

Release Notes

Basic Information

Product Model	ADS NX3-M1600E
Software Version	V4.5R89F03
Upgrade File	update_adsm_V4.5R89F03build20170627.zip (MD5: 06f9c872dd37d1d349cb4dd715ce7f73)
Release Date	2017-07-14
How to Obtain	Contact technical support personnel of NSFOCUS.

Version Mapping

Source Software Version	<ul style="list-style-type: none"> • V4.5R89F02 • V4.5R89F02SP01 • V4.5R89F02SP02
Product Model	ADS NX3-M1600E
Managed Device Version	ADS: <ul style="list-style-type: none"> • V4.5.88.15.sp13 • V4.5R89F03 NTA: <ul style="list-style-type: none"> • V4.5.61.2.BF19 • V4.5.61.2.BF20 • V4.5.61.2.BF21 • V4.5R89F03
Client	Internet Explorer 11, Chrome, or Firefox browser
Other System or Tool	None
Documentation	NSFOCUS ADS M User Guide (V4.5R89F03)

Note:

Make sure that this version is used together with an ADS or NTA version listed in the Managed Device Version row. Otherwise, the collaboration function will be unable to work properly.

Requirement List

No.	Requirement Description
1	Access control should be optimized.
2	Reports should be able to be downloaded in PDF format.
3	Statistics of reflection alerts reported by NTA should be supported.
4	The DNS retransmission algorithm should be added for DNS Protection Algorithm .
5	ADS M should be able to manage ADS V4.5R89F03.
6	ADS M should be able to manage NTA V4.5R89F03.
7	Language selection for reports to be sent by email should be supported.
8	ADS M should adapt to ADS's IPv6 prefix length that is expanded to 1–128 bits.
9	HTTP authentication synchronization should be configured for ADS devices in a cluster.
10	Query of traffic destined for individual IP addresses in a region should be supported.
11	Configuration wizard should be available.
12	Cloud-side authentication should be provided.
13	Network diagnosis tools should be provided.
14	Vulnerabilities should be fixed by upgrading Memcache, OpenSSL, OpenSSH, and nginx.

Upgrade and Rollback Paths

ADS M can be upgraded to V4.5R89F03 from V4.5R89F02, V4.5R89F02SP01, and V4.5R89F02SP02.

Note:

After being upgraded to V4.5R89F03, ADS M cannot be rolled back to the source version.

Upgrade Procedure

Make sure that the current ADS M version is V4.5R89F02, V4.5R89F02SP01, or V4.5R89F02SP02. Otherwise, ask technical support personnel of NSFOCUS to upgrade it to V4.5R89F02, V4.5R89F02SP01, or V4.5R89F02SP02.

To perform the upgrade, follow these steps:

- Step 1** Log in to the web-based manager of ADS M.
- Step 1** Choose **Administration > Local Settings > System Upgrade**.
The **System Upgrade** page appears.
- Step 2** Click **Browse** and select the upgrade package file **update_adsm_V4.5R89F03build20170627.zip**. Then click **OK**.
- Step 3** After the upgrade package is successfully uploaded and the version number is confirmed to be correct, click **OK** to start the installation.
- Step 4** After the system informs you that the installation is complete, click **OK** to restart the system service.
- Step 5** Refresh the web-based manager. Click **About** in the upper-right corner of the manager to check the current system version.

If no message is displayed indicating that the installation is complete, please wait 3 minutes. Then the system service will automatically restart.

If **Product Version** is **V4.5R88F03** and **Build Date** is **20170627**, the upgrade succeeded. Otherwise, the upgrade failed. Please contact NSFOCUS technical support personnel.

