
NSFOCUS NTA

Installation Guide

NSFOCUS

Version: V4.5R90F00 (2017-12-01)

©2018 NSFOCUS

■ Copyright © 2017 NSFOCUS Technologies, Inc. All rights reserved.

Unless otherwise stated, **NSFOCUS Technologies, Inc.** holds the copyright for the content of this document, including but not limited to the layout, figures, photos, methods, and procedures, which are protected under the intellectual property and copyright laws. No part of this publication may be reproduced or quoted, in any form or by any means, without prior written permission of **NSFOCUS Technologies, Inc.**

Contents

Preface.....	1
1 Overview.....	3
1.1 Product Appearance.....	3
1.2 Basic Information.....	4
1.3 AC Power Supply System.....	5
1.4 LEDs.....	5
1.4.1 Power LED.....	5
1.4.2 Ethernet Interface LED.....	6
2 Preparations.....	7
2.1 Accessories Supplied with the Device.....	7
2.2 User-Provided Tools.....	8
2.3 Others.....	8
3 Installation Procedure.....	9
3.1 Installation Flowchart.....	9
3.2 Connecting to the Power Supply.....	10
3.3 Connecting to the Network.....	10
3.4 Shutting Down the Device.....	10
4 Basic Configuration.....	11
4.1 Logging In to the Console.....	11
4.2 Configuring the IP Address of the Management Port.....	14
4.3 Logging In to the Web-based Manager.....	15
4.4 Importing a License.....	18

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.
<i>Italic font</i>	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

Email: support@nsfocusglobal.com

Portal: <https://nsfocus.desk.com/>

Contacts:

- USA: +1-844-673-6287 or +1-844-NSFOCUS
- UK: +44 808 164 0673 or +44 808 164 0NSF
- Australia: +61 2 8599 0673 or +61 2 8599 0NSF
- Netherlands: +31 85 208 2673 or +31 85 208 2NSF
- Brazil: +55 13 4042 1673 or +55 13 4042 1NSF
- Japan: +81 3-4510-8673 or +81 3-4510-8NSF
- Singapore: +65 3158 3757
- Hong Kong +852 5803 2673 or +852 5803 2NSF
- Middle East: +973 1619 7607

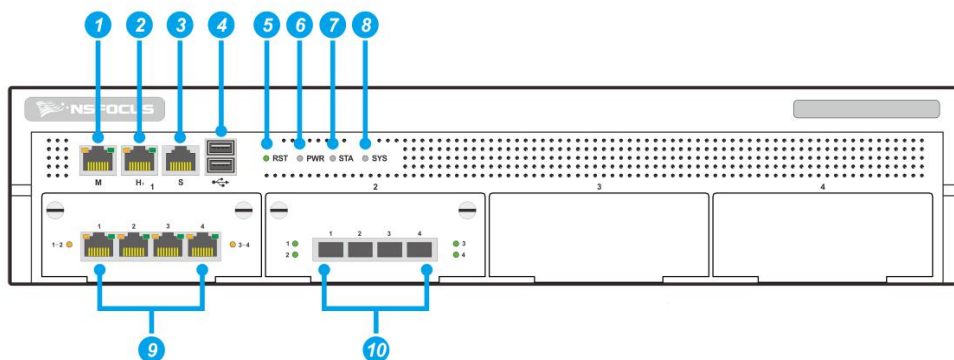
1 Overview

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.

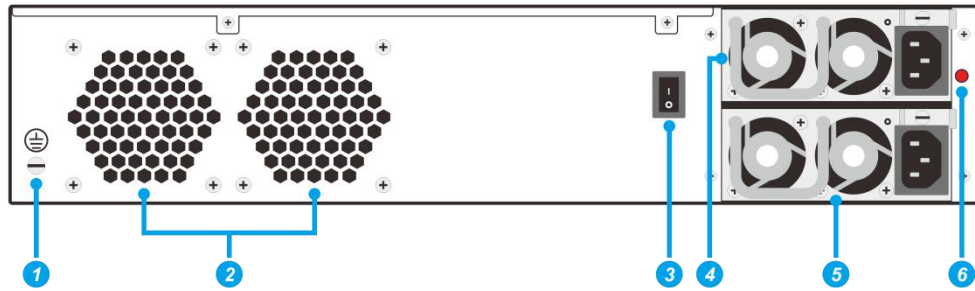
Figure 1-1 and Figure 1-2 show the front panel and rear panel of the product respectively.

