AVAYA
INTELLIGENT COMMUNICATIONS

Ethernet Routing Switch 8300

Software Release 4.2.3.10 2
Software Release 4.2.3.9 6
Software Release 4.2.3.8 9
Software Release 4.2.3.7 12
Software Release 4.2.3.6 15
Software Release 4.2.3.5 19
Software Release 4.2.3.4 21
Software Release 4.2.3.3 24
Software Release 4.2.3.2 27
Software Release 4.2.3.0 30

Ethernet Routing Switch 8300

Software Release 4.2.3.10

1. Release Summary

Release Date : June 21, 2013
Purpose : Software maintenance release to address a specific customer found issue.

2. Important Notes before Upgrading to This Release

If using RADIUS:
RADIUS secret keys used to be stored as plain text in the config file. Starting from release 4.2.3.8, will now be encrypted and saved with other system secret keys in shadov.txt file. The software will automatically take care of reading pre-4.2.3.8 config file containing plain-text RADIUS keys and converting them to encrypted form after a "save config" is issued. However the newly generated config file is not backward compatible. It can only be used on releases 4.2.3.8 or higher. Care must also be taken if a system with a config that was generated using release version 4.2.3.8 or higher is being downgraded to a pre-4.2.3.8 release. The original pre-4.2.3.8 config file should be used for such a downgrade. Avaya recommends users to backup a copy of pre-4.2.3.8 config file before upgrading from a pre-4.2.3.8 release to 4.2.3.8 or later release.

3. Platforms Supported

Ethernet Routing Switch 8300 modules in 8010 and 8006 chassis.
Ethernet Routing Switch 8300 modules in 8306 and 8310 chassis.

4. Notes for Upgrade

File Names for This Release

File Name	Module or File Type	File Size (bytes)
p83b42310.img	Boot monitor image	1092693
p83a42310.img	Runtime image	9414586
p83r42310.dld	Run-time image for R modules	2326872
p83c42310.img	3DES	52424
p83c42310.aes	AES (this image includes the DES image)	26960

p83a42310.mib	MIB	3685730
p83a42310.mib.zip	MIB (zip file)	579267
p83a42310.md5	md5 checksum file	758
p83f42310.img	Pre-Boot monitor image **See IMPORTANT Note below	230786
pp83_42310.tar.gz	Archive of all files for this release	13962471

_____

** Avaya recommends that the Pre-Boot Image ONLY be upgraded if the system is currently running a Pre-Boot Monitor Software Rel 3.6. Systems running a Pre-Boot image Rel 3.7 should not be upgraded as there have been no changes to the Pre Boot Image for this release. The following CLI command can be used to help determine the version of the Pre-Boot Monitor Software:

show sys sw

5. Version of Previous Release

Software Version 4.2.3.9

6. Compatibility

This software release is managed with Java Device Manager (JDM) release v6.2.1.7er1 or greater.

7. Changes in This Release

New Features in This Release

None

Old Features Removed From This Release

None

Problems Resolved in This Release

- Error message “HAL WARNING NPAL_AddNHToCreateBulkList: could not allocate next hop. status = 19” is seen. This message is displayed when ARP record exhaustion has happened due to improper cleanup of NULL / Duplicate records. This issue has now been fixed. Null/Duplicate records are now cleaned up correctly [wi01081784]

- Show sys topology on 8300 CLI reported incorrect device name information. This has now been fixed [WI01083665]

- When two core 8300s are connected in IST SMLT scenario and a multicast source is connected on one of the IST peers, in some cases, the multicast stream is not forwarded to the client connected to the edge switch over the SMLT links. This has now been fixed. [WI01085242]

- SF/CPU failover when saving config after entering static-mcastmac command. This issue has been fixed. [wi01087451]

- There is a possibility of stale (S,G) and (*,G) being left behind when the last multicast receiver in a IST/SMLT environment leaves. This problem has now been solved [wi01092535]

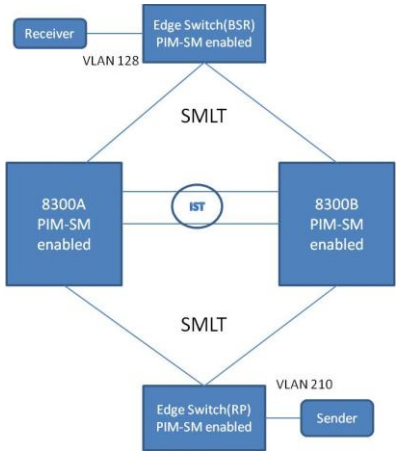
- For the scenario where the IST/SMLT switches are configured as Layer-3 transit network for multicast stream and the multicast source and receiver are located on two different SMLT edge switches of the same IST peer cluster, a PIM Multicast routing loop may occur over IST links. This scenario can now be avoided by enabling a new CLI/ACLI parameter called pim-ist-protect. By default, it is disabled and will need to be turned on to handle the above scenario [WI01088695]

  Syntax:

  PPCLI(rwa/rwa):
  config pim-ist-protect <enable|disable|info>

  ACLI(rwa/rwa):
  config t;
  pim-ist-protect;
  <no|default> pim-ist-protect;
  show pim-ist-protect;

Example configuration of sender and receiver on different edge switches of the same IST cluster.