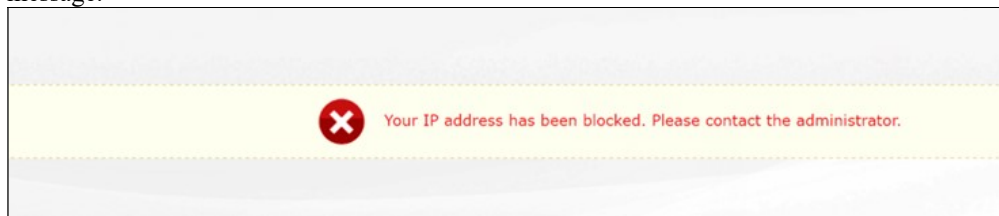
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Function Changes

1.1 Functions Incorporated from V4.5R89F02

1.1.1 Optimization of Access Control

If a user logs in to the web-based manager from a blocked IP address, the system displays the corresponding message.




1.1.2 PDF Reports Available

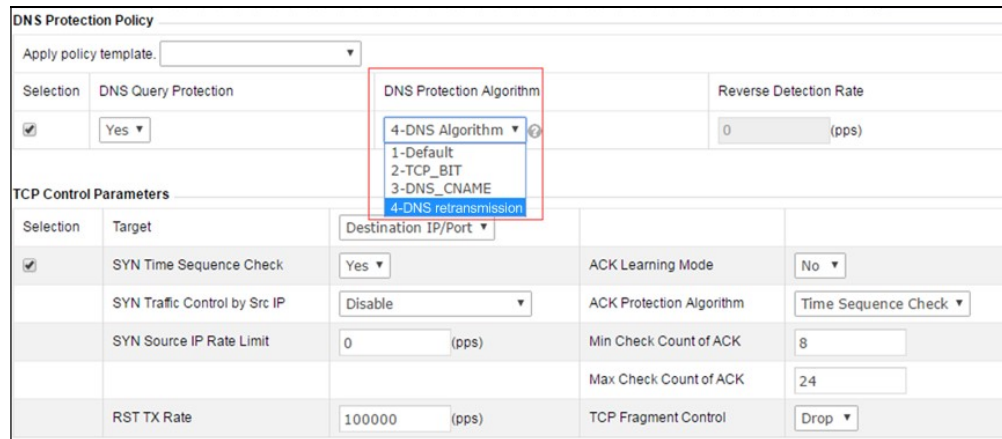
Reports can be now downloaded in PDF format. PDF reports can be downloaded on each widget and sent via email.

1.1.3 Support for Statistics of NTA Reflection Alerts

NTP REFLECTION FLOOD, SSDP REFLECTION FLOOD, SNMP REFLECTION FLOOD, and CHARGEN REFLECTION FLOOD are added as new alert types under Log > Traffic Alert Log.

1.1.4 DNS Retransmission Algorithm Added as a New DNS Protection Algorithm

Under Region > Region Management, if you click  in the Operation column of a region IP group, in step 5 for configuring policies, 4-DNS retransmission is added as a new DNS protection algorithm in the DNS Protection Policy area.