Figure 1-1 Front panel of NTA



① Management port	② Management port	③ Console (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	<ul style="list-style-type: none"> • 1 x console port (RJ-45) • 2 x USB 2.0 port • 2 x management port (RJ-45) • 4 x 1000M electrical port • 4 x 1000M SFP optical port
Weight	16.6 kg
Height	88 mm
Width	432 mm
Depth	575 mm
Rack	2U
Power Supply	<ul style="list-style-type: none"> • AC input: 100 V–240 V AC • Maximum power: 350 W
Mean Time Between Failures (MTBF)	60,000 hours
Operating Temperature	0–45°C
Storage Temperature	–20°C to +65°C

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	<ul style="list-style-type: none"> • On: indicates that a link is already established. • Off: indicates that no link is established.
Yellow LED	<ul style="list-style-type: none"> • Blinking: indicates that the device is transmitting or receiving data. • Off: indicates that no data is being transmitted or received.

2 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 items, 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.

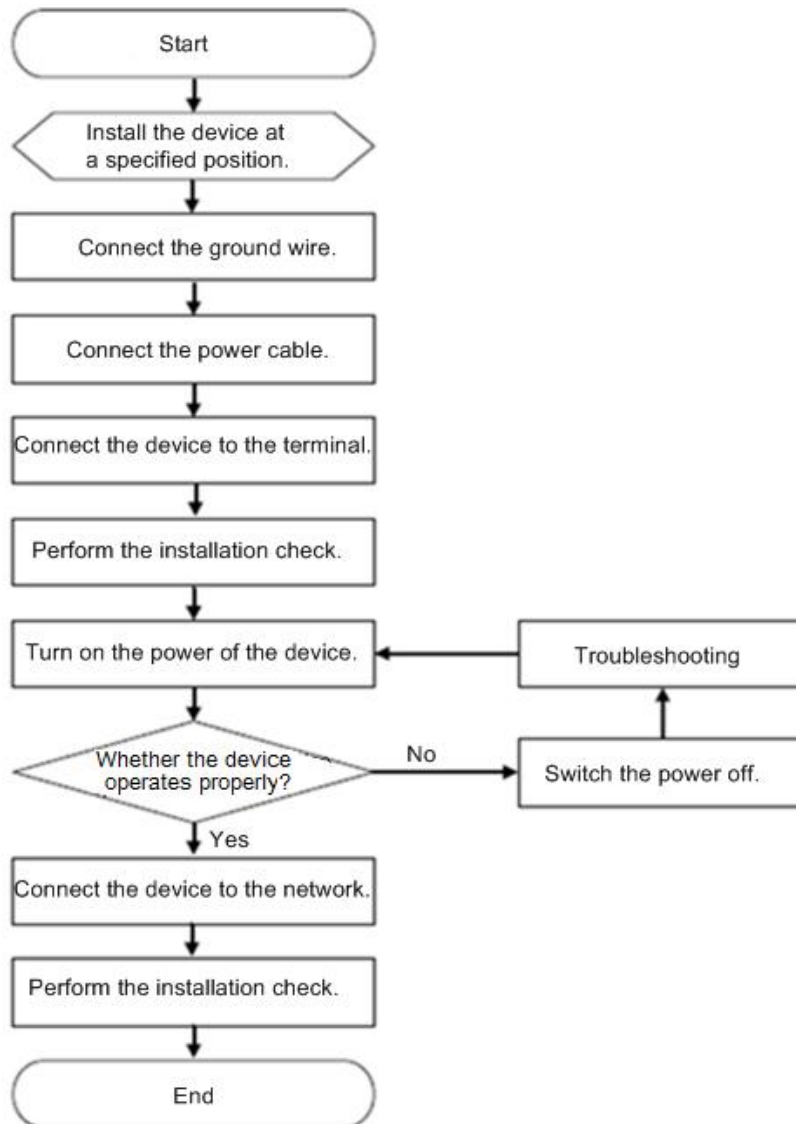
Rack Mounting

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 environment. For details on default parameters of NTA, see [appendix A Default Parameters](#).



