

## **NSFOCUS NTA Installation Guide**



Version: V4.5R89 (2016-01-21)

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## **Preface**

## Scope

This document describes the basic hardware information and installation procedure of NSFOCUS Network Traffic Analyzer NX3-1000E/2000E series ("NTA" for short).

This document is provided for reference only. It may slightly differ from the actual product due to version upgrade or other reasons.

### **Audience**

This document is intended for the following users:

- Users who wish to know main features and usage of this product
- System administrator
- Network administrator

This document assumes that you have knowledge in the following areas:

- Network security
- Linux and Windows operating systems
- TCP/IP protocols

## Organization

Chapter	Description
1 Overview	Describes the appearance and basic information of NTA.
2 Preparations	Describes installation preparations of NTA.
3 Installation Procedure	Describes the installation procedure of NTA.
4 Basic Configuration	Describes the basic configuration of NTA series.
A Default Parameters	Presents default settings of NTA.



#### **Conventions**

Convention	Description
Bold font	Keywords, names of screen elements like buttons, drop-down lists or fields, and user-entered text appear in bold font.
Italic font	Document titles, new or emphasized terms, and arguments for which you supply values are in italic font.
Note	Reminds users to take note.
Tip	Indicates a tip to make your operations easier.
Caution	Indicates a situation in which you might perform an action that could result in equipment damage or loss of data.
Warning	Indicates a situation in which you might perform an action that could result in bodily injury.
A > B	Indicates selection of menu options.

## **Customer Support**

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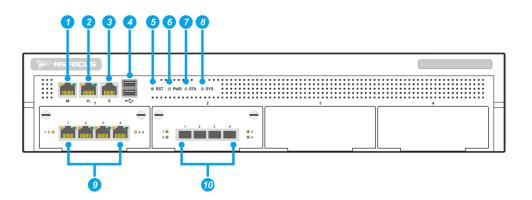
## 1 Overview

## 1.1 Product Appearance

NTA is an integrated device for network traffic analysis and classified into NTA NX3-1000E series and NTA NX3-2000E series.

Figure 1-1 and Figure 1-2 show the front panel and rear panel of the product respectively.

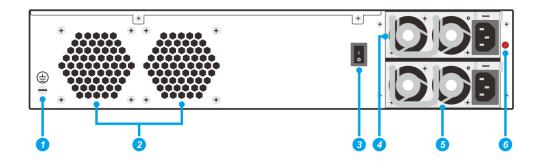
Figure 1-1 Front panel of NTA



1	Management port	2	Management port	3	Console process (RJ-45)	port	4	USB port
(5)	_	6	Power LED	7	_		8	_
9	Working port: GE electrical (RJ-45)	10	Working port: GE optical (SFP)		-			-



Figure 1-2 Rear panel of NTA



1	Ground connector	2	Heat dissipation holes	3	Power switch
4	Power supply 1	5	Power supply 2	6	Mute button: The device supports two power supplies. If only one power supply is configured, a sound alert will be generated. To clear the alert, press the mute button.

## 1.2 Basic Information

Table 1-1 describes basic information of NTA.



Table 1-1 Hardware information of NTA

Interface	1 x console port (RJ-45) 2 x USB 2.0 port 2 x management port (RJ-45) 4 x 1000M electrical port 1 x 1000M SFP optical port
Weight	16.6 kg
Height	88 mm
Width	432 mm
Depth	575 mm
Rack	2U racks
Power Supply	AC input: 100 V–240 V AC Maximum power: 350 W
Mean Time Between Failures (MTBF)	60,000 hours
Operating Temperature	0–45 ℃
Storage Temperature	-20 ℃ to +65 ℃

## 1.3 AC Power Supply System

NTA products are able to receive AC power input from two power supplies. If two independent power supplies are used, connect NAT to both of them to maintain NTA's reliability even when one power supply breaks down. The power switch and the power port are located at the rear of the chassis, as shown in Figure 1-2.

Rated voltage: 100 V-240 V AC, 50 Hz/60 Hz

Maximum output power: 350 W

#### **1.4 LEDs**

The power LED and Ethernet interface LEDs are on the front panel of the chassis.

#### 1.4.1 Power LED

Power LED refers to the PWR LED on the front panel. Table 1-2 describes power LED indications.



Table 1-2 Power LED indications

LED Status	Meaning
On	The power is normal.
Off	The power is off or abnormal.

## 1.4.2 Ethernet Interface LED

Ethernet interface LED refers to an LED on either side of an Ethernet interface. Table 1-3 describes Ethernet interface LED indications.

Table 1-3 Ethernet interface LED indications

LED	Meaning
Green LED	On: indicates that a link is already established.  Off: indicates that no link is established.
Yellow LED	Blinking: indicates that the device is transmitting or receiving data.  Off: indicates that no data is being transmitted or received.