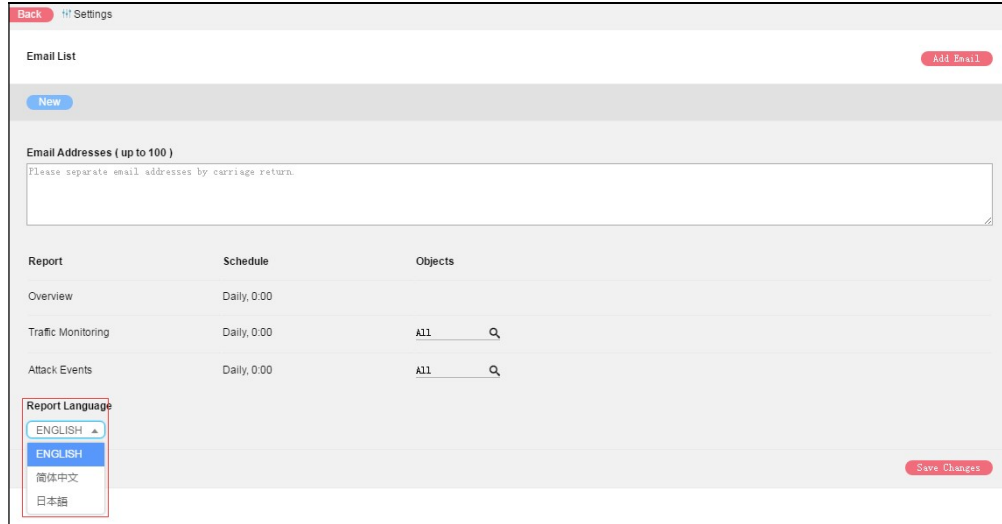


DNS Protection Policy			
Apply policy template: <input type="text"/>			
Selection	DNS Query Protection	DNS Protection Algorithm	Reverse Detection Rate
<input checked="" type="checkbox"/>	Yes ▾	4-DNS Algorithm ▾ 1-Default 2-TCP_BIT 3-DNS_CNAME 4-DNS retransmission	0 (pps)
TCP Control Parameters			
Selection	Target	Destination IP/Port ▾	
<input checked="" type="checkbox"/>	SYN Time Sequence Check	Yes ▾	ACK Learning Mode: No ▾
	SYN Traffic Control by Src IP	Disable ▾	ACK Protection Algorithm: Time Sequence Check ▾
	SYN Source IP Rate Limit	0 (pps)	Min Check Count of ACK: 8
			Max Check Count of ACK: 24
	RST TX Rate	100000 (pps)	TCP Fragment Control: Drop ▾

1.2 Functions Incorporated from V4.5R89IB02

1.2.1 Support for Language Selection for Reports to Be Sent by Email

For versions prior to V4.5R89F03, reports to be sent by email follow the default system language. Therefore, no reports in Japanese will be sent. V4.5R89F03 supports reports in Japanese and allows users to select a language for such reports. You can select different languages for the reports sent to different email addresses.



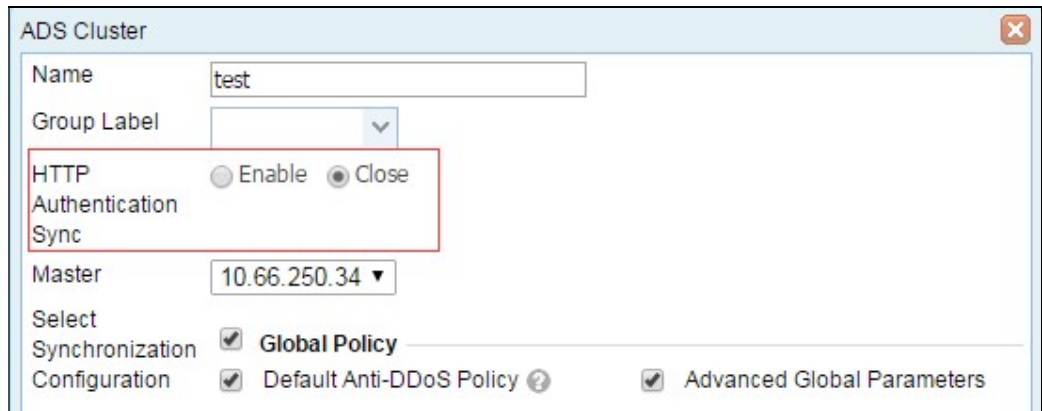
The report language can be English, Chinese, or Japanese, with the first as the default.

1.2.2 Adaptation to ADS's Expansion of IPv6 Prefix Length to 1-128 Bits

Modifications are made on ADS M to adapt to ADS's IPv6 prefix length that is expanded to 1-128. For details, see related ADS documents.