8. Known Limitations

- Known Limitations noted for 4.2.3.9 apply to this software version. Please refer to the 4.2.3.9 9. Known Limitations" section.

- In releases prior to 4.2.3.10, for the scenario where the IST/SMLT switches are configured as Layer-3 transit network for multicast streams and the multicast source/sender and receiver are located on two different SMLT edge switches of the same IST peer cluster, a PIM multicast routing loop may occur over IST links. Beginning with release 4.2.3.10, this issue can be avoided by enabling the pim-ist-protect parameter as explained earlier. However this solution has a limitation in the case where a multicast receiver is single-home connected to only one of the IST peers within the same VLAN as the multicast sender. The receiver may not be able to receive streams it registers for, if that stream is hashed to the far-side (in relation to where the receiver resides) IST peer. Given this limitation, it is recommended that multicast receivers be connected to an SMLT edge switch in this case as well as enbling the pim-ist-protect parameter. Alternatively, the receiver can be put into a different VLAN than the sender's VLAN if moving the receiver to an edge switch is not practical/possible [wi01101328]

9. Documentation Corrections

None

Ethernet Routing Switch 8300

Software Release 4.2.3.9

1. Release Summary

Release Date: January 11, 2013
Purpose : Software maintenance release to address customer found software issues.

2. Important Notes before Upgrading to This Release

If using Radius:
Starting from release 4.2.3.8, the radius secret keys used to be stored as plain text in the config file will now be encrypted and saved with other system secret keys in shadov.txt file. The software will automatically take care of reading pre-4.2.3.8 config file containing plain-text radius keys and converting them to encrypted form after a "save config" is issued. However the newly generated config file is not backward compatible. It can only be used on releases 4.2.3.8 or higher. Care must also be taken if a system with a config that was generated using release version 4.2.3.8 or higher is being downgraded to a pre-4.2.3.8 release. The original pre-4.2.3.8 config file should be used for such a downgrade. Avaya recommends users to backup a copy of pre-4.2.3.8 config file before upgrading from a pre-4.2.3.8 release to 4.2.3.8 or later release.

3. Platforms Supported

Ethernet Routing Switch 8300 modules in 8010 and 8006 chassis.
Ethernet Routing Switch 8300 modules in 8306 and 8310 chassis.

4. Notes for Upgrade

File Names for This Release

File Name	Module or File Type	File Size (bytes)
p83b4239.img	Boot monitor image	1092694
p83a4239.img	Runtime image	9410174
p83r4239.dld	Run-time image for R modules	2326872
p83c4239.img	3DES	52424
p83c4239.aes	AES (this image includes the DES image)	26960

p83a4239.mib	MIB	3684013
p83a4239.mib.zip	MIB (zip file)	578961
p83a4239.md5	md5 checksum file	477
p83f4239.img	Pre-Boot monitor image **See IMPORTANT Note below	230786
pp83_4239.tar.gz	Archive of all files for this release	13961791

_____

** Avaya recommends that the Pre-Boot Image ONLY be upgraded if the system is currently running a Pre-Boot Monitor Software Rel 3.6. Systems running a Pre-Boot image Rel 3.7 should not be upgraded as there have been no changes to the Pre Boot Image for this release. The following CLI command can be used to help determine the version of the Pre-Boot Monitor Software:

show sys sw

5. Version of Previous Release

Software Version 4.2.3.8

6. Compatibility

This software release is managed with Java Device Manager (JDM) release v6.2.1.7er1 or greater.

7. Changes in This Release

New Features in This Release

None

Old Features Removed From This Release

None

Problems Resolved in This Release

- Removed erroneous reporting of ipcXdrGT_STATU alarm for the S1Mg task on IO modules. This alarm is not applicable to the S1Mg task on the IO card [wi01023485]

- Hardware record dump debug messages are now disabled by default as part of the fix for wi01023485. Having them enabled by default caused system overhead and undue alarm when CPU was in a valid high utilization state. Examples of a valid high utilization state include the ftp of a large file through the out-of-band Management Ethernet port.

- Upon rebooting the VRRP Master, the VRRP Backup takes over the ownership. In some cases, when master switch comes back up, traffic in some VLANs gets affected as the virtual MAC address for those VLANs is missing from the records on the Master. The fix addresses deletion of Virtual MAC Addresses [wi01034741]

- Another related issue was fixed as part of wi01034741 to address some corner case scenarios, where MAC addresses of type “self” are wrongly programmed with port pointing to the IST. They are now programmed correctly with type “self”.

- The setting of the 'IpFragment' option for internally created filters that key off on layer-4 fields has been modified to be set to “non-fragment” by default. This will prevent the misleading error message that used to be seen when features such as DHCP Snooping were configured. User configured filters that require modification to the IpFragment setting, will still generate a warning message to inform the user of the change [wi01030189]

- IST may not come up after a switch reboot when VLACP is enabled on IST ports. The issue is seen intermittently either during a peer-node reset or the IST link/port toggling. The issue is now fixed by dropping any VLACP packets that are received before the port is fully operational [wi01043159]

8. Known Limitations

- The ERS8300 NNCLI command "show fulltech" fails indicating "command buffer is full" error. [wi01018816]. Workaround: Use the “show tech” command instead, augmented with specific commands as applicable to the issue being investigated.
- Additionally Known Limitations noted for 4.2.3.0 also apply to this software version. Please refer to the 4.2.3.0 9. Known Limitations” section.

