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## Internal Release Note

FIRMWARE VERSION 2.00.0Z .....	4
FIRMWARE VERSION 2.00.0Y .....	4
FIRMWARE VERSION 2.00.0X .....	4
FIRMWARE VERSION 2.00.0W .....	5
FIRMWARE VERSION 2.00.0V .....	5
FIRMWARE VERSION 2.00.0U .....	5
FIRMWARE VERSION 2.00.0T .....	6
FIRMWARE VERSION 2.00.0S .....	7
FIRMWARE VERSION 2.00.0R .....	7
FIRMWARE VERSION 2.00.0Q .....	7
FIRMWARE VERSION 2.00.0P .....	7
FIRMWARE VERSION 2.00.0O .....	8
FIRMWARE VERSION 2.00.0N .....	8
FIRMWARE VERSION 2.00.0M .....	9
FIRMWARE VERSION 2.00.0L .....	9
FIRMWARE VERSION 2.00.0K .....	9
FIRMWARE VERSION 2.00.0J .....	9
FIRMWARE VERSION 2.00.0I .....	10
FIRMWARE VERSION 2.00.0H .....	10
FIRMWARE VERSION 2.00.0G .....	11
FIRMWARE VERSION 2.00.0F .....	11
FIRMWARE VERSION 2.00.0E .....	11
FIRMWARE VERSION 2.00.0D .....	12



FIRMWARE VERSION 2.00.0C.....	12
FIRMWARE VERSION 2.00.0A .....	12
FIRMWARE VERSION 2.00.09 .....	13
FIRMWARE VERSION 2.00.08 .....	13
FIRMWARE VERSION 2.00.07 .....	13
FIRMWARE VERSION 2.00.06 .....	14
FIRMWARE VERSION 2.00.05 .....	14
FIRMWARE VERSION 2.00.04 .....	15
FIRMWARE VERSION 2.00.03 .....	15
FIRMWARE VERSION 2.00.02 .....	16
FIRMWARE VERSION 2.00.01 .....	16
FIRMWARE VERSION 2.00.00 .....	17
FIRMWARE VERSION 1.ZZ.1B.....	17
FIRMWARE VERSION 1.ZZ.1A.....	17
FIRMWARE VERSION 1.ZZ.19 .....	17
FIRMWARE VERSION 1.ZZ.18 .....	18
FIRMWARE VERSION 1.ZZ.17 .....	18
FIRMWARE VERSION 1.ZZ.16 .....	18
FIRMWARE VERSION 1.ZZ.15 .....	19
FIRMWARE VERSION 1.ZZ.14 .....	19
FIRMWARE VERSION 1.ZZ.13 .....	19
FIRMWARE VERSION 1.ZZ.12 .....	20
FIRMWARE VERSION 1.ZZ.11.....	20
FIRMWARE VERSION 1.ZZ.10 .....	20
FIRMWARE VERSION 1.ZZ.0Z.....	21
FIRMWARE VERSION 1.ZZ.0Y.....	21
FIRMWARE VERSION 1.ZZ.0X.....	22
FIRMWARE VERSION 1.ZZ.0W.....	22
FIRMWARE VERSION 1.ZZ.0V.....	22



FIRMWARE VERSION 1.ZZ.0U.....	23
FIRMWARE VERSION 1.ZZ.0T.....	23
FIRMWARE VERSION 1.ZZ.0S.....	24
FIRMWARE VERSION 1.ZZ.0R.....	25
FIRMWARE VERSION 1.ZZ.0P.....	25
FIRMWARE VERSION 1.ZZ.0O.....	26
FIRMWARE VERSION 1.ZZ.0N.....	27
FIRMWARE VERSION 1.ZZ.0M.....	27
FIRMWARE VERSION 1.ZZ.0L.....	28
FIRMWARE VERSION 1.ZZ.0I.....	28
FIRMWARE VERSION 1.ZZ.0H.....	28
FIRMWARE VERSION 1.ZZ.0G.....	29
FIRMWARE VERSION 1.ZZ.0F.....	29
FIRMWARE VERSION 1.ZZ.0E.....	29
FIRMWARE VERSION 1.ZZ.0D.....	29
FIRMWARE VERSION 1.ZZ.0C.....	30
FIRMWARE VERSION 1.ZZ.0B.....	30
FIRMWARE VERSION 1.ZZ.0A.....	30
FIRMWARE VERSION 1.ZZ.09.....	30
FIRMWARE VERSION 1.ZZ.08.....	31
FIRMWARE VERSION 1.ZZ.07.....	31
FIRMWARE VERSION 1.ZZ.06.....	31
FIRMWARE VERSION 1.ZZ.05.....	32
FIRMWARE VERSION 1.ZZ.04.....	32
FIRMWARE VERSION 1.ZZ.03.....	32
FIRMWARE VERSION 1.ZZ.02.....	33
FIRMWARE VERSION 1.ZZ.01.....	33
FIRMWARE VERSION 1.ZZ.00.....	33

## Firmware Version 2.00.0Z

Date: 2022/05/10

New Feature / System Release	Description
N/A	N/A
Update	Description
System	When system get IPv6 address from DHCPv6 Server or RADVD, it will cause system(util) memory size continue to increase, and if system free memory not enough then device will auto reboot for recover.
System / IPv6	Device IPv6 address disable and IGMP enable, then cannot forward IPv6 packets from each ports.

## Firmware Version 2.00.0Y

Date: 2022/05/04

New Feature / System Release	Description
N/A	N/A
Update	Description
System	After enabled IP Source Binding, every time try get/set OID or polling via SNMP, it will cause system(snmpd) memory size continue to increase, and if system free memory not enough then device will auto reboot for recover.
IP Source Binding / SNMP	After enabled IP Source Binding, device cannot response SNMP server. (e.g. get/set OIDs)
IP Source Binding / SSH	After enabled IP Source Binding, cannot login device via SSH.