# Preparations

## 2.1 Accessories Supplied with the Device

Before installation, check whether the following items are included in the accessory box delivered with the device:

- Straight-through cable (green)
  - Used to connect the device to the network.
- Crossover cable (yellow)
  - Used to connect a PC to the management port of NAT so that you can log in to the web-based manager of NTA to perform configurations.
- Power cable
  - One or two power cables for each device.
- Rubber pad
  - Cut into four pieces along the dotted line and attached to four angles or tabs of the device chassis to avoid abrasion.
- Rack-mounting ear
  - Used to fasten the device to the rack.
- Rack-mounting screw
  - Used to fasten the device onto the rack when it is necessary to use a rack.
- RJ-45 serial cable
  - Used to connect the serial port (RJ-45) on the front panel when you use the configuration of the serial port.



Accessories supplied may vary with the product model. For specific accessories, see the packing list.

In addition to items in the accessory box, prepare the following:

- IP address
  - Reserved for NTA.
- Computer



Directly connected to the management port of NTA so that you can log in to the web-based manager of NTA in HTTPS mode for management.

• Terminal software

Software used for connecting to the console port, for example, HyperTerminal that comes with the Windows operating system.

Browser

Make sure that IE (V10), Chrome, or Firefox browser is available on the computer.

#### 2.2 User-Provided Tools

Screwdrivers and screws of various specifications

Devices and meters such as terminal and multimeter

ESD wrist strap

#### 2.3 Others

#### **Environment**

Good ventilation and cooling system

Temperature: 0 C--45 C

Relative humidity: 10%–95% (non-condensing)

#### **ESD**

Make sure that the device and floor are well grounded.

Use a dust-proof room.

Proper temperature and humidity.

Wear ESD gloves or wrist straps when handling the circuit board.

#### **Rack Mounting**

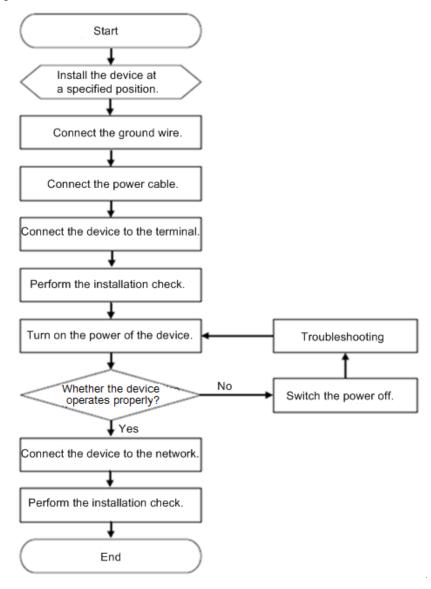
The rack must be secure enough and fit for the device.



## **3** Installation Procedure

## 3.1 Installation Flowchart

Figure 3-1 Installation flowchart





## 3.2 Connecting to the Power Supply

The AC input voltage of NTA is 100–240 V. Before connection, make sure that the power supply specifications of the equipment room are the same as those required by the product, preventing product damage.

To connect the AC power cable, perform the following steps:

- **Step 1** Turn the power switch of the AC power module to the OFF position.
- **Step 2** Connect one end of a power cable to the port of the AC power module.
- **Step 3** Connect the other end of the power cable to an external AC power socket.

----End

## 3.3 Connecting to the Network

Connect NTA to the network according to the actual network structure.

Pay attention to the following during the connection:

- Use the straight-through cables to connect the switch to the communication interface of the device.
- NTA can be deployed anywhere in the network. However, to achieve the optimal
  performance, it is recommended that you connect it to the switch on the backbone
  network of the company.
- After deployment, adapt its network settings immediately to the actual network. For details on default parameters of NTA, see appendix A.



You can modify network settings on the console-based manager or web-based manager.

For details, see the NSFOCUS NTA User Guide.

## 3.4 Shutting Down the Device

Shut down the device in either of the following ways:

- 1. Turn the power supply switch to the OFF position.
- 2. Log in to the console, type the **enable** command to switch to the privileged view mode, and then type the **poweroff** command. For details about how to log in to the console, see 4.1 Logging In to the Console.



# 4 Basic Configuration

This chapter describes mandatory configurations for initial login:

- Log in to the console.
- Set the IP address of the management interface.
- Set a subnet mask to log in to the web-based manager and change the initial password.
- Import a valid license file.

## 4.1 Logging In to the Console

For initial use, you need to log in to the console to change the IP address of the management interface.

Before logging in to NTA using a serial connection, prepare the following:

- One PC
- One serial cable shipped in the accessory kit
- Terminal software that can connect to the console port, such as the HyperTerminal that comes with Windows operating systems
- NTA connected to the PC with the serial cable

The following takes HyperTerminal (Windows XP) as an example to detail how to access the console user interface of NTA:

Step 1 Choose Start > All Programs > Accessories > Communications > HyperTerminal. The Connection Description dialog box appears, as shown in Figure 4-1.