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



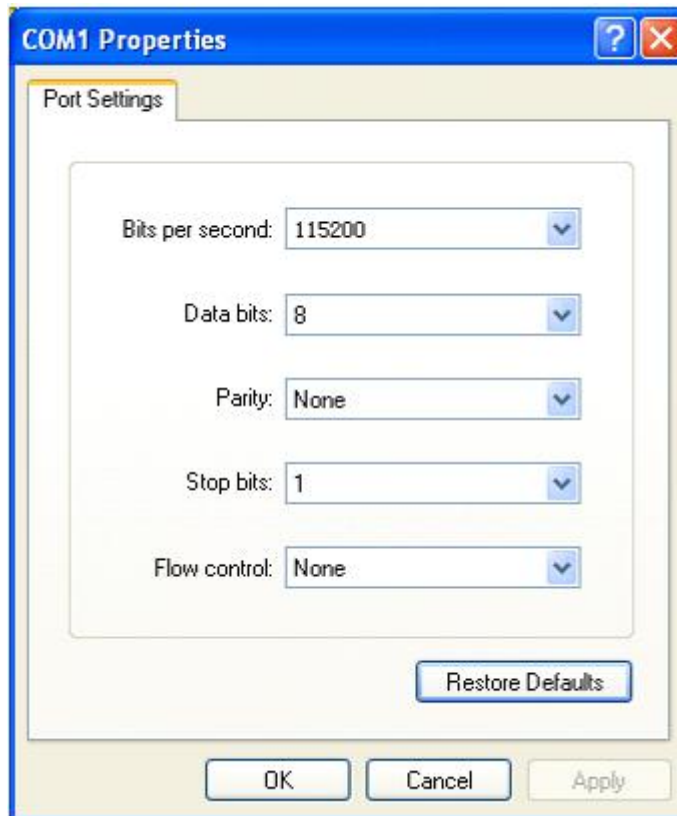
Step 2 Enter the name of the new connection in the **Name** text box, such as **NTA**, and then click **OK**.

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**.

Figure 4-3 Configuring communication parameters



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

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

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
 2) Add an address
 3) Delete an address
 4) 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
> 1
Network adapters:
 1) eth0
 2) eth1
 0) Escape
> 1
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> en
NTA# net

Please select an operation:
 1) Display network settings
 2) Add an address
 3) Delete an address
 4) Setup default gateway
 5) Add a route
 6) Delete a route
 7) Setup domain name server
 8) Set to Default
 0) Escape
> 4
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



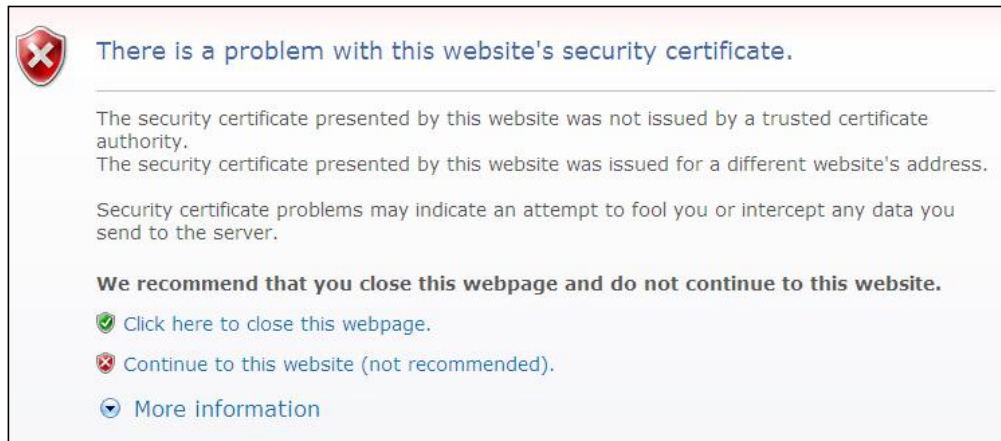
- Before login, check whether **Block pop-ups** is selected or JavaScript is disabled in the browser. If yes, uncheck the selection.
- You are advised to use the latest Firefox, IE 10.0, or Chrome browser and set the browser resolution to 1024 x 768 or higher.

