation, use a pen, pencil, or other pointed object. The NMI Button is also available remotely over the network in the LOM GUI, in the **Remote Control** menu. For more information about the lights out management port of the appliance, see https://docs.citrix.com/en-us/citrix-hardware-platforms/mpx/netscaler-mpx-lights-out-management-port-lom.html.

Appliance, rack, and electrical precautions

See Safety, cautions, warnings, and other information for the updated list of precautions.

Installation

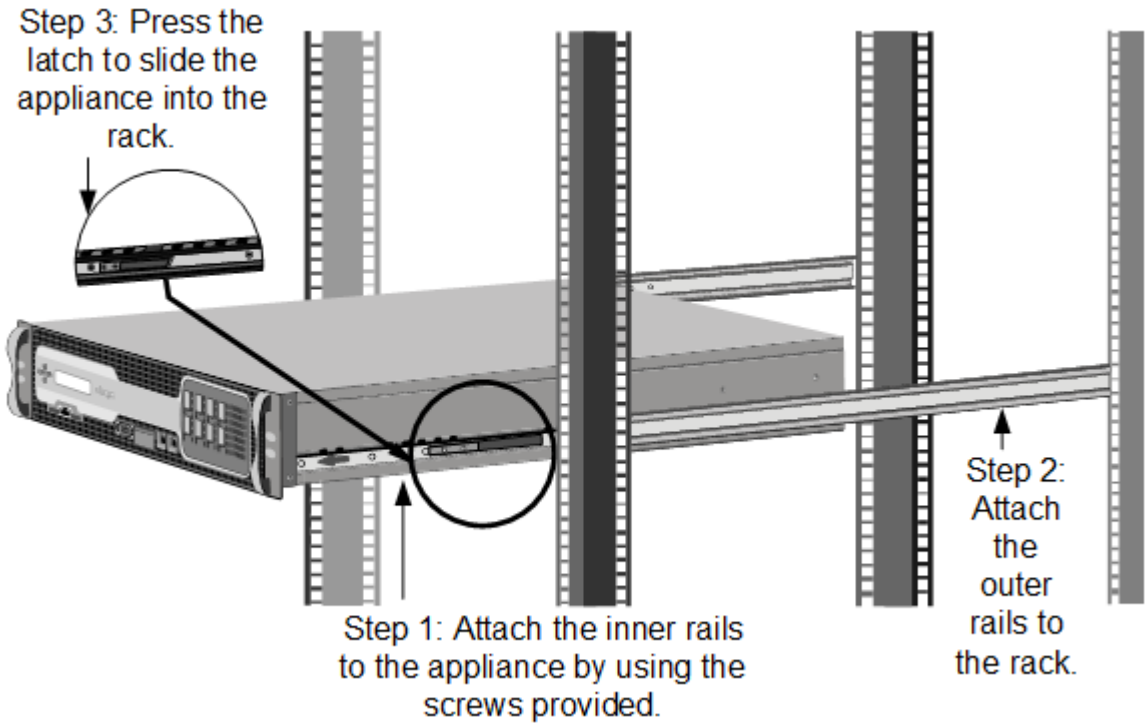
Installation involves rack-mounting the appliance, installing transceivers (if available), and connecting the appliance to the network and a power source.

Note: The appliances illustrated in the installation instructions might not represent the actual ADC 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 ADC appliance to a rack.

Figure 3. Rack mounting the appliance



Connecting the appliance to the network

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

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

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

Connecting the 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. The extra power supply serves as a backup. The Citrix logo on the front of the appliance illuminates after the appliance starts.

Note: If you want to upgrade to the latest release of the system software before proceeding, see https://docs.citrix.com/en-us/citrix-adc/current-release/upgrade-downgrade-citrix-adc-appliance.html.

Power Supply Status	LED	
	Green	Orange
No input power	Off	Off
Standby	1 Hz blink	Off
Main power on	On	Off
Failure (shutdown)	Off	On
Warning (predictive failure)	Off	1 Hz blink

Setting up connectivity

Connect the appliance to a management workstation or the network by using the ADC configuration utility (GUI), or the command line interface (CLI).

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

Using the GUI

To set up the appliance by using the GUI, 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 a subnet IP address is not configured.

To configure the appliance by using the ADC GUI

1. Connect the port labelled 0/1 on the appliance to a management workstation or network.
2. Open a browser and type: **http://192.168.100.1**
   Note: The ADC is preconfigured with the IP address 192.168.100.1.
3. In the **User Name** box, type nsroot and in the Password box, type the serial number of the appliance.
4. In **Deployment Type**, select **ADC**.
5. 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.
6. To confirm that the ADC appliance is configured correctly, you can either ping the new ADC IP address (NSIP) or use the new NSIP to open the configuration utility in a browser.