## Firmware Version 2.00.0X

Date: 2022/04/26

New Feature / System Release	Description
N/A	N/A
Update	Description
Network Configuration / IPv6	IPv6 current status display information inconsistent in all UI (WEB/CLI/SNMP)

## Firmware Version 2.00.0W

Date: 2022/04/21

New Feature / System Release	Description
N/A	N/A
Update	Description
System	When execute network diagnosis with DHCPv4 or DHCPv6 mode and via CLI, then will cause system open some file but without close, and when accumulated to a certain files number, system will be crash. Note: After system crashed, you cannot do anything(e.g. Change setting, software reboot, save configure, firmware upgrade, restore configuration, reset to factory default...etc.), please to power off/on for recover.
Syslog	Close "Network Diagnosis" system message when enabled syslog function.
Network Diagnosis / IPTV	During execute "IPTV diagnosis bandwidth" cannot stop diagnosis by using "ctrl + c" via CLI.

## Firmware Version 2.00.0V

Date: 2022/04/19

New Feature / System Release	Description
N/A	N/A
Update	Description
SNMP	Device IPv4 set as DHCP mode and enabled ntp/syslog function, then system sometimes cannot send warm/cold start trap.
Syslog	Close "SSH" system message when enabled syslog function.

## Firmware Version 2.00.0U

Date: 2022/04/18

New Feature / System Release	Description
N/A	N/A
Update	Description



System / Restore Configuration	<p>Use different operator system to editor and save as configure file, then configure file newline format will be different:</p> <p>MAC: "\r"</p> <p>Linux: "\n" (Device default format)</p> <p>Windows: "\r\n"</p> <p>After restored configuration file of "\r" newline format, system DHCP process will be dead and cannot send DHCP packets anymore, even do reboot still not useful, if need to recover it, then only can do factory default.</p> <p>Solution:</p> <ol style="list-style-type: none"> <li>1. Block system to restore and update configuration file of "\r" newline format.</li> <li>2. Can restore configuration file of "\r\n" newline format, but after device reboot done, system will auto switch the configuration file newline format to "\n" for backup configure use. (Avoid old firmware to restore not "\n" newline format and happen unknown issue)</li> </ol>
System	<p>When system without get IPv4 address, it will open some file but without close, and when accumulated to a certain files number(around 2 hours), system will be crash.</p> <p>Note: After system crashed, you cannot do anything(e.g. Change setting, software reboot, save configure, firmware upgrade, restore configuration, reset to factory default...etc.), please to power off/on for recover.</p>
System	<p>When system without get IPv4 address and enabled NTP function, every interval time arrives will add same one ntp process. It will cause system memory leak, and until free memory not enough then system will auto-reboot for recover(around 1 half day or more).</p>
Telnet/SSH	<p>When switch Telnet service (telnet/ssh/disable), it will random happen telnet or ssh service stuck and cannot use anymore.</p>
SNMP	<p>Cannot send all SNMP trap.</p>

## Firmware Version 2.00.0T

Date: 2022/03/03

New Feature / System Release	Description
System	Support new hardware "HES-3106B-RTL8231(A04)".
Update	Description



SNMP	Modify the value of public OID 1.3.6.1.2.1.2.2.1.2 (ifTable / ifDescr) to display Port number instead of Copper or Fiber. (E.g. Port1, Port2, Port3...etc.)
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## Firmware Version 2.00.0S

Date: 2022/01/04

New Feature / System Release	Description
N/A	N/A
Update	Description
System	Improve CPU loading. (CPU loading often close to 100% before)

## Firmware Version 2.00.0R

Date: 2021/12/06

New Feature / System Release	Description
N/A	N/A
Update	Description
EEE	Fixed EEE will cause link unstable issue. PS. Modify default value of EEE from enable to disable.

## Firmware Version 2.00.0Q

Date: 2021/11/30

New Feature / System Release	Description
N/A	N/A
Update	Description
Network Diagnosis	When device without has default gateway address, it will cause cannot do network diagnosis tests.

## Firmware Version 2.00.0P

Date: 2021/11/29

New Feature / System Release	Description
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N/A	N/A
<b>Update</b>	<b>Description</b>
Network Diagnosis / IPTV	When finished IPTV diagnosis, diagnosis interface will send IGMP leave with incorrect stream IP address.
Network Diagnosis	After created diagnosis interface, related source information of send out packets will confused. (e.g. source IP address, source MAC address...etc.)

## Firmware Version 2.00.00

Date: 2021/10/22

<b>New Feature / System Release</b>	<b>Description</b>
N/A	N/A
<b>Update</b>	<b>Description</b>
Network Diagnosis / IPTV	When use WEB method to do iptv mpeg-loss diagnosis, after diagnosis done and change to CLI method to do iptv mpeg-loss again, then "Network Diagnosis" function will stuck.
Network Diagnosis / IPTV	When use CLI method to do iptv mpeg-loss diagnosis with over 5 mins (e.g. 6, 10, 180 mins), after test done and press any key, the CLI session will auto logout (Session timeout).
Network Diagnosis / IPTV	When use WEB method to do iptv mpeg-loss diagnosis, random happen cannot stop diagnosis session.
Network Diagnosis / IPTV	If someone user is in diagnosing (ex: CLI or SNMP), at this moment when you change to diagnosis page via WEB, system will not pop prompt for user "Other user in IPTV diagnosis processing, please wait ....!".