9. Documentation Corrections

None

Ethernet Routing Switch 8300

Software Release 4.2.3.8

1. Release Summary

Release Date: September 6, 2012
Purpose : Software maintenance release to address customer found software issues.

2. Important Notes before Upgrading to This Release

If using Radius:
Starting from release 4.2.3.8, the radius secret keys used to be stored as plain text in the config file will now be encrypted and saved with other system secret keys in shadov.txt file. The software will automatically take care of reading pre-4.2.3.8 config file containing plain-text radius keys and converting them to encrypted form after a "save config" is issued. However the newly generated config file is not backward compatible. It can only be used on releases 4.2.3.8 or higher. Care must also be taken if a system with a 4.2.3.8-generated config is being downgraded to a pre-4.2.3.8 release. The original pre-4.2.3.8 config file should be used for such a downgrade. Avaya recommends users to backup a copy of pre-4.2.3.8 config file before upgrading to 4.2.3.8.

3. Platforms Supported

Ethernet Routing Switch 8300 modules in 8010 and 8006 chassis.
Ethernet Routing Switch 8300 modules in 8306 and 8310 chassis.

4. Notes for Upgrade

File Names for This Release

File Name	Module or File Type	File Size (bytes)
p83b4238.img	Boot monitor image	1092751
p83a4238.img	Runtime image	9409747
p83r4238.dld	Run-time image for R modules	2326612
p83c4238.img	3DES	52424
p83c4238.aes	AES (this image includes the DES image)	26960

p83a4238.mib	MIB	3684013
p83a4238.mib.zip	MIB (zip file)	578961
p83a4238.md5	md5 checksum file	477
p83f4238.img	Pre-Boot monitor image **See IMPORTANT Note below	230786
pp83_4238.tar.gz	Archive of all files for this release	13960929

** Avaya recommends that the Pre-Boot Image ONLY be upgraded if the system is currently running a Pre-Boot Monitor Software Rel 3.6. Systems running a Pre-Boot image Rel 3.7 should not be upgraded as there have been no changes to the Pre Boot Image for this release. The following CLI command can be used to help determine the version of the Pre-Boot Monitor Software:

show sys sw

5. Version of Previous Release

Software Version 4.2.3.7

6. Compatibility

This software release is managed with Java Device Manager (JDM) release v6.2.1.7er1 or greater.

7. Changes in This Release

New Features in This Release

- Config file storage of RADIUS keys: RADIUS key entries in the config file are now stored in encrypted form. On ERS8300, RADIUS key used to be stored in plain text format in the config file. A CLI show command, JDM or SNMP walk with "PUBLIC" as the community string will display the key which obviously introduces security loophole.

- After upgrading to 4.2.3.8, once users issue a “save config” command, the RADIUS secret key will be saved in encrypted password file (shadov.txt). When users perform an SNMP walk or CLI show info on the radius entires, the secret keys will return "******". Please note the only change is the display of RADIUS keys to the public, other

behaviors including authentication, system login/out, and RADIUS configuration etc. are not affected. [wi01024797]

Old Features Removed From This Release

None

Problems Resolved in This Release

- When a next-hop entry is deleted it does not get removed correctly from the NPAL shadow list, leaving behind zombie next-hop entries in the shadow list and resulting in a memory leak. The message "HAL WARNING NPAL_AddNHToCreateBulkList: could not allocate next hop. status = 19" is seen indicating the occurrence of this problem. This problem and the resulting memory leak have now been corrected in this software release. [wi00961897 / wi01030258]

- A login via ssh that was followed very quickly by a logout of the session (similar to what would result from an automated script logging in and immediately logging out) would result in improper cleanup of the ssh session. This would eventually lead to all available ssh sessions being marked as "in use" preventing any further ssh access to the device. The condition could only be cleared by toggling the global ssh state. This issue has been resolved [wi01020747]

8. Known Limitations

- The ERS8300 NNCLI command "show fulltech" fails indicating "command buffer is full" error. [wi01018816]. Workaround: Use the "show tech" command instead, augmented with specific commands as applicable to the issue being investigated.
- Additionally Known Limitations noted for 4.2.3.0 also apply to this software version. Please refer to the 4.2.3.0 9. Known Limitations" section.

9. Documentation Corrections

None

Ethernet Routing Switch 8300

Software Release 4.2.3.7

1. Release Summary

Release Date : June 22, 2012
Purpose : Software maintenance release to address customer found software issues.

2. Important Notes before Upgrading to This Release

None

3. Platforms Supported

Ethernet Routing Switch 8300 modules in 8010 and 8006 chassis.
Ethernet Routing Switch 8300 modules in 8306 and 8310 chassis.