For the first login 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](#).

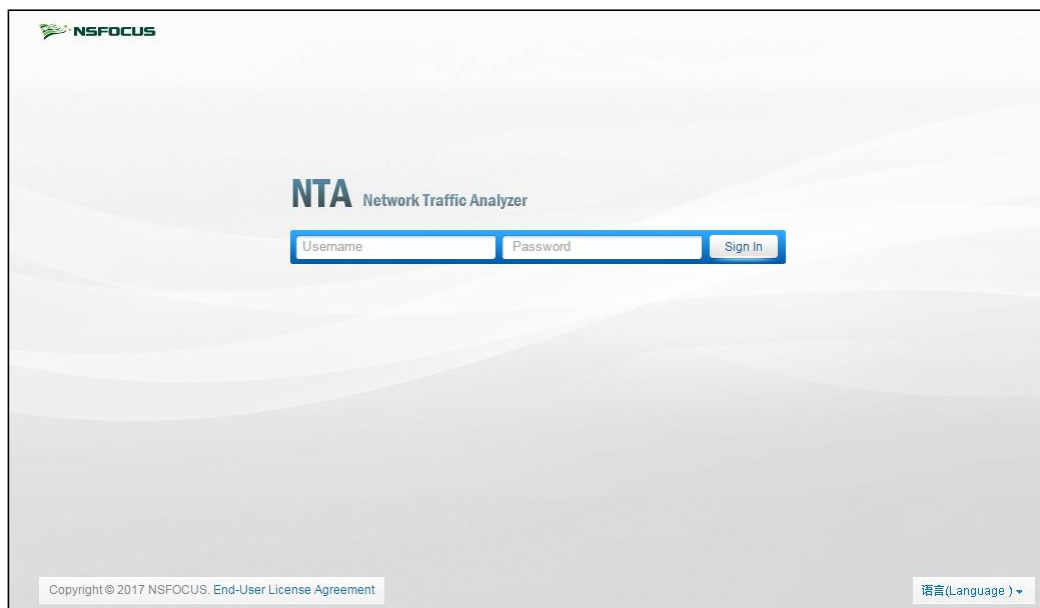
Figure 4-7 Security alert



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**.

A window shown in [Figure 4-9](#) appears, prompting you to select a UI language.



Note

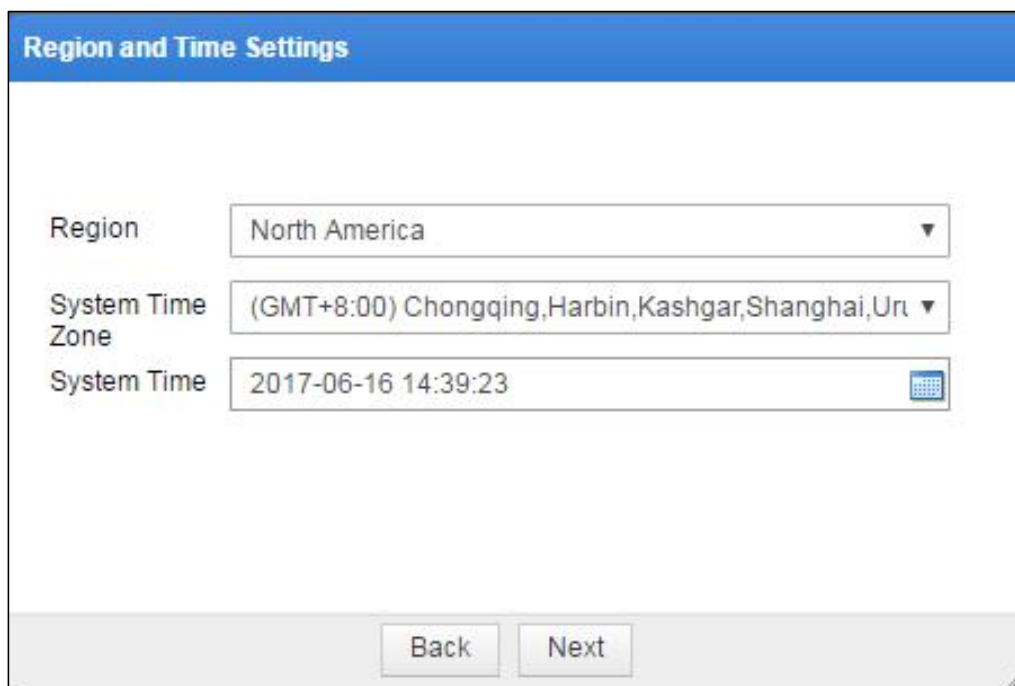
During the first login to NTA that has just been upgraded to V4.5R90F00, you need to set the locality, system time zone, and system time, but do not need to change the initial password.