## Firmware Version 2.00.0N

Date: 2021/10/18

<b>New Feature / System Release</b>	<b>Description</b>
Network Diagnosis / IPTV / MPEG-Loss	Improve mechanism of IPTV Mpeg-loss diagnosis for WEB & CLI. Note: SNMP and "Time schedule function" still using old mechanism for diagnosis!
<b>Update</b>	<b>Description</b>
Network Diagnosis / IPTV	When using IPTV Mpeg test, it will lose management.
DHCP Auto-Provision	Even downloaded configure md5 file is same as current device, but device still will continue to download 2 times.





## Firmware Version 2.00.0M

Date: 2021/07/08

New Feature / System Release	Description
N/A	N/A
Update	Description
Network Diagnosis / IPTV	Fixed that when doing IPTV diagnosis, sometime will stop the test even the video throughput without over system loading (ex: 50~65Mbps)
Network Diagnosis / IPTV	Modify IPTV MPEG loss counter can support counter to 1 million counts.

## Firmware Version 2.00.0L

Date: 2021/06/22

New Feature / System Release	Description
N/A	N/A
Update	Description
Network Diagnosis / IPTV	Fixed that when doing IPTV diagnosis, DUT will loses management for some time (Depend on your diagnosis time).

## Firmware Version 2.00.0K

Date: 2021/04/28

New Feature / System Release	Description
N/A	N/A
Update	Description
CLI / Network Diagnosis / IPTV	Fixed that DHCP release packet's Src Mac address is incorrect issue.
Network Diagnosis / IPTV	Fixed that have chance to occur timeout in advance issue.

## Firmware Version 2.00.0J

Date: 2021/04/26

New Feature / System Release	Description
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Release	
N/A	N/A
Update	Description
Network Diagnosis / IPTV	Fixed that when setting incorrect port number, still can run issue.
Network Diagnosis / IPTV	Fixed that diagnosis state result didn't show config information (start from DHCP information) issue.
Network Diagnosis / IPTV	Fixed that after end of running time, state window still display in running.

## Firmware Version 2.00.0I

Date: 2021/04/15

New Feature / System Release	Description
N/A	N/A
Update	Description
Network Diagnosis / IPTV	Fixed that when doing IPTV diagnosis, simulated DHCP gateway will replaced to management gateway issue..
Network Diagnosis / IPTV	Fixed that when setting incorrect port number, still can run issue.
Network Diagnosis / IPTV	Fixed that after doing diagnosis, didn't send DHCP release with STB mode issue.
Network Diagnosis / IPTV	Fixed that when do long time test, will happen stream searching timeout issue.
Network Diagnosis / IPTV	Fixed that the first minute will display loss 1 counter issue.
Network Diagnosis / Ping	Fixed that DHCP release packet's Src Mac address is incorrect issue.
Network Diagnosis / IPTV	Fixed that result windows will display empty issue.

## Firmware Version 2.00.0H

Date: 2021/02/01

New Feature / System Release	Description
IPTV diagnosis	Support multicast range from 224.0.0.0 ~ 239.255.255.255



Update	Description
Network Diagnosis / Diagnosis Schedule	Fixed that when doing diagnosis schedule will not get correct result issue.
Network Diagnosis / IPTV	Fixed that when doing IPTV diagnosis, will randomly happen diagnosis state empty and process will not stop issue.
Network Diagnosis / IPTV	Fixed that when doing IPTV diagnosis and using RTP stream, will easy to trigger overrun feature issue.

## Firmware Version 2.00.0G

Date: 2020/12/15

New Feature / System Release	Description
N/A	N/A
Update	Description
Network Diagnosis / Diagnosis Schedule	Fixed that when doing IPTV Diagnosis bandwidth test (untagged VLAN) with 'Diagnosis Schedule' feature and the result will happen search stream timeout.

## Firmware Version 2.00.0F

Date: 2020/12/10

New Feature / System Release	Description
Network Diagnosis / IPTV	IPTV diagnosis support RTP coding stream. Note: System will auto detect stream, no need to add or change any commands.
Update	Description
Network Diagnosis	Fixed that when using specific source mac address then will get DHCP IP failed or cannot diagnosis.

## Firmware Version 2.00.0E

Date: 2020/07/15

New Feature / System Release	Description
N/A	N/A

Update	Description
Network Diagnosis / Diagnosis Schedule	Fixed that when doing IPTV Diagnosis bandwidth test (simulate STB DHCP mode) with 'Diagnosis Schedule' feature and the result will happen search stream timeout or diagnosis function error.

## Firmware Version 2.00.0D

Date: 2020/09/21

New Feature / System Release	Description
N/A	N/A
Update	Description
Network Diagnosis / Diagnosis Schedule	Fixed that when doing IPTV Diagnosis bandwidth test with 'Diagnosis Schedule' feature and the result will happen search stream timeout.

## Firmware Version 2.00.0C

Date: 2020/09/18

New Feature / System Release	Description
Network Diagnosis / IPTV	Support filter multicast stream with specific L4 port number.
Update	Description
N/A	N/A

## Firmware Version 2.00.0A

Date: 2020/07/15

New Feature / System Release	Description
N/A	N/A
Update	Description
DHCP Auto-Provision	Fixed that when do DHCP auto-provision FW upgrade will be failed.  Situation: After download file and reboot, the HES is still running old FW, but cannot download and



	upgrade new FW anymore. Reason: Only updated the MD5 checksum to new one.
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## Firmware Version 2.00.09

Date: 2020/04/28

New Feature / System Release	Description
N/A	N/A
Update	Description
IGMP	Fixed that when enable IGMP Snooping, if port 6 receive non Mgmt VLAN IGMP packets will replace to Mgmt VLAN and send back from port 6.
Restore Configuration	Fixed that after restore configure then happen lost management issue, might need do reset to default.