4. Notes for Upgrade

File Names for This Release

File Name	Module or File Type	File Size (bytes)
p83b4237.img	Boot monitor image	1092706
p83a4237.img	Runtime image	9409526
p83r4237.dld	Run-time image for R modules	2326616
p83c4237.img	3DES	52424

p83c4237.aes	AES (this image includes the DES image)	26960
p83a4237.mib	MIB	3684013
p83a4237.mib.zip	MIB (zip file)	578961
p83a4237.md5	md5 checksum file	477
p83f4237.img	Pre-Boot monitor image **See IMPORTANT Note below	230786

** Avaya recommends that the Pre-Boot Image ONLY be upgraded if the system is currently running a Pre-Boot Monitor Software Rel 3.6. Systems running a Pre-Boot image Rel 3.7 should not be upgraded as there have been no changes to the Pre Boot Image for this release. The following CLI command can be used to help determine the version of the Pre-Boot Monitor Software:

show sys sw

5. Version of Previous Release

Software Version 4.2.3.6

6. Compatibility

This software release is managed with Java Device Manager (JDM) release v6.2.1.7er1 or greater.

7. Changes in This Release

New Features in This Release

None

Old Features Removed From This Release

None

Problems Resolved in This Release

- The link-up and link-down traps from ERS 8300 devices are not conforming to standards. [wi00938585]

- The CLI command show port stats lacp, does not show stats for the ports with lacp enabled on. This fix is applicable to CLI only [wi00964670]

- Privilege password was not working for "dbg enable", when in NNCLI mode. [wi00976100]

- Unexpected Reboot occurs while configuring Alarm Manager under RMON. [wi00976794]

- FrontHwVersion within show sys info command displays revision of the Back Board not the Front Board of an I/O Card. [wi00987587]

- CPU switchover messages are reported as INFO and should be reported as CRITICAL. Due to architectural constraints these messages are now reported as Warning.[wi01004439]

- Multicast streams fail when both sides of SMLT link up between 8300 pair and 8600. [wi01005022]

- Unable to create protocol based vlan, except usrDefined protocol id [wi01000985]
  Note: This resolution requires JDM version 6.2.1.7 which is the only compatible version of JDM for this Device software version.

- Can no longer create protocol based vlans using reserved names such as 'ip' or 'ipx802dot2' using ER6 8300 software version 4.2.3.6 from CLI and NNCLI. [wi01003228]
- **Note**: This resolution requires JDM version 6.2.1.7 which is the only compatible version of JDM for this Device software version.

8. Known Limitations

- The ERS8300 NNCLI command "show fulltech" fails indicating "command buffer is full" error. [wi01018816]. Workaround: Use the command from CLI mode.
- Additionally Known Limitations noted for 4.2.3.0 also apply to this software version. Please refer to the 4.2.3.0 9. Known Limitations" section.

10. Documentation Corrections

None

Ethernet Routing Switch 8300

Software Release 4.2.3.6

1. Release Summary

Release Date : March 9, 2012
Purpose : Software maintenance release to address customer found software issues.

2. Important Notes before Upgrading to This Release

None

3. Platforms Supported

Ethernet Routing Switch 8300 modules in 8010 and 8006 chassis.
Ethernet Routing Switch 8300 modules in 8306 and 8310 chassis.

4. Notes for Upgrade

File Names for This Release

File Name	Module or File Type	File Size (bytes)
p83b4236.img	Boot monitor image	1092652

p83a4236.img	Runtime image	9406492
p83r4236.dld	Run-time image for R modules	2326040
p83c4236.img	3DES	52424
p83c4236.aes	AES (this image includes the DES image)	26960
p83a4236.mib	MIB	3684013
p83a4236.mib.zip	MIB (zip file)	578961
p83a4236.md5	md5 checksum file	477
p83f4236.img	Pre-Boot monitor image **See IMPORTANT Note below	230786

_____

** Avaya recommends that the Pre-Boot Image ONLY be upgraded if the system is currently running a Pre-Boot Monitor Software Rel 3.6. Systems running a Pre-Boot image Rel 3.7 should not be upgraded as there have been no changes to the Pre Boot Image for this release. The following CLI command can be used to help determine the version of the Pre-Boot Monitor Software:

show sys sw

5. Version of Previous Release

Software Version 4.2.3.5

6. Compatibility

This software release is managed with Java Device Manager (JDM) release v6.2.1.6ER or greater.