Figure 4-1 Creating a new connection



**Step 2** Enter the name of the new connection in the **Name** text box, such as **NTA**, and then click **OK**.

Figure 4-2 Selecting a port for connection



**Step 3** Select a port (**COM1**, for example) from the **Connect using** drop-down list and click **OK**.



COM1 Properties ?

115200

Figure 4-3 Configuring communication parameters

Bits per second:

Data bits: | 8

Stop bits: 1

Flow control: None

OK.

Parity: None

Step 4 Set Bits per second to 115200 and Flow control to None, leave other parameters at their default values, and click OK.

Cancel

HyperTerminal is now successfully connected to NTA and prompts you to enter a user name and password.

Restore Defaults

Apply

**Step 5** Enter the user name and password (both are **admin**).

The language selection page is displayed, as shown in Figure 4-4.

Figure 4-4 Login to the console

```
login: admin
Password:
account use default password, Strongly recommended to change the password
Change it?(Y/N)n
NTA>
```

----End



## 4.2 Configuring the IP Address of the Management Port

After login to the console, configure the IPv4 address, subnet mask, and gateway address for the management port, as shown in Figure 4-5 and Figure 4-6. After the configuration is complete, you can log in to the web-based manager.

Figure 4-5 Configuring the IP address of the management port

```
NTA> en
NTA# net
Please select an operation:
  1) Display network settings
  Add an address

 Delete an address

  Setup default gateway
  5) Add a route
  6) Delete a route
  7) Setup domain name server
8) Set to Default
  0) Escape
  2
Please select network family:
  1) inet
2) inet6
  0) Escape
Network adapters:
  1) eth0
2) eth1
  0) Escape
Please input ip address
> 10.245.2.206
Please input netmask
> 255.255.0.0
```



Figure 4-6 Configuring the gateway address of the management port

```
NTA# net
Please select an operation:

    Display network settings
    Add an address

 Delete an address

 Setup default gateway

     Add a route
  6) Delete a route
7) Setup domain na
     Setup domain name server
  8) Set to Default
     Escape
Please select network family:
  1) inet
2) inet6
  0) Escape
  1
Please input default gateway address > 10.245.255.254
Operation success.
```

## 4.3 Logging In to the Web-based Manager



- Before login, check whether Block pop-ups is selected or JavaScript is disabled in the browser. If yes, uncheck the selection.
- You are advised to use the latest Firefox, IE 10.0, or Chrome browser and set the browser resolution to 1024x768 or higher.

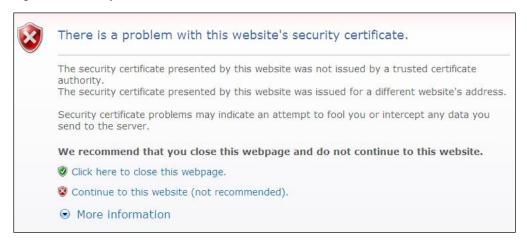
To log in to the web-based manager of NTA, perform the following steps (Microsoft Internet Explorer is used as an example):

- **Step 1** Make sure that the client communicates properly with NTA (open port 443 if the traffic needs to go through a firewall).
- **Step 2** Open the IE browser and connect to the management IP address of NTA over HTTPS, for example, enter https://10.30.2.204 in the address bar.

A security alert appears, as shown in Figure 4-7.



Figure 4-7 Security alert



**Step 3** Click **Continue to this website** (**not recommended**) to accept the channel secured by the NTA certificate.

The NTA login page appears, as shown in Figure 4-8.

Figure 4-8 Login page



- Step 4 Enter the initial user name and password (both are admin), and then click Sign In.
- **Step 5** On the **Change password** page, change the password, as shown in Figure 4-9.

After initial login, you must change the default password immediately before being able to use the system.



Figure 4-9 Changing the password



**Step 6** On the login page, enter the new password, and then click **Sign In** to log in to the web-based manager.

----End

## 4.4 Importing a License

After logging in to an NTA device, you must import a license before using it.

To import a license, perform the following steps:

**Step 1** Choose **Administration** > **License**.

Figure 4-10 License





**Step 2** Browse to the NTA license file.



To get the NTA license file, please contact technical support personnel of NSFOCUS.

#### **Step 3** Click **Upload** to import the license file.

The page after an import success is as shown in Figure 4-11.

Figure 4-11 Importing the license successfully



#### ----End

After the configuration is complete, the device is ready to use. For details, see the *NSFOCUS NTA User Guide*.



# A Default Parameters

## **A.1 Default Network Settings**

IP Address	M:192.168.1.100
Subnet Mask	255.255.255.0
Default Gateway	192.168.1.1

## **A.2 Default Administrator Accounts**

	Web Operator	Web Auditor	Console Administrator	SSH Administrator
User Name	admin	auditor	conadmin	admin
Password				

## A.3 Communication Parameters of the Console Port

Baud Rate	115200
Bits per Second	8