## Firmware Version 2.00.08

Date: 2019/09/10

New Feature / System Release	Description
N/A	N/A
Update	Description
Network Diagnosis / IPTV	Fixed that when clearing the field of Search stream time and Diagnosis Period then pressing start, there is no alert message.
Network Diagnosis / IPTV	Fixed that Gateway IP isn't in the source IP address subnet mask should be block.
Network Diagnosis / IPTV	Fixed that when the VLAN is set to 0 and DHCP disabled with IPTV_Diagnosis, it is not as same as CPU VLAN

## Firmware Version 2.00.07

Date: 2019/09/02

New Feature / System Release	Description
N/A	N/A



Update	Description
Network Diagnosis / IPTV	Fixed that the when the diagnosis schedule is triggered and there are other schedules still running, then the triggered schedule will be ignored.
Network Diagnosis	Fixed that Network diagnosis source MAC address field does not block 00:00:00:00:00:00.
Network Diagnosis	Fixed that the diagnosis test item fills in the option15 field and press start. The state misses the value of Option15.
Network Diagnosis/ CLI	Fixed that Network Diagnosis cannot enter the value of option15/16.
Network Diagnosis / IPv6	Fixed that Diagnosis enable IPv6 mode, if the field of Destination IP address is cleared and press start, the program will not stop.
SNMP	Fixed the timeout issue when using snmpwalk command to pulling all OID.

## Firmware Version 2.00.06

Date: 2019/08/12

New Feature / System Release	Description
N/A	N/A
Update	Description
Network Diagnosis / IPTV	Fixed that when start running IPTV Diagnosis then continue press "stop" button will cause DUT reboot.

## Firmware Version 2.00.05

Date: 2019/08/08

New Feature / System Release	Description
N/A	N/A
Update	Description
Network Diagnosis / IPTV	Fixed that when IPTV diagnosis can't receive IP from DHCP server, IPTV diagnosis function will be lock. (WEB)
Network Diagnosis / VLAN	Fixed that when change CPU VLAN to 101(no apply), then set port 6 to trunk mode(press ok), CPU VLAN already change to 101, but Diagnosis can't run with VLAN 101.
Network Diagnosis /	Fixed that when doing [IPTV diagnosis MPEG loss] start and stop switches

IPTV	repeatedly via Web, then CLI cannot use.
Network Diagnosis / IPTV	Fixed that when inputting error stream IP in [IPTV diagnosis MPEG loss], re-entering the correct IP via SNMP will reduce the DHCP information.

## Firmware Version 2.00.04

Date: 2019/07/31

New Feature / System Release	Description
N/A	N/A
Update	Description
Network Configuration / IPv6	Fixed that when DUT get IPv6 address through DHCP mode, the state of DHCPv6 DUID sometimes will display empty when refresh page.
Network Configuration / IPv6	Fixed that DHCPv6 Client cannot disable success.

## Firmware Version 2.00.03

Date: 2019/07/26

New Feature / System Release	Description
N/A	N/A
Update	Description
Network Diagnosis / IPTV	Fixed that when doing [IPTV diagnosis MPEG loss] start and stop switches repeatedly via WEB, then CLI cannot use anymore.
Network Diagnosis / IPTV	Fixed that when IPTV diagnosis triggers the searching timeout, the state field of the WEB does not show the result of the analysis.
Network Diagnosis	Fixed that after inputting the invalid stream IP via WEB, then inputting the correct IP again will show that the search cannot be found.
Network Diagnosis / IPTV	Fixed that when set management VLAN same with IPTV VLAN (no press Apply), then run IPTV diagnosis will cause DUT crash.
Network Diagnosis / IPTV	Fixed that when doing IPTV diagnosis and enabled DHCP mode via WEB, if quick do start and stop several times, will cause during DHCP stage then suddenly stop IPTV diagnosis and cause test result failed.
Network Diagnosis / IPTV	Fixed that when inputting error stream IP in [IPTV diagnosis MPEG loss], re-entering the correct IP via SNMP will reduce the DHCP information.



Network Diagnosis / IPTV	Fixed that IPTV diagnosis result show 0.0.0.0 stream IP via SNMP.
Network Diagnosis / IPTV	Fixed that when doing [IPTV diagnostic MPEG loss], if received bandwidth over CPU limited (Video stream total average rate over 50~65Mb/s) then will cause result not accurate.

## Firmware Version 2.00.02

Date: 2019/06/14

New Feature / System Release	Description
N/A	N/A
Update	Description
Network Diagnosis	Fixed that when doing diagnosis IPTV test via CLI and over 5 minutes (Maximum of CLI session timeout), CLI session will auto cut/logout after print out the report done.
Network Diagnosis	Fixed that when doing diagnosis IPTV test, during this time if have much traffic incoming to CPU (e.g. broadcast) then will cause system crash.

## Firmware Version 2.00.01

Date: 2019/06/03

New Feature / System Release	Description
N/A	N/A
Update	Description
Network Diagnosis / IPTV	Fixed that when doing [IPTV diagnostic MPEG loss], will get error message "Other user in IPTV diagnosis processing, please wait..." even if they don't have any other test ongoing.
Network Diagnosis / IPTV	Fixed that when doing [IPTV diagnostic MPEG loss], always got an error first min of test even if there are no loss.
Network Diagnosis / IPTV	Fixed that when doing [IPTV diagnostic MPEG loss], will get this message "Diagnosis is running" but no data.
Network Diagnosis / IPTV	Fixed that IPTV diagnosis result show 0.0.0.0 stream IP when stream searching timeout.





## Firmware Version 2.00.00

Date: 2019/03/11

New Feature / System Release	Description
System	ECN official release
Update	Description
N/A	N/A

## Firmware Version 1.ZZ.1B

Date: 2019/02/21

New Feature / System Release	Description
N/A	N/A
Update	Description
Network Diagnosis / Diagnosis Schedule	Fixed that when enable NTP and enable three diagnosis schedule, then save reboot will cause DUT cannot boot up successful.