7. Changes in This Release

New Features in This Release

None

Old Features Removed From This Release

None

Problems Resolved in This Release

- A VLACP link between ERS 8300 and a switch such as a BayStack that sends VLACP subtype DOWN packets will never come up if VLACP is configured with a short timer.
- [wi00927850]

- In a dual CPU system, the save boot command on the master may generate an error on the slave CPU. [wi00945558]

- For some 8348GTX-PWR cards the power indication is displayed on an incorrect port. This does not affect the operation, just the management of the port. This is due to an error mapping stored in the POE controller. The mapping is now being checked and fixed if necessary on every initialization cycle.
- Note: For 8348TX-PWR cards, ignore the hardware message “HW ERROE Slot x poeTask: Program MCU failed” as the MCU is never reprogrammed on 8348TX-PWR.
- This fix will supersede the fix [wi00700770] in release 4.2.3.4. [wi00954116]

- Changes to “force-trap-sender” and “force-iphdr-sender” are not saved properly after executing the “save config” command. [wi00956678]

- The 8300 Power Supply information may not be displayed properly when viewed through JDM. [wi00963162]

- The “udp-source” should be displayed as “udpsrc-by-vip” in the config sys set info
- [wi00967121]

- An error message "the specified protocol id is invalid" may be displayed when creating user-defined, protocol-based VLANs using Device Manager. [wi00969529]

- In a triangle SMLT setup in an 8300 IST peer configuration, when one leg of SMLT is down and the IST is bounced (disable/enable) ARP packets coming across the IST link are not forwarded out to the SMLT port. As the result traffic is disrupted. [WI00973684]

- When an IST link is brought up shortly after a port in a SLT/SMLT goes down, ARP packets across the IST link are not forwarded. As a result traffic which needs to go across the IST and to its final destination is not sent. [wi00975991]

- The CLIP address may not be used as the source IP address when the “sourceip-flag” is set to true. [wi00981306]

8. Known Limitations

- Same as in 4.2.3.0, please refer to the 4.2.3.0 9. Known Limitations" section.

9. Documentation Corrections

None

Ethernet Routing Switch 8300

Software Release 4.2.3.5

1. Release Summary

Release Date : Dec 8, 2011
Purpose : Software maintenance release to address customer found software issues.

2. Important Notes before Upgrading to This Release

None

3. Platforms Supported

Ethernet Routing Switch 8300 modules in 8010 and 8006 chassis.
Ethernet Routing Switch 8300 modules in 8306 and 8310 chassis.

4. Notes for Upgrade

File Names for This Release

File Name	Module or File Type	File Size (bytes)
p83b4235.img	Boot monitor image	1092712
p83a4235.img	Runtime image	9406576
p83r4235.dld	Run-time image for R modules	2325208
p83c4235.img	3DES	52424
p83c4235.aes	AES (this image includes the DES image)	26960
p83a4235.mib	MIB	3684013
p83a4235.mib.zip	MIB (zip file)	578961
p83a4235.md5	md5 checksum file	477
p83f4235.img	Pre-Boot monitor image **See IMPORTANT Note	230786

	below	

** Avaya recommends that the Pre-Boot Image ONLY be upgraded if the system is currently running a Pre-Boot Monitor Software Rel 3.6. Systems running a Pre-Boot image Rel 3.7 should not be upgraded as there have been no changes to the Pre Boot Image for this release. The following CLI command can be used to help determine the version of the Pre-Boot Monitor Software:

show sys sw

5. Version of Previous Release

Software Version 4.2.3.4

6. Compatibility

This software release is managed with Java Device Manager (JDM) release v6.2.1.5ER or greater.

7. Changes in This Release

New Features in This Release

None

Old Features Removed From This Release

None

Problems Resolved in This Release

- Broadcast and multi-cast packets which arrive over the IST-MLT ports may not be forwarded properly on non-IST MLT ports configured in the VLAN. [wi00895118]

8. Known Limitations

- Same as in 4.2.3.0, please refer to the 4.2.3.0 9. Known Limitations" section.

9. Documentation Corrections

None

Ethernet Routing Switch 8300

Software Release 4.2.3.4

1. Release Summary

Release Date : Oct 14, 2011
Purpose : Software maintenance release to address customer found software issues.

2. Important Notes before Upgrading to This Release

None

3. Platforms Supported

Ethernet Routing Switch 8300 modules in 8010 and 8006 chassis.
Ethernet Routing Switch 8300 modules in 8306 and 8310 chassis.

4. Notes for Upgrade

File Names for This Release

File Name	Module or File Type	File Size (bytes)
p83b4234.img	Boot monitor image	1092681
p83a4234.img	Runtime image	9406808
p83r4234.dld	Run-time image for R modules	2325204
p83c4234.img	3DES	52424
p83c4234.aes	AES (this image includes the DES image)	26960
p83a4234.mib	MIB	3684013
p83a4234.mib.zip	MIB (zip file)	578961

p83a4234.md5	md5 checksum file	477
p83f4234.img	Pre-Boot monitor image **See IMPORTANT Note below	230786

_____

** Avaya recommends that the Pre-Boot Image ONLY be upgraded if the system is currently running a Pre-Boot Monitor Software Rel 3.6. Systems running a Pre-Boot image Rel 3.7 should not be upgraded as there have been no changes to the Pre Boot Image for this release. The following CLI command can be used to help determine the version of the Pre-Boot Monitor Software:

show sys sw

5. Version of Previous Release

Software Version 4.2.3.3

6. Compatibility

This software release is managed with Java Device Manager (JDM) release v6.2.1.5ER or greater.

