

NGS 3H / 5H Version 9.0.2.3



Available firmware

9.0.2.2 (a41dd178b11e80b09f495410a7d45c05a1e450ab)



Supported hardware models

The HX 9.0.2.3 release supports the following models.

HASH

md5: 986a92fee59f40b6118ed23e10c39258

sha1: b2c1fd6683506620299f9c0e0b866c0bacfd82aa

sha256:

4986ac2cbc0eedbb40db0d285d72aa05719ef2a9e85e4211c389a1f524a6f58e



Installation instruction

- 1. After the update is installed, the system will automatically restart twice. Please wait 3-5 minutes.
- 2. Updated log: 2023-09-14 13:38:35 ==> 9.0.2.2 to 9.0.2.3

Upgrade Notes

%Configuration

Basic Setting→

(01) Adds: "LAN Acceleration Mode" to [General Setting].

(02) Adds: "Control Bridge Vlan packets" to [General Setting].

(03) Adds: "Security" (TLSv1.1, TLSv1.2, and TLSv1.3 items) to

[Administrative Access > Administrative Access].

Backup & Restore→

(01) Adds: "Keep SSL Certification" to [Reset Default].

(02) Adjusts to keep the license status of 【APP Control】 and 【URL Filter】 after

executing a system recovery.





<u>Notification</u>→

Adds: "Abnormal System Shutdown", "Virus Engine Abnormal Notification", and "DHCP Flood Attack Notification" to [Notification Items]



AP Management→

Supports the following models:

Zyxel: NWA90-AX, NWA210-AX, and WAX510D.

Netgear: WAC510.

<u>Signature Update</u>→

(01) Adjusts to allow importing update files without license period restriction.

(02) Adjusts buttons and texts size properly on UI.

SSL Certificate→

Adds: "Term" to [Regenerate default certificates].

%Network%

Zone Setting→

Adds: "IPv6 Settings" to [Default Gateway].

<u>Route</u>→

Adjusts that "Line Detection Method" is chosen NONE, invalid settings will be hidden automatically at [Designated Gateway > Add].

PPPoE→

(01) Adds: "AUTO" option to detect MTU values automatically at [Add].

(02) Adds: the "Remote Address" option to "Detected IP Address" at [PPoE Alive Detection].

WWAN→

(01) Supports "APAL Dongle".

(02) Adds: SYN, ICMP, UDP, Port Scan, and Sandstorm to [Firewall Protection Items].



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<u>Policy</u>→

[Security Policy]

- (01) Adds: "Define Search" to [Advance > Search Rule].
- (02) Adds: notifications to different subnets at [Source Interface and Source > Add].
- (03) Adjusts that the set VLAN can display interface settings without being activated at [Source Interface > Add].
- (04) Adds: IP options to [IPv6] [Source/Destination].
- (05) Adjusts that policies are applied to "Service Group", detailed info can be
 - scanned via tip at [Outgoing/Advance].
- (06) Adjusts "Mapped IP", "Mapped Port" and "Server Load Balance to match with IP in the IPSec segments at [Incoming/Advance].
- (07) Adds: "Source IP Address" settings to [Search Rule > Define Search].
- (08) Adjusts to display a tip explaining while activating "Application Control" and "URL Access Control" at a time will trigger mutual Affection.

IPSec Policy→

Adds: "Max. Concurrent Sessions for Each Source IP Address" to [Policy > Add].

<u>Object</u>→

[IP Address]

- (01) Adjusts "Define IP" from judging subnet masks to matching clustering at [IP Address > Assist].
- (02) Adjusts not to display IP address options in the 169.254.0.0/16 address range at 【IP Address > Assist】.
- (03) Adjusts "Define IP" from judging subnet masks to matching clustering at 【IP Address Gorup > Search】.

QoS→

Optimizes programs to increase packet processing speed.

<u>Application Control</u>→

Adjusts unlicensed module can be transformed into the new module and 14-day trial can be activated at **[**Objects > Application Control >











Transform].

<u>URL Filter</u>→

Adds: "Upload Extension Blacklist" and "Download Extension Blacklist" that can control over files upload/download via webpages to 【BW List Setting > Add > Define Black/White List】.

<u>Firewall Protection</u>→

 Optimizes judgement of "Block Ping of Death Attack" at [Firewall Protection > Other items].