## Firmware Version 1.ZZ.1A

Date: 2019/01/31

New Feature / System Release	Description
N/A	N/A
Update	Description
Network Diagnosis	Fixed that when performing network diagnosis with VLAN 0 and CPU VLAN isn't 1, it will cause function not work.
Network Diagnosis	Fixed that it may cause user lost connection with DUT when doing throughput diagnosis with VLAN 0.
Network Diagnosis	Fixed that the throughput diagnosis can't be worked fine issue.

## Firmware Version 1.ZZ.19

Date: 2019/01/08

New Feature / System Release	Description
Network Diagnosis	Add that Network Diagnosis can support un-tag mode.
Update	Description
System	Fixed that when enable QinQ Passthrough mode, combo mode and IGMP, device can't be accessed by copper port 5 (CPU packets no send out from port 5).

## Firmware Version 1.ZZ.18

Date: 2018/12/26

New Feature / System Release	Description
N/A	N/A
Update	Description
LAN follows WAN	Fixed that the LED of back up port will be lighted with enabled combo mode when change the LAN Follows WAN configuration issue.
SFP DMI	Fixed that the SFP message will show incorrect information issue.

## Firmware Version 1.ZZ.17

Date: 2018/12/13

New Feature / System Release	Description
LAN follows WAN	Support the LAN follows WAN feature.
DHCP recycle	Support DHCP auto recycle feature.
Update	Description
DNS	Modified that the comment of DNS to “DNS response measurement” on CLI.

## Firmware Version 1.ZZ.16

Date: 2018/11/29

New Feature / System Release	Description
N/A	N/A
Update	Description

DHCP-Option60	Remove the DHCP-Option60-Based VLAN from CLI command for backup configuration..
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## Firmware Version 1.ZZ.15

Date: 2018/11/27

New Feature / System Release	Description
N/A	N/A
Update	Description
DHCP-Option60	Remove the DHCP-Option60-Based VLAN from UI.

## Firmware Version 1.ZZ.14

Date: 2018/10/30

New Feature / System Release	Description
Network Diagnosis / Schedule Record	Added that Record information can show diagnosis start time and finish time.
Update	Description
Network Diagnosis / Schedule Record	Fixed that when using DHCP-Client diagnosis, it will show “test time out” issue.
Network Diagnosis / Schedule Record	Fixed that when using IPTV diagnosis, it will show incorrect information on CLI.
Network Diagnosis / Schedule	Fixed that it can work fine for week item.
Network Diagnosis / Schedule Record	Fixed that it display incorrect result on DHCP-client diagnosis.

## Firmware Version 1.ZZ.13

Date: 2018/10/25

New Feature / System Release	Description
N/A	N/A

Update	Description
Network Diagnosis / Schedule Record	Fixed that it display incorrect information (happened on Chrome Browser).
Network Diagnosis / Schedule	Fixed that it can't support "no active" command on CLI issue.
Network Diagnosis / Schedule	Fixed that it can't work fine.

## Firmware Version 1.ZZ.12

Date: 2018/10/23

New Feature / System Release	Description
N/A	N/A
Update	Description
Diagnosis / DHCP	Fixed it can't get IP when use DHCP Diagnosis.

## Firmware Version 1.ZZ.11

Date: 2018/10/18

New Feature / System Release	Description
Time Scheduling	Support Time Scheduling feature.
Save Record	Support Save Record feature.
Update	Description
Network Diagnosis / IPTV	Fixed that the information of result does not match the WEB page issue.
DHCP	Fixed that the DUT can't send a DHCP release packet after it acquires an IP address from the DHCPv4/DHCPv6 server.
Network Diagnosis / IPTV	Fixed that the result show "No Multicast stream can be found." but still show stream result details on CLI.

## Firmware Version 1.ZZ.10

Date: 2018/09/21



New Feature / System Release	Description
N/A	N/A
Update	Description
Network Diagnosis / IPTV	Fixed that when setting IPTV diagnosis items will cause WEB page momentary occur blank page.
Network Diagnosis / IPTV	Fixed that WEB page IPTV diagnosis mode setting change will cause source MAC, stream IP, VLAN, option 60 items change to default setting.
Network Diagnosis / IPTV	Fixed that when use CLI to execute IPTV diagnosis command added option 60 will reply "@!Fail! Invalid input.
Network Diagnosis / IPTV	Fixed that when use CLI to execute IPTV diagnosis command will cause CLI off line.
Network Diagnosis / IPTV	Fixed that when use SNMP to execute IPTV diagnosis PCR-Jitter and Bandwidth result does not match WEB page result.
Network Diagnosis / DHCP-Client	Fixed that if RADVD is gone in the process of "IPv6 DHCP client diagnosis", the UI does not report the correct status.
Network Diagnosis / DHCP-Client	Fixed that the web page does not reject "31" as the input of "Keep IP Interval" field.

## Firmware Version 1.ZZ.0Z

Date: 2018/09/14

New Feature / System Release	Description
Network Diagnosis / IPTV	Support "DHCP STB simulation" of diagnosis IPTV for WEB & SNMP.
Network Diagnosis / DHCP-Client	Support "DHCP Timer" (Keep DHCP IP 1-30 mins then release IP) for WEB & SNMP.
Update	Description
N/A	N/A

## Firmware Version 1.ZZ.0Y

Date: 2018/09/11

New Feature / System Release	Description
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Network Diagnosis / IPTV	Support "DHCP STB simulation" of diagnosis IPTV for CLI.
Network Diagnosis / DHCP-Client	Support "DHCP Timer" (Keep DHCP IP 1-30 mins then release IP) for CLI.
<a href="#">Update</a>	<a href="#">Description</a>
N/A	N/A

## Firmware Version 1.ZZ.0X

Date: 2018/06/13

<a href="#">New Feature / System Release</a>	<a href="#">Description</a>
Network Diagnosis / Ping	Support parameter ping size (1 ~ 65500) bytes.
<a href="#">Update</a>	<a href="#">Description</a>
System Information	Fixed that system information can input space character by WEB & SNMP method, should be cannot.
User Authentication	Fixed that when user account's password use some symbol, web can login success, but press any page will auto change to login page.