7. Changes in This Release

New Features in This Release

None

Old Features Removed From This Release

None

Problems Resolved in This Release

- Modules POE port "P" showing green on wrong port is now resolved.
  This issue is specific to 8348GTX FrontHwVersion 50 card. The FrontHwVersion can be identified by using the CLI command "show sys info card". [wi00700770]

- The ERS8300 may stop forwarding traffic over the SMLT links due to resource contention. This issue has been resolved. [wi00826020]

- An abnormal behavior of ERS8300 using a default static route with ECMP enabled has been resolved. [wi00828280]

- An excessive number of HAL messages: NPAL_AddNHToCreateBulkList: could not allocate next hop. status = 19 are seen in the log.
  The behavior of the NextHop table functions as designed, but the log messages displayed are excessive. This fix addresses the excessive log messages issue. [wi00879699]

- The 8300 may log warnings and errors when enabling DHCP-Snooping globally which on rare occasions can cause a crash. This issue has been resolved. [wi00898338]

- Setting the "Discard-Untagged-Frames" Parameter on the 8300 discards STP BPDUs. [wi00899666]

- After Upgrading the 8300 From 4.2.1.0 to 4.2.3.3 IP Scrutinizer IPFIX Software Receives Traffic With Checksum Errors and No Longer Receives Interface Data. [wi00930995]

8. Known Limitations

- Same as in 4.2.3.0, please refer to the 4.2.3.0 9. Known Limitations" section.

9. Documentation Corrections

wi00888206 – The documentation recommending RSMLT L2 Edge configuration has been removed.

wi00928243 – A password is no longer needed to enter in the PRIVILEGED EXEC mode from GLOBAL CONFIG EXEC mode as of 4.2.3.3. The documentation has been changed.

Ethernet Routing Switch 8300 Software

Software Release 4.2.3.3

1. Release Summary

Release Date : June 8, 2011
Purpose : Software maintenance release to address customer found software issues.

2. Important Notes before Upgrading to This Release

None

3. Platforms Supported

Ethernet Routing Switch 8300 modules in 8010 and 8006 chassis.
Ethernet Routing Switch 8300 modules in 8306 and 8310 chassis.

4. Notes for Upgrade

File Names for This Release

File Name	Module or File Type	File Size (bytes)
p83b4233.img	Boot monitor image	1092693
p83a4233.img	Runtime image	9406821
p83r4233.dld	Run-time image for R modules	2325000
p83c4233.img	3DES	52424

p83c4233.aes	AES (this image includes the DES image)	26960
p83a4233.mib	MIB	3684013
p83a4233.mib.zip	MIB (zip file)	578961
p83a4233.md5	md5 checksum file	477
p83f4233.img	Pre-Boot monitor image **See IMPORTANT Note below	230786

_____

** Avaya recommends that the Pre-Boot Image ONLY be upgraded if the system is currently running a Pre-Boot Monitor Software Rel 3.6. Systems running a Pre-Boot image Rel 3.7 should not be upgraded as there have been no changes to the Pre Boot Image for this release. The following CLI command can be used to help determine the version of the Pre-Boot Monitor Software:

show sys sw

5. Version of Previous Release

Software Version 4.2.3.2

6. Compatibility

This software release is managed with Java Device Manager (JDM) release v6.2.1.5ER or greater.

7. Changes in This Release

New Features in This Release

None

Old Features Removed From This Release

None

Problems Resolved in This Release

- "show cli who" command is may not display the active SSH and Telnet user sessions due to a data initialization problem. This issue is resolved [wi00852930]

- The following error message is seen when using the “show log file category” command. “Invalid category: MSTP” Error messages are seen when using show log file category command. This issue is resolved. [wi00840206]

- The changes made to the ip_frag_flag in ACLI not correctly saved after the 8300 is restarted This issue is resolved [wi00857800]

- The copy command from the active CP to the standby CP will not work if the “host” account is used for authentication. This issue is resolved [wi00731942]

- IPFIX ExporterIP is not used as SourceIP in the flow This issue is resolved [wi00734190]

- When an active port is toggled, the adjacent active port’s LEDturns orange. This issue is resolved [wi00828166]

- VLACP PDUs not transmitted at the configured interval. This issue is resolved. [wi00876958]

- In MSTP/RSTP mode, non-active MLT port addition, or deletion would result in traffic loss. This issue is resolved [wi00564851]

- PCMCIA log file size exceeding the configured value may hang the ERS 8300 switch upon reboot, or CP switchover.. This issue is resolved [wi00857796]

- Logging the events to PCMCIA would some times hang the ERS 8300 Switch or may cause a silent reset when PCMCIA card is removed when logging task is trying to write to PCMCIA card when CPU is at 100% utilization. This issue is resolved [wi00891037]

8. Outstanding Issues

NA

9. Known Limitations

- Same as in 4.2.3.0, please refer to the 4.2.3.0 9. Known Limitations” section.

10. Documentation Corrections

None

Ethernet Routing Switch 8300

Software Release 4.2.3.2

1. Release Summary

Release Date: March 4, 2011
Purpose: Software maintenance release to address customer found software issues.

2. Important Notes before Upgrading to This Release

None

3. Platforms Supported

Ethernet Routing Switch 8300 modules in 8010 and 8006 chassis.
Ethernet Routing Switch 8300 modules in 8306 and 8310 chassis.