<u>Authentication</u>→

- (01) Adds: "Allow connection" that can limit online authentication pages to [Auth Setting].
- (02) Adds: 2-Step Verification to
 [POP3, IMAP, RADIUS User > Server Lists > Add].
- (03) Adds: 2-Step Verification to [AD User].
- (04) Adds: "all users/selected users" to [User Group > Add].
- (05) Adjusts to split search results into several pages at 【Local User > Search】.
- (06) Adjusts to allow using comma(,) and semicolon(:) in password at 【Local User > Add 】.
- (07) Adjusts to unify tips for checking column format of POP3, IMAP, RADIUS User setting at 【POP3, IMAP, RADIUS User】.
- (08) Adds: to display "usage time" after a successful login.

%Service

DHCP→

- (01) Syncs UI and self-define IP settings in "Default Gateway" at [DHCP Server > DHCP Server Setting].
- (02) Adds: "DHCP Flood Attack" to [DHCP Black MAC].
- (03) Optimized page load speed of the DHCP User List.
- (04) Adjusts tip suggestion about undistributed IP quantity at **[**DHCP User List**]**.
- (05) Adjusts IP segments which can be distributed at [DHCP Server > Interface > IP Address].

















%SNMP%

- (01) Adds: "Visit Control" and "Restrict Source IP Access" settings.
- (02) Adjusts SNMPv1/v2.
- (03) Replaces "Service Status & Running After Reboot" option with "SNMP Agent: Enable".
- (04) Removes partially unpublished message items.



%Anti-Virus Engine

- (01) Supports updating virus signatures database offline using USB flash drives at 【ClamAV/Kaspersky Engine】 (UI will be displayed only when USB flash drive and update files are properly recognized.).
- (02) Adds: settings to [Kaspersky Engine].
- (03) Updates ClamAV version.
- (04) Optimizes ClamAV memory consumption at [ClamAV Engine].

%WEB Service

- (01) Adds: Term settings to

 [Encryption Connection Setting > Re-generate Certificate] .
- (02) Updates Mac address database of iOS devices.

%High Availability**%**

- (01) Adds: "Detection frequency" and "Auxiliary detection interface."
- (02) Adds: "Service status", "Pause switching and data synchronization", "Current detection status", and "Recent data synchronization time."
- (03) Fixes system upgrade can still be available when HA is not disabled.

%Remote Syslog%

- (01) Adds: App ID (CEF: cn1=%u; General: APP=%u).
- (02) Adjusts to keep "Log Item" settings when activation check box is not



checked at 【Remote Connect Setup】.

(03) Adds: "Intranet Protection Log" to [Log item > Advanced Protection]

(CEF: SharetechFunction; General: FUNCTION).



%Advanced Protection

<u>Anomaly IP Analysis</u>→

(01) Adjust the default value into 10 (minutes) at [Block Anomaly > Action > Block].

(02) Adjust the setting range 1-9999 (Kbps) at [Block Anomaly > Action > Bandwidth Limit].



<u>Switch</u>→

Removes "Model: Juniper-ex2200" because the model does not support "SNMP Write" at [Switch Setup > Add > Switch Model].

<u>Intranet Protection</u>→

- (01) Adjusts to take the info of 【Object > IP Address】 into reference at 【IP Collision Log】.
- (02) Adds: tip suggestion for Mac address to
 [IP Collision Log > Status > Exceed the threshold/Detected the same IP].
- (03) Adds: "Event" to the table at [IP Collision Log].
- (04) Optimizes packets processing speed.

※Mail Security ※

Filter & Log→

- (01) Adds tips to each items explaining about communication ports.
- (02) Adds: "Enable POP3" to [Retrieve Mail Anti-Virus].
- (03) Adds: [SSL Certification Set] setting.

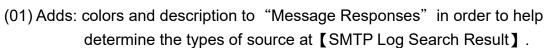
Mail Log→

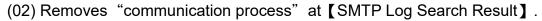
Adds: colors and description to "Message Responses" in order to help determine the types of source at [Today Mail/Mail Search

Result].

SMTP Log→









%VPN

- (01) Adds: a unified search interface to [PPTP Server Log/PPTP Client Log/L2TP Log].
- (02) Fixes failure to delete accounts in VPN log.



IPSec Tunnel→

- (01) Supports endpoint segments for 0.0.0.0/0 at [Enable Routing]
- (02) Adds: a loading icon while importing IPSec policies.