## Firmware Version 1.ZZ.0W

Date: 2018/05/29

<a href="#">New Feature / System Release</a>	<a href="#">Description</a>
N/A	N/A
<a href="#">Update</a>	<a href="#">Description</a>
System	Fixed that system will auto reboot after 4 hours with no known issue.

## Firmware Version 1.ZZ.0V

Date: 2018/05/11

<a href="#">New Feature / System Release</a>	<a href="#">Description</a>
N/A	N/A



Update	Description
Network Diagnosis / Ping	Fixed that when do the IPv6 ping diagnosis, the value of the link layer address in the DHCPv6 solicit/request packet is the DUT's MAC address.
Network Diagnosis	Change the following warning message "Can not be found any multicast stream !".
Network Diagnosis	SNMP add warning message "Diagnosis is stopped by the user!" for Network Diagnosis.

## Firmware Version 1.ZZ.0U

Date: 2018/05/08

New Feature / System Release	Description
N/A	N/A
Update	Description
Network Diagnosis / IPTV	Fixed that after the IPTV Diagnosis finishes, the web always reports "Can't be found any multicast stream !".
Network Diagnosis / IPTV	Fixed that when change the value of the search stream time of IPTV diagnosis to an invalid value. The web UI will pop a wrong warning message.
Network Diagnosis	Change the warning message "Diagnosis is stopped by user !" to "Diagnosis is stopped by the user!".
Network Diagnosis / Ping	Fixed that when stopping the ping diagnosis may cause the ping diagnosis function hang.(Last time ipv6, this time ipv4)
Network Diagnosis / DNS	Fixed that do DNS diagnosis via web, SNMP, and if DNS server without reply DNS, when click stop button will can't stop test immediately.
Network Diagnosis / DHCP-Client	Fixed that DHCP client diagnosis set source MAC address should not accept multicast and broadcast MAC address.
Network Diagnosis	Change the warning message "Error: Diagnosis VLAN(333) is not existed."
Network Diagnosis	Change the warning message "Probably the destination is not reachable or the service doesn't exist!".
Network Diagnosis / Throughput	Fixed that if the nuttcp server doesn't exist, the throughput diagnosis doesn't show the diagnosis failure message on web page and SNMP.

## Firmware Version 1.ZZ.0T

Date: 2018/05/04

New Feature / System	Description
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Release	
N/A	N/A
Update	Description
Network Diagnosis / IPTV	<b>Modify feature name from "IPTV Diagnosis" should be integrated to the "Network Diagnosis IPTV Diagnosis" in UI.</b>

## Firmware Version 1.ZZ.0S

Date: 2018/05/02

New Feature / System Release	Description
Network Diagnosis	Add parameter "Timeout" and "Period" field.
Update	Description
Network Diagnosis / DNS	Fixed that DNS2 server should not same with DNS1 server in SNMP. (Real 2 DNS Server IP is different)
Network Diagnosis / DHCP-Client	Fixed that when doing DHCP client diagnosis will deny other user to do, but can do from other UI, and maybe cause process hang or crash.
Network Diagnosis / DHCP-Client	Fixed that DHCP client diagnosis option 15, 16, 60 can input over 55 character via web, SNMP, but actually support maximum 55 character.
Network Diagnosis / Ping	Fixed that when stopping the ping diagnosis may cause the ping diagnosis function hang.
Network Diagnosis / DNS	Fixed that do DNS diagnosis IPV6 via CLI, tip has no option15, and only can execute one of option15 or option16.
Network Diagnosis / DNS	Fixed that do DNS diagnosis IPv6 in web UI, the setting should not display "Destination IP", should be "DNS Server IP".
Network Diagnosis	Fixed that the UI of the network diagnosis won't reject the input of the illegal IPv6 address such as "2001:DB8:2000".
Network Diagnosis / IPTV	Fixed that if the "Search Stream Time" of IPTV Diagnosis can't be changed, user should not be able to edit this field.
Network Diagnosis / IPTV	Fixed that when change the channel in the half way of IPTV diagnosis for bandwidth, the stream IP is always the first channel's IP on the web.
Network Diagnosis / IPTV	Fixed that when stop the PCR-Jitter test on SNMP or CLI, the status field shows "Can't be found any multicast stream!". → Will pop "Diagnosis is stopped by user !" message
Network Diagnosis / IPTV	Fixed that if the IPTV diagnosis is interrupted by clicking the "stop" button, UI should report that this function is interrupted. → Will pop "Diagnosis is stopped by user !" message





Network Diagnosis / IPTV	Fixed that when change the value of the search stream time of IPTV diagnosis to an invalid value. The web UI will pop a wrong warning message.
Network Diagnosis / IPTV	Fixed that the Time field of PCR-Jitter test on SNMP should shows the time value like "1~10" on the web or like "1" on the telnet. → SNMP add one string parameter and OID is "swbPCRJitterTimeRange"
Network Diagnosis / DHCP-Client	Fixed that do DHCP client diagnosis via web UI, display DHCP discover sent out two or three packet, but actually only one packet.
Network Diagnosis / DHCP-Client	Fixed that when DHCP server not exist, do DHCP client diagnosis via CLI will sent out discover five times, but via web, SNMP only four.
Network Diagnosis / Ping	Fixed that DUT did not send the DHCP release packet to VRG5 after the DHCPv4 Ping Diagnosis is finished.
Network Diagnosis / DNS	Fixed that execute DNS diagnosis via SNMP, the result display information less then other UI.
Network Diagnosis / Throughput	Fixed that if the nuttcp server doesn't exit, the throughput diagnosis doesn't show the diagnosis failure message on web page and SNMP.