4. Notes for Upgrade

File Names for This Release

File Name	Module or File Type	File Size (bytes)
p83b4232.img	Boot monitor image	1092177

p83a4232.img	Runtime image	9404537
p83r4232.dld	Run-time image for R modules	2324652
p83c4232.img	3DES	52424
p83c4232.aes	AES (this image includes the DES image)	26960
p83a4232.mib	MIB	3684013
p83a4232.mib.zip	MIB (zip file)	578961
p83a4232.md5	md5 checksum file	477
p83f4232.img	Pre-Boot monitor image **See IMPORTANT Note below	230786

_____

** Avaya recommends that the Pre-Boot Image ONLY be upgraded if the system is currently running a Pre-Boot Monitor Software Rel 3.6. Systems running a Pre-Boot image Rel 3.7 should not be upgraded as there have been no changes to the Pre Boot Image for this release. The following CLI command can be used to help determine the version of the Pre-Boot Monitor Software:

show sys sw

5. Version of Previous Release

Software Version 4.2.3.0

6. Compatibility

This software release is managed with Java Device Manager (JDM) release 6.1.9.0 or greater.

7. Changes in This Release

New Features in This Release

None

Old Features Removed From This Release

None

Problems Resolved in This Release

CLI/ACLI

- The command "boot config flags qos" does not exist under ACLI but is available under regular CLI [wi00823950]
- The command "save boot" in dual CPU environments will not always update both the boot.cfg files on the /flash and the /pcmcia directories. The version on the /flash directory is not always updated. [wi00731960]

Filters

- Unable to permanently remove any fragmentation restrictions. Once the config is saved, the fragmentation setting is still there. [wi00564378]

SNMP

- On dual CPU system, the rcSysGrpDoSaveConfigData MIB object will cause a crash when saving configuration via JDM [wi00733215]

L2

- Enabling UDP forwarding on 4.2.2.3 causes connectivity issues via IST.[wi00774196]

Platform

- NTP server usage may cause silent reset to happen. This specific silent reset problem was found at a customer site and determined to be caused by the NTP feature support. [wi00829453]

8. Outstanding Issues

NA

9. Known Limitations

- Same as in 4.2.3.0, please refer to the 4.2.3.0 9. Known Limitations" on page 33

10. Documentation Corrections

None

Ethernet Routing Switch 8300

Software Release 4.2.3.0

1. Release Summary

Release Date: October 15, 2010
Purpose: Software maintenance release to address customer found software issues.

2. Important Notes before Upgrading to This Release

None

3. Platforms Supported

Ethernet Routing Switch 8300 modules in 8010 and 8006 chassis.
Ethernet Routing Switch 8300 modules in 8306 and 8310 chassis.

4. Notes for Upgrade

File Names for This Release

File Name	Module or File Type	File Size (bytes)
p83b4230.img	Boot monitor image	1091944
p83a4230.img	Runtime image	9403809
p83r4230.dld	Run-time image for R modules	2324652
p83c4230.img	3DES	52424
p83c4230.aes	AES (this image includes the DES image)	26960
p83a4230.mib	MIB	3684013
p83a4230.mib.zip	MIB (zip file)	578961
p83a4230.md5	md5 checksum file	477
p83f4230.img	Pre-Boot monitor image **See IMPORTANT Note	230786

	below	

** Avaya recommends that the Pre-Boot Image ONLY be upgraded if the system is currently running a Pre-Boot Monitor Software Rel 3.6. Systems running a Pre-Boot image Rel 3.7 should not be upgraded as there have been no changes to the Pre Boot Image for this release. The following CLI command can be used to help determine the version of the Pre-Boot Monitor Software:

show sys sw

5. Version of Previous Release

Software Version 4.2.2.2

6. Compatibility

This software release is managed with Java Device Manager (JDM) release 6.1.9.0 or greater.

7. Changes in This Release

New Features in This Release

- Auto configuration of IP phones is possible with LLDP-MED feature.
  The new CLI and ACLI commands: added to support the feature

  CLI :
  Config ethernet (slot/port) lldp tx-tlv med med-network-policy add|del app-type <value> [vlan <value>] [dscp <value>] [priority <value>

  ACLI :
  Interface gigabitEthernet/fastEthernet [slot/port] lldp tx-tlv med med-network-policies

  - For details on MIB object changes and new CLI/ACLI commands refer to section 11

Old Features Removed From This Release

None

Problems Resolved in This Release

CLI/ACLI

- The two CLI commands shown below have been extended to filter on port number. [Q01977336]
  - show port info fdb-entry [vlan <value>] [port <value>]
  - show vlan info fdb-entry [<vid>] [mac <value>] [port <value>].

- Nortel to Avaya rebranding done, All the show commands in CLI/ACLI along with the banner would display Avaya. [Q02146140]
- The new banner is shown below:

```
**********************************************
* Copyright (c) 1996-2010 Avaya, Inc.        *
* All Rights Reserved                        *
* Ethernet Routing Switch 8006               *
* Software Release 4.2.3.0                   *
**********************************************
```

  - MIB description is still maintained as Nortel.