- (01) Adds: "Accounts Expiration Date" to [PPTP Account List > Add].
- (02) Sorts the accounts list in alphabetical order at [PPTP Account List].
- (03) Adjusts to hide "password" and adds "new password" item that allows editing at [PPTP Account List].
- (04) Adds: to display accounts in tip suggestion during execution at [PPTP Account List > Delete].
- (05) Adjusts interface at [PPTP Account List > Import].
- (06) Adds: "years" to TIME at [PPTP Server Log].

PPTP Client→

- (01) Sorts the accounts list in alphabetical order at [PPTP Client List].
- (02) Adds: to display accounts in tip suggestion during execution at [PPTP Client List > Delete].

SSL VPN Server→

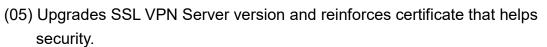
- (01) Adds: "Software Download Page Setting" that allows to define user download pages to the tab bar.
- (02) Adds: "2-Step Verification Validity Extension" with a tip suggestion to [SSL VPN Setup].
- (03) Adds: "Re-generate Certificate" button to [SSL VPN Setup > Certificate Message] .
- (04) Adds: "Certificate Message" with a tip suggestion to [SSL VPN Setup].











- (06) Supports 2-Step verification to sslvpn-gui (PC client) v1.5.0.6
- (07) Adjusts to disable VPN service after applying a factory reset.

(01) Adds: "Account Expiration Date" to [Account List > Add].

- (02) Sorts the Account List in order.
- (03) Adjusts to hide "password" and adds "new password" item that allows editing at [Account List].
- (04) Adds: to display accounts in tip suggestion during execution at [Account List > Delete].
- (05) Adjusts interface at [Account List > Import].

%Tools%

L2TP→

Connection Test→

Adjusts the display of "IP Tunnel" at [Ping > Source IP].

Capture Packet→

- (01) Adjusts to select the single port item in bride mode at[Schedule List > Add].
- (02) Adjusts file names in chronological order at [Schedule List > Log].
- (03) Adds file size units like Kbytes & Mbytes to [Schedule List/Completed List].

%Status

System Status→

- (01) Adjusts that WiFi bridge mode does not affect the display in [WWAN User List].
- (02) Adds: "SSID", "signals", "Rx Bytes" and "Tx Bytes" to [WWAN User List].

Flow Analysis→

Optimizes "export" performance at [Flow Rank Search Quota].

Dashboard→













- (01) Adds: "report language options".
- (02) Adjust to include logs that are being searched.









%Log%

System Operation→

- (01) Adjusts to record importing action at【Object > Authentication > Local User】.
- (02) Adds: the Wizard operation log.

%Others

$UI \rightarrow$

- (01) Adds an alert message about "database restore failed" at 【Homepage】.
- (02) Adjusts that no pop up alert message will be displayed after the setup wizard has been run at [Wizard].
- (03) Unifies display interface.
- (04) Adjusts to allow copy & paste and adds format judgement at [2-Step Verification].
- (05) Adjusts not to generate operation log and file download when executing an export that has no data.
- (06) Adjusts some English interface texts.
- (07) Disables autofill password.
- (08) Adjusts some factory default values.

【Configuration > Basic Setting > Login Failure Block Settings】

Temporarily

block when login failed more than: 5 (times)

[Configuration > Basic Setting > Login Failure Block Settings] IP

blocking

period: 5 (minutes)

【Configuration > Basic Setting > DNS > DNS Server 1/2】: 8.8.8.8 / 1.1.1.1.

[Configuration > Signature Update > Auto Update]: Default ON

[Configuration > number of items to be displayed]: Default 30 items

[Network > Interface > Visit Control > SNMP]: Default OFF



【Object > Firewall Protection > UDP Attack Detection Setting】: Allow maximum flow 10000 Packet/Second(s)

[Service > DHCP > Primary/Secondary DNS]: 8.8.8.8 / 1.1.1.1.

[Service > Anti-Virus Engine > ClamAV]: Default OFF

[VPN > SSLVPN Server > DNS Server 1/2]: 8.8.8.8 / 1.1.1.1.

<u>System</u>→

- (01) Optimizes system security and adjusts connection requests and restriction.
- (02) Optimizes database performance and recovery procedure.
- (03) Updates area IP geolocation database.
- (04) Upgrades jQuery UI versions.











2023/10