## Firmware Version 1.ZZ.0R

Date: 2018/04/20

New Feature / System Release	Description
Network Diagnosis	Support feature "Network Diagnosis" <ul style="list-style-type: none"><li>- Cable (CLI, WEB, SNMP)</li><li>- DHCP-Client simulation (CLI, <b>WEB</b>, <b>SNMP</b>)</li><li>- DNS (CLI, <b>WEB</b>, <b>SNMP</b>)</li><li>- IPTV (CLI, <b>WEB</b>, <b>SNMP</b>)</li><li>- Ping (CLI, WEB, <b>SNMP</b>)</li><li>- Throughput (CLI, <b>WEB</b>, <b>SNMP</b>)</li></ul>
Update	Description
N/A	N/A

## Firmware Version 1.ZZ.0P

Date: 2017/12/01

New Feature / System Release	Description
N/A	N/A



Update	Description
Network Diagnosis / Cable / WEB,CLI	Fixed that after diagnostic, port speed will not display.
Network Diagnosis / Cable	Fixed that when cable test done, even result is test pass, but cable length will display 0 m.
Network Diagnosis / Cable	Fixed that when continue do cable test, random happen "Pair Status" display other issue (Should be "Test Pass")
Network Diagnosis / Ping	Fixed that when receive ping reply should not wait 3 sec to next ping.

## Firmware Version 1.ZZ.00

Date: 2017/11/20

New Feature / System Release	Description
N/A	N/A
Update	Description
Network Diagnosis / DHCP-Client	Fixed that DHCPv6 stateless mode if no get IP then will not stop get IP stage (keep send info request).
Network Diagnosis / DHCP-Client	Fixed that DHCPv6 option 15 phase 1 not support, so please to remove(hide) it.
Network Diagnosis / DHCP-Client	Fixed that DHCPv4 DNS Server if provide 3 address to DUT, then the result, second address only display 0.0.0.0.
Network Diagnosis / DNS	Fixed that when second stage(DNS diagnostic) then press CTRL+C, it cannot stop and will keep run until session over.
Network Diagnosis / DNS	Fixed that when first DHCPv6 IP session timeout, it will still run next DNS diagnostic session, then CLI crash.
Network Diagnosis	Add pop message when second user also need to use diagnostic function.
Network Diagnosis / Throughput	Fixed that when using UDP and diagnosis period test done, it will pop wrong message, even result is pass.
Network Diagnosis / IPTV	Fixed that even no search and get the stream then still start to test. (Bandwidth)
Network Diagnosis / IPTV	Fixed that when diagnosis period over 5 mins, then after test done, CLI session will timeout. (Bandwidth & MPEG-Loss)
Network Diagnosis / IPTV	Fixed that if use wrong VLAN still can search stream and diagnosis then print result (result stream is environment exist).
Network Diagnosis / IPTV	Fixed that even environment have stream but sometime cannot search the stream and test.



Network Diagnosis / IPTV	Fixed that when do long time test, if press CTRL+C to stop in halfway, then cannot get any already run (time) result. (Will print current get counts of result)
Network Diagnosis / IPTV	Fixed that when do 60 mins diagnosis test, after 60 mins no get any result.
Network Diagnosis / Cable	Fixed that after diagnostic, port speed will not display (WEB/CLI only; SNMP will display)
Network Diagnosis / Cable	Fixed that CLI test result, title name "Pair Status" lost one word "P".
Network Diagnosis / Cable	Fixed that when port 3 test done then plug-off and plug on port 4, then try again on port 3, will get wrong result.
Network Diagnosis / Cable	Fixed that Port 5 cannot use cable test function.
Network Diagnosis / Ping / WEB	Fixed that the parameter -t(timeout) should be ... → If first ping request no get reply then wait time to send second request.
Network Diagnosis / Ping / CLI	Fixed that when after -t [1-99] then press "?" will pop "Invalid Input" message, but still can run this command.

## Firmware Version 1.ZZ.0N

Date: 2017/11/10

New Feature / System Release	Description
N/A	N/A
Update	Description
System	Fixed that when the IGMP Snooping is disabled and the DUT is receiving Router Advertisement(IPv6 Multicast), the DUT will ignore port VLAN mode and whether the packet tag.

## Firmware Version 1.ZZ.0M

Date: 2017/11/02

New Feature / System Release	Description
Network Diagnosis	Support feature "Network Diagnosis" <ul style="list-style-type: none"> <li>- Cable (CLI, WEB, SNMP)</li> <li>- DHCP-Client simulation (CLI)</li> <li>- DNS (CLI)</li> <li>- IPTV (CLI)</li> </ul>



	<ul style="list-style-type: none"><li>- Ping (CLI, WEB)</li><li>- Throughput (CLI)</li></ul>
Update	Description
N/A	N/A

## Firmware Version 1.ZZ.0L

Date: 2017/10/30

New Feature / System Release	Description
N/A	N/A
Update	Description
Configuration	Modify that both HES-3106 and HES-3106-PLUS model can use the each other configure files.

## Firmware Version 1.ZZ.0I

Date: 2017/08/14

New Feature / System Release	Description
N/A	N/A
Update	Description
Network Configuration / SNMP	Fixed that can't use IP address ending with (.0), but (.255) is OK.