Figure 4-9 Setting the UI language



Step 5 Select a language. After the system directs you to the page shown in [Figure 4-10](#), set the locality of the device, time zone, and system time.

Figure 4-10 Setting the time zone and system time

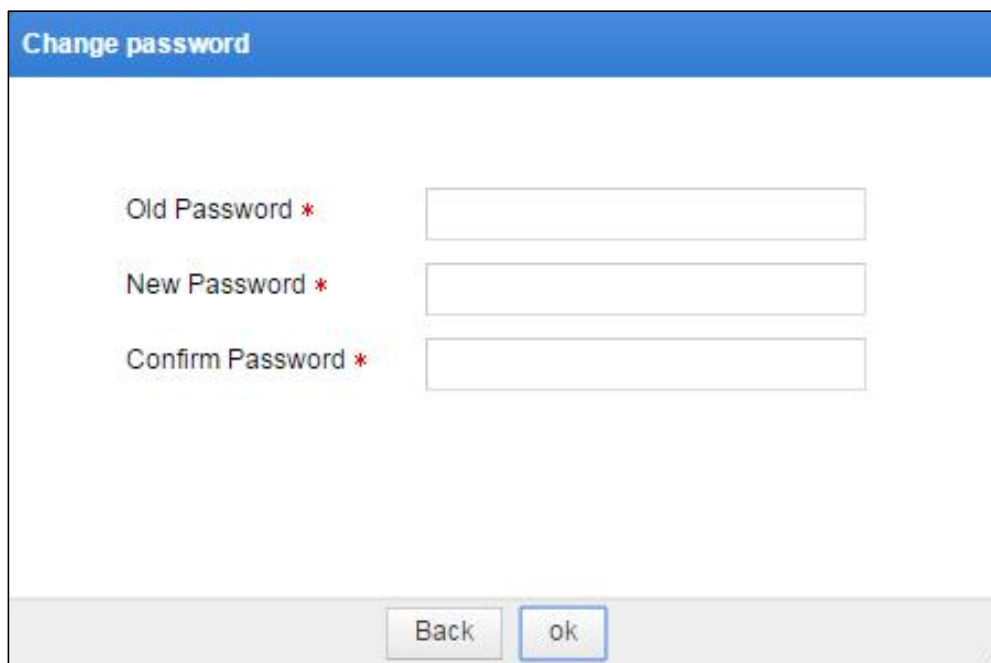


Step 6 Click Next.

The page for changing the initial password appears, as shown in [Figure 4-11](#).

The new password must be a string of no less than 8 characters and contain at least two of the following character types: English letters, digits, and special characters.

Figure 4-11 Changing the initial password

The image shows a web browser window with a title bar that says "Change password". The page has a white background with a blue header bar. Below the header, there are three text input fields. The first field is labeled "Old Password *", the second is "New Password *", and the third is "Confirm Password *". Each label is followed by a red asterisk. To the right of each label is a white rectangular input box. At the bottom of the page, there are two buttons: "Back" and "ok". The "ok" button is highlighted with a blue border.

Step 7 After changing the initial password, click **OK** to make the settings take effect.

Then you successfully log in to the web-based manager.