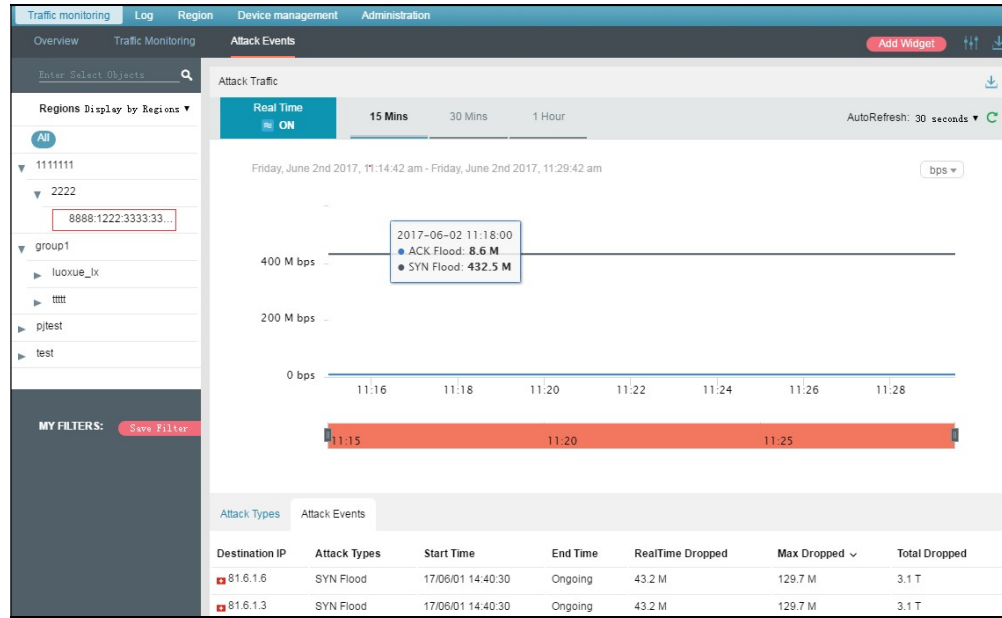
1.2.3 Support for HTTP Authentication Synchronization for ADS Devices in a Cluster

In cluster management mode, ADS M can send HTTP authentication synchronization information to ADS devices in a cluster.



1.2.4 Support for Query of Traffic Destined for Individual IP Addresses in a Region

Under **Traffic monitoring > Traffic Monitoring** or **Traffic monitoring > Attack Events**, enter an IP address in the search box in the left pane. Then related traffic information is displayed in the right pane.



1.3 New Functions in V4.5R89F03

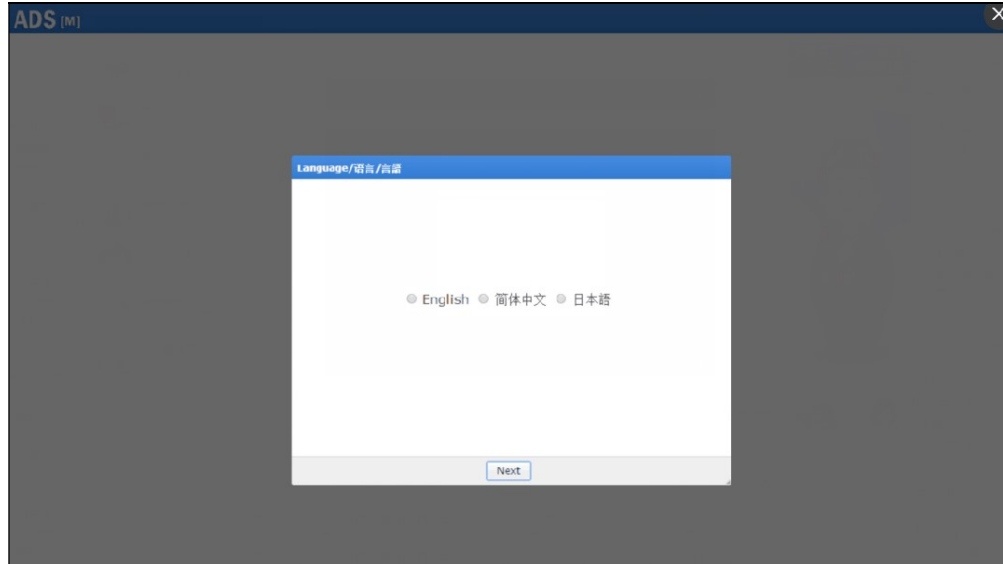
1.3.1 Configuration Wizard

When the **admin** user logs in to the web-based manager of ADS M for the first time, the configuration wizard appears. Currently, the configuration wizard is available only for the **admin** user.