## Firmware Version 1.ZZ.0H

Date: 2017/07/31

New Feature / System Release	Description
N/A	N/A
Update	Description
Network Diagnosis / IPTV	Fixed that when STB zapping the channel, the other will be affected into dark screen if they are in same channel.
Storm Control	Fixed that can't cancel the pop window, if storm control enter wrong rate.
Network Configuration	Fixed that can't use IP address ending with (.255) (.0)

## Firmware Version 1.ZZ.0G

Date: 2017/02/10

New Feature / System Release	Description
System	Support module "HES-3106B" (BOSA on Board)
Update	Description
User Authentication	Modify feature name from "Auth Method" to "Password Encryption".

## Firmware Version 1.ZZ.0F

Date: 2016/11/24

New Feature / System Release	Description
N/A	N/A
Update	Description
User Authentication / WEB	Fixed that after press "Auth Method" OK button will cause OK button disappear.
User Authentication / WEB	Fixed that WEB auth method disabled issue.

## Firmware Version 1.ZZ.0E

Date: 2016/11/23

New Feature / System Release	Description
N/A	N/A
Update	Description
User Authentication	Fixed that when user account level are RW and RO but can do "modify user account" issue.

## Firmware Version 1.ZZ.0D

Date: 2016/11/18

New Feature / System Release	Description
User Authentication	Support hashed password.
Update	Description



N/A

N/A

## Firmware Version 1.ZZ.0C

Date: 2016/07/15

New Feature / System Release	Description
N/A	N/A
Update	Description
System Information / DHCP Vendor ID	Fixed that if change DHCP vendor-id & host-name, device(Auto-Provision) will keep upgrade and reboot over and over again.

## Firmware Version 1.ZZ.0B

Date: 2016/07/05

New Feature / System Release	Description
N/A	N/A
Update	Description
User Authentication / WEB	Fixed that when user account add password, WEB UI can't access success even already input correct password, but CLI/SSH can login success.

## Firmware Version 1.ZZ.0A

Date: 2016/06/06

New Feature / System Release	Description
N/A	N/A
Update	Description
Syslog	Modify feature name from "Mal-attempt Log Configuration" to "Syslog Configuration".

## Firmware Version 1.ZZ.09

Date: 2018/05/27

New Feature / System Release	Description
N/A	N/A

Update	Description
IGMP Snooping	Fixed that when HES-3106-PLUS is set to combo WAN mode, the IGMP report can't be forwarded to the copper WAN port.
IGMP Snooping	Fixed that the IGMP snooping table is always empty after DUT reboots.
Network Diagnosis / IPTV	Fixed that DUT may lose management after IPTV diagnosis and IGMP function is working for a few times.
System	Fixed that after system boot-up short-term traffic have flood issue.

## Firmware Version 1.ZZ.08

Date: 2016/04/28

New Feature / System Release	Description
N/A	N/A
Update	Description
Network Diagnosis / IPTV	Change the "Query Interval time" column in the "Diagnosis IPTV General Query Response Details" table.
Network Diagnosis / IPTV	Fixed Diagnosis IPTV status error issue.

## Firmware Version 1.ZZ.07

Date: 2016/04/26

New Feature / System Release	Description
N/A	N/A
Update	Description
Syslog	Fixed that can't send the syslog message for user login/logout to the syslog server.
Syslog / CLI	Fixed that when type CLI command to show the syslog server settings, CLI will show "Time Server Address", not "Syslog Server Address".

## Firmware Version 1.ZZ.06

Date: 2016/04/20

New Feature / System Release	Description
N/A	N/A
Update	Description



Syslog	Fixed that syslog server field in the UI can't accept IPv6 address.
Network Diagnosis / IPTV	Fixed that IPTV status can't be cleared in UI after IPTV diagnosis is disabled.
Network Diagnosis / IPTV	Fixed that when the switch may not send any syslog message to the server if the settings in the IPTV Diagnosis is changed
Network Diagnosis / IPTV	Fixed that the counters of Diagnosis IPTV MPEG Continuity Result Details can't be updated successfully.
Network Diagnosis / IPTV	Fixed that the IPTV Diagnosis function can't work properly after the configure is saved and the switch reboots.

## Firmware Version 1.ZZ.05

Date: 2016/04/11

New Feature / System Release	Description
Syslog	Support Syslog feature.
Update	Description
N/A	N/A

## Firmware Version 1.ZZ.04

Date: 2016/03/31

New Feature / System Release	Description
Network Diagnosis / IPTV	Support Diagnosis – IPTV
Update	Description
IGMP Snooping	Fixed that when receive different VLAN IGMP Query, it will affect all VLAN IGMP Snooping table then clear to empty (after IGMP Query – Max response time expired).

## Firmware Version 1.ZZ.03

Date: 2015/12/11

New Feature / System Release	Description
N/A	N/A
Update	Description
IP Source Binding /	Fixed private mib "swNetworkConfiguration" IP source binding not check





SNMP	duplicated issue.
LLDP	Fixed LLDP VLAN Tag issue.

## Firmware Version 1.ZZ.02

Date: 2015/12/09

New Feature / System Release	Description
System	Pass through special MAC address "01:20:DA:02:01:71"
Update	Description
IP Source Binding / SNMP	Fixed private mib "swNetworkConfiguration" IP source binding set wrong issue.

## Firmware Version 1.ZZ.01

Date: 2015/12/08

New Feature / System Release	Description
N/A	N/A
Update	Description
LLDP / SNMP	Fixed private mib "swLLDPStatus" LLDP status error issue.

## Firmware Version 1.ZZ.00

Date: 2015/11/06

New Feature / System Release	Description
IPv6	Support IPv6
LLDP	Support LLDP function
Update	Description
N/A	N/A