----End

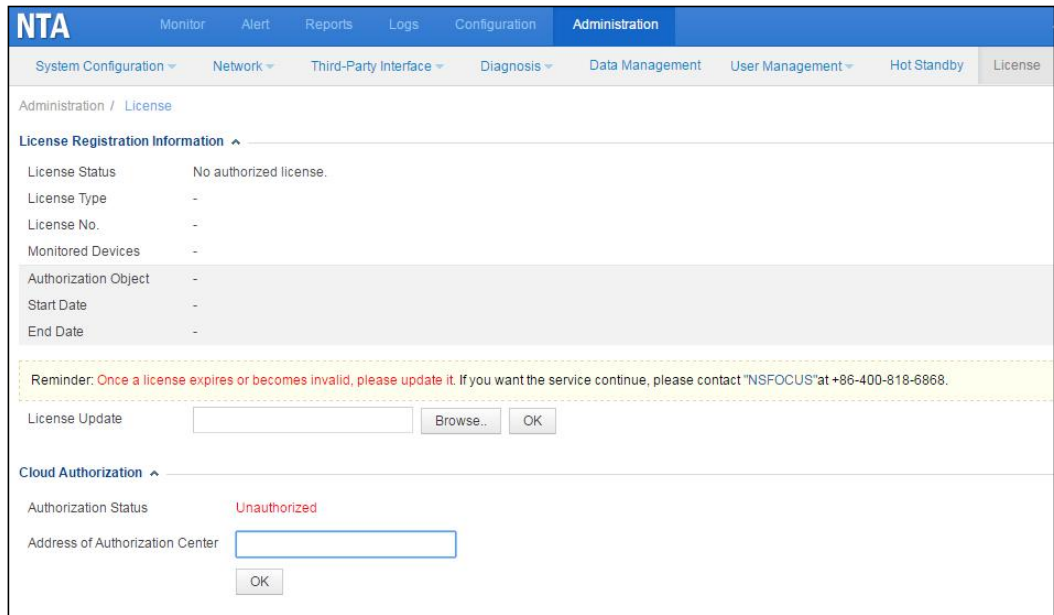
4.4 Importing a License

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


To import a license, perform the following steps on NTA:

Step 1 Choose **Administration > License**.

Figure 4-12 License page before a license is imported



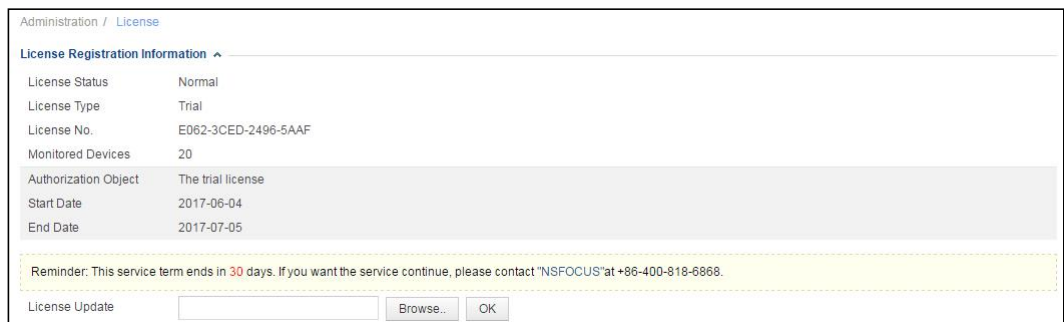
Step 2 Browse to the NTA license file.


 Note	To get the NTA license file, please contact NSFOCUS technical support.
--	--

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

The page after an import success is as shown in [Figure 4-13](#).

Figure 4-13 License page after a license is imported



 Note	Licenses for vNTA provide a new option for flow limiting. That is to say, the rate of flows going through vNTA can be limited to 10,000, 30,000, 60,000, 120,000, 180,000, or 240,000 flows per second via licenses. For details, contact NSFOCUS technical support.
--	--

---End

After the configuration is complete, the device is ready for 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

A.2.1 Web Operator

User Name	admin
Password	

A.2.2 Web Auditor

User Name	auditor
Password	

A.2.3 Console Administrator

User Name	admin
Password	

A.2.4 SSH Administrator

User Name	develop
SSH Service Port	50022

A.3 Communication Parameters of the Console Port

Baud Rate	115200
Data Bits	8