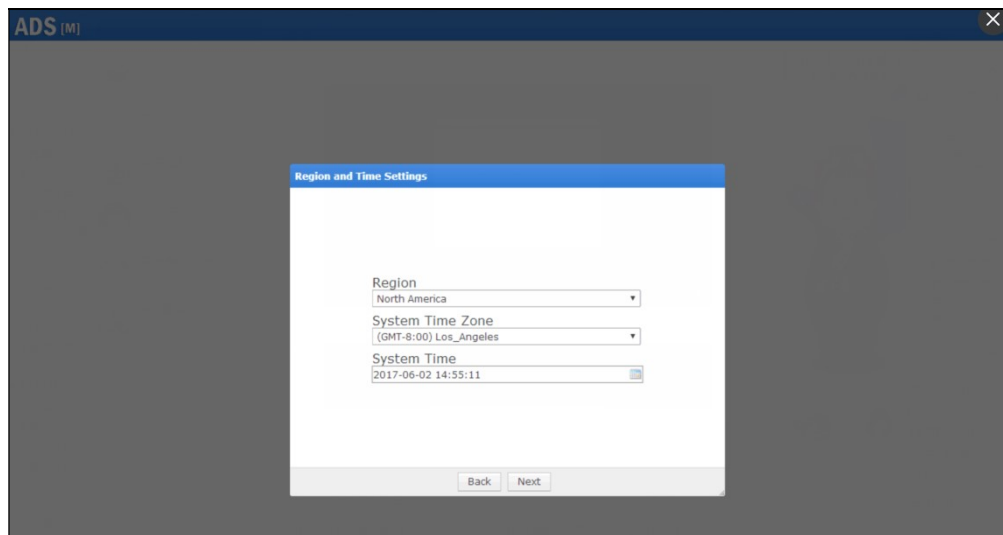
The first dialog box is for language selection. Before the configuration wizard is configured, no language is selected by default. After you select a language and click **Next**. The **Region and Time Settings** dialog box appears.

For a new ADS M device, after the region and system time configuration, you can click **Next** to change the default password to a custom one. If the ADS M device is not a new one, you can directly click **Submit** to complete the configuration wizard.

After you complete the configuration and click **Submit**, the service will be restarted before all settings are applied to the system as configured. If you refresh the page during service restart, the system may be irresponsive. In this case, please reload the page later. If you close the browser or refresh the page before the configuration is complete, the configuration wizard saves the completed settings until you finish the configuration wizard.



In the **Language** dialog box, the configured language (if any) is displayed. You can click **Next** to open the **Region and Time Settings** dialog box.



Options for **Region** include **North America**, **LATAM**, **Asia Pacific**, **EMEA**, and **Chinese mainland**. As for the configuration authentication server of ADS M VM, the Chinese mainland uses auth.api.nsfocus.com, while other areas use the international authentication server, auth.nsfocusglobal.com.

1.3.2 Cloud Authentication (only for 64-bit ADS M VM)

Compared with V4.5R89F02, changes to V4.5R89F03 include:

- Cloud authentication mode

In earlier versions, **Address of Authorization Center** must be manually typed.

The screenshot shows a configuration window titled "Cloud Authorization". It has two main fields: "Authorization Status" and "Address of Authorization Center". The "Authorization Status" field displays "Unauthorized" in red text. The "Address of Authorization Center" field contains the text "auth.api.nsfocus.com". A "Save" button is located at the bottom right of the form.

In V4.5R89F03, you can select an address for **Address of Authorization Center**.

The screenshot shows the same "Cloud Authorization" configuration window. The "Authorization Status" field now displays "Authorized". The "Address of Authorization Center" field is a dropdown menu with three options: "auth.nsfocusglobal.com", "auth.api.nsfocus.com", and "auth.nsfocusglobal.com". The second option, "auth.nsfocusglobal.com", is currently selected and highlighted in blue.

- Authentication process and related parameter configuration
 - The device side sends an online authentication request to the authentication server regularly. If the authentication succeeds, the default validity period of authentication is one day and then scheduled authentication starts. If the authentication fails, **Authorization Status** is displayed as **Unauthorized** and no further authentication will be performed. However, you can trigger instant authentication by setting **Address of Authorization Center** and then clicking **Save**.
 - In the case of an authentication timeout, the timeout detection cycle is one day by default.
- Authentication results

Results of scheduled authentication can be as follows:

 - Authentication success

After an authentication success, the device will be authenticated again in the next authentication cycle (one day later).