For information about deploying a high availability (HA) pair, see https://docs.citrix.com/en-us/citrix-adc/current-release/system/high-availability-introduction/configuring-high-availability.html.

Using the ADC serial console

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 ADC with the following credentials:

User name: nsroot

Password: serial number of the appliance

To configure the appliance by using the ADC CLI

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**

When prompted, enter a 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
```

Configuring the LOM port

You can use the Intelligent Platform Management Interface (IPMI), also known as the Lights Out Management (LOM) port, to remotely monitor and manage the appliance, independently of the ADC software. 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.

To configure the ADC LOM port

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

   Note: The ADC 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** and in the **Password** box, type the serial number of the appliance.
4. On the **Configuration** tab, click **Network** and type values for the following parameters:
   a. IP Address—IP address of the LOM port.
   b. Subnet Mask—Subnet mask used to define the subnet of the LOM port.
   c. Default Gateway—IP address of the router that connects the LOM port to the network.
5. Click **Save**.

Remote power control of the appliance

The LOM port can be used to remotely turn the appliance on and off. Selecting "**Power Off System - Orderly Shutdown** " is similar to pressing the power button on the appliance for less than two seconds: The appliance performs a graceful shutdown. All operations on the appliance are stopped, no new connections are accepted, and all existing connections are closed.

To power down the appliance

1. In a web browser, type the IP address of the LOM port.
2. In the **User Name** box, type **nsroot** and in the **Password** box, type the serial number of the appliance.
3. In the **Menu** bar, click **Remote Control**.
4. Under **Options**, click **Power Control**, and then click **Power Off System - Orderly Shutdown**.
5. Click **Perform Action**.

To power up 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 On System**.
5. Click **Perform Action**.

System specifications

The following table summarizes the specifications of the ADC MPX 9100T appliance.

Specifications	MPX 9100T
Regulatory model number	1U2P2A
Processors	1 ten-core processor
Memory	64 GB: 2x 32GB DDR4 RDIMM
Number of power supplies	2
AC power supply input voltage, frequency and current	100 - 240V AC 50 - 60 Hz 3.2 - 1.6A
Typical power consumption	250 W
Maximum power consumption	282 W
Airflow (front to rear)	23.3 CFM, typical
Typical heat dissipation	853 BTU/hour
Maximum heat dissipation	962 BTU/ hour
Package weight (lbs.)	39 lbs
System weight (lbs.)	25 lbs
Height	1U
Width	EIA 310-D for 19-inch racks
Depth	61 cm; 24 in
Operating temperature	0 - 45°C; 32 - 113°F
Humidity range (non-condensing)	5% - 95% relative humidity
Safety certifications	IEC/EN/UL/CSA/AS/NZS 62368-1 and 60950-1
EMC & susceptibility	US (FCC (Part 15 Class A)), Canada (ICES-003), EU(CE (EN55032/55024)), Australia (RCM), Japan (VCCI), Korea (KCC), Taiwan (BSMI), China (CCC), India (BIS), Russia (EAC), Saudi Arabia (CITC), Brazil (Anatel), South Africa (ICASA), Mexico (NOM), Egypt (NTRA), Israel (MoC)
Environmental compliance	RoHS, WEEE, REACH

設備名稱：網絡路由器，型號（型式）：ADC MPX 9100T Equipment name Type designation (Type)						
單元Unit	限用物質及其化學符號 Restricted substances and its chemical symbols					
	鉛Lead (Pb)	汞Mercury (Hg)	鎘Cadmium (Cd)	六價鉻 Hexavalent chromium (Cr^{+6})	多溴聯苯 Polybrominated biphenyls (PBB)	多溴二苯醚 Polybrominated diphenyl ethers (PBDE)
金屬外殼	○	○	○	○	○	○
電路板	○	○	○	○	○	○
電源供應器	○	○	○	○	○	○
風扇	○	○	○	○	○	○

備考1.〝超出0.1 wt %〞及〝超出0.01 wt %〞係指限用物質之百分比含量超出百分比含量基準值。

Note 1：“Exceeding 0.1 wt %” and “exceeding 0.01 wt %” indicate that the percentage content of the restricted substance exceeds the reference percentage value of presence condition.

備考2.〝○〞係指該項限用物質之百分比含量未超出百分比含量基準值。

Note 2：“○” indicates that the percentage content of the restricted substance does not exceed the percentage of reference value of presence.

備考3.〝-〞係指該項限用物質為排除項目。

Note 3：The “−” indicates that the restricted substance corresponds to the exemption.

Additional Information

A complete set of documentation is available from http://docs.citrix.com/.

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.