The authentication success should be recorded in system logs.
 - Authentication failure

After the authentication fails, **Authorization Status** is displayed as **Unauthorized** and authentication is terminated. In this case, you can manually trigger instant authentication.

The authentication failure should be recorded in system logs.
 - Authentication timeout

After the authentication times out, the timeout period will be recorded.

(a) If the timeout is 3–6 days, the device becomes offline and records the authentication timeout in system logs.

(b) If the timeout is no shorter than 7 days, the device becomes unauthorized and records the authentication failure in system logs.

In the case of an authentication timeout, re-authentication will be performed after each timeout detection cycle (one day). Scheduled authentication starts regardless of whether the authentication succeeds or fails.

- Function limitations of ADS M VM
 - Offline status

ADS M VM cannot be upgraded.

Other functions are available.

The system prompts a message indicating the offline status, its cause, and time remaining before the device becomes unauthorized.
 - Unauthorized status

The engine exits the protected status.

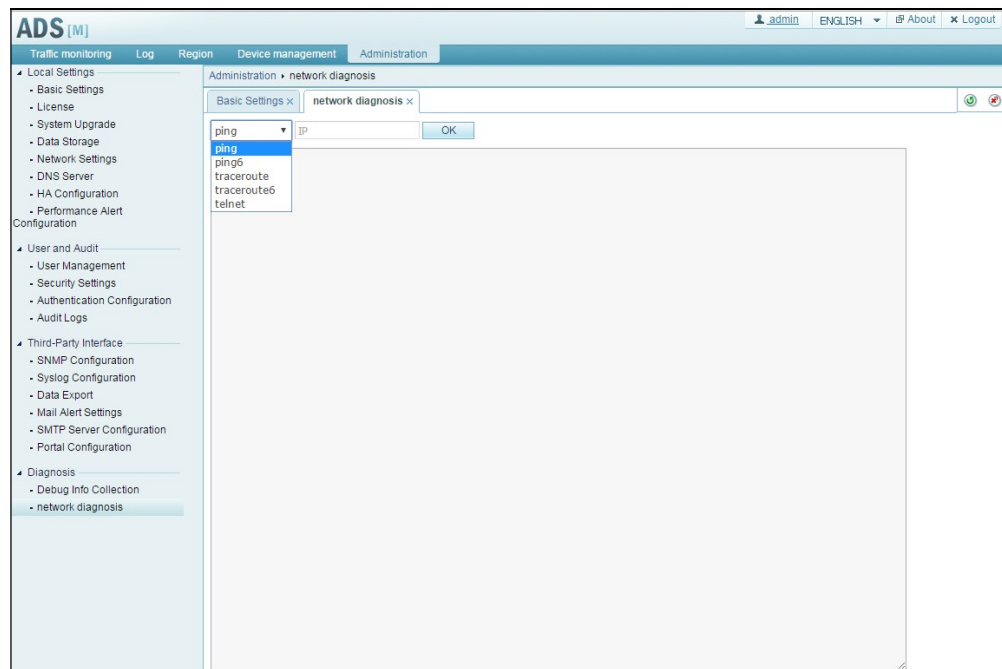
You cannot create or edit protection objects and protection policies.

The system prompts a message indicating that the device is unauthorized and the cause.

Other limitations are the same as that of the offline status.

1.3.3 Network Diagnosis Tools

Under **Administration > Diagnosis > Network Diagnosis**, such diagnosis tools as ping, traceroute, and telnet are added.



1.3.4 Incorporated Functions and Bugs

- Manual traffic diversion rules can be imported in bulk.
- The login password is encrypted.
- In some cases, the delay to send emails is longer than 30 seconds.
- In the case of large amounts of data, ADS M fails to restore data.
- When ADS M collaborates with NTA, editing a region under **Device management** displays a JavaScript error message and clicking **Next** displays no further page.