Layer 2

- RSTP port config was not saved while running in ACLI mode, this is resolved [Q02156871]

- RSTP port role/state not correct after link break on MLT is resolved. [Q01845973]

- SLPP default Ethertype is now Avaya owned 0x8102 (from Nortel owned 0x8104) – 0x8104 still processed for backward compatibility [Q01845973]

- VLACP transitions when display a large file and quit is resolved. [Q02154476]

Layer 3

- Trace route failing in full mesh RSMLT is resolved. [Q02133826]

- Ping on VRRP virtual IP failing with data packet size more then 1472 is resolved. [Q02163855]

- OSPF value md5-key was getting stored in the config file, this is resolved. [Q02133043]

Platform

- The situation of POE cards going down during failovers is resolved. [Case ID: 100902-97554]

- Data loss on GBIC [AA1419013-E5] for 5-10 seconds is resolved. To be noted if a link is connected both sides with SFP AA1419013-E5 and are in half-Duplex state, we may have one side disabled and other side forwarding. [Q02130626]

- In ACLI: Switch was getting factory defaulted in verbose mode, this is resolved. [Q02124517]

- Switch resets on continuous login and exits is resolved.[Q02150788]

- HW WARNING Wrong dev type 15111ab - error message on stand-by is resolved. [Q02151936]

- The switch was getting factory defaulted on reboot after swapping IO cards. This is resolved now, we see the configurations getting loaded without getting factory [Q02060208]

MLT / SMLT

- When the fdb-entry ages out on IST boxes, one of the boxes makes an ARP request for the Mac entry, but due to hashing algorithm the reply is coming on the peer IST box. Since the Arp is aged out on one box, it requests the other to delete it too. As a result, the entry is getting lost on both the boxes. This issue is resolved. [Q02057910]

SNMP

- Filter Crash SNMP task was resolved. [Q02158463]

8. Outstanding Issues

NA

9. Known Limitations

- JDM support for LLDP-MED is not available
- Log File Transfer with RSTP Fails.
- Configuring ACL mode – from the bootconfig sub-context still uses the nncli syntax instead of ACL

  "config bootconfig flags nncli <true|false>"

10. Documentation Corrections

None

11. LLDP-MED Feature

The purpose of this feature is to allow an IP Phones to get *voice* VLAN, DSCP and priority, tagged/untagged traffic type's information through LLDP MED Network Policy TLV.

LLDP-MED functionality is configured on a per port basis.

When an IP Phone sends a LLDP PDU with MED capabilities the switch will notice that it has a MED endpoint device on that port and will reply with a PDU containing the Network Policies TLVS together with the other non-LLDP-MED TLVs already set for transmission.

The LLDP–MED standard specifies that if the MED capability TLV is not received from an endpoint device on a port than no other MED TLVs except med-capabilities will be sent to the user in a PDU.

The VLAN information is sent to the IP Phone through LLDP-Med Network Policy TLV. Multiple Network Policy TLVs can be sent in one LLDP PDU, each for a distinct application type.

CLI Command

config ethernet (slot/port) lldp tx-tlv med med-network-policy
add|del app-type <value> [vlan <value>] [dscp <value>] [priority <value>]

CLI Examples

PURPOSE: LLDP-MED: app-type Voice
PROCEDURE: Execute command **config ethernet [slot/port] lldp tx-tlv med med-network-policy add app-type 1**
This command is used to enable IP voice traffic to flow.

PURPOSE: LLDP-MED: app-type Voice-Signaling
PROCEDURE: Execute command **config ethernet [slot/port] lldp tx-tlv med med-network-policy add app-type 2**
This command is used to enable Voice-Signaling for connection establishment with the IP phone.

PURPOSE: LLDP-MED: Vlan ID set
PROCEDURE: Execute command **config ethernet [slot/port] lldp tx-tlv med med-network-policy add app-type [1/2] vlan [Value]**
This command is send the vlan id in the LLDP MED network policy TLV. Default value of Zero is sent, if not configured.

PURPOSE: LLDP-MED: dscp set
PROCEDURE: Execute command **config ethernet [slot/port] lldp tx-tlv med med-network-policy add app-type [1/2] dscp [Value]**
This command is send the dscp in the LLDP MED network policy TLV. Default value of Zero is sent, if not configured.

PURPOSE: LLDP-MED: priority set
PROCEDURE: Execute command **config ethernet [slot/port] lldp tx-tlv med med-network-policy add app-type [1/2] priority [Value]**
This command is send the priority in the LLDP MED network policy TLV. Default value of Zero is sent, if not configured.

PURPOSE: LLDP-MED: Add Voice and Voice Signaling and then delete both Voice and Voice-Signaling
PROCEDURE: Execute command **config ethernet [slot/port] lldp tx-tlv med med-network-policy add app-type 1**
config ethernet [slot/port] lldp tx-tlv med med-network-policy add app-type 2
config ethernet [slot/port] lldp tx-tlv med med-network-policy del app-type 1
config ethernet [slot/port] lldp tx-tlv med med-network-policy del app-type 2

PURPOSE: LLDP-MED: Show Info
PROCEDURE: Execute all the commands under med-network-policy and execute the command **show lldp local-sys-data type med**

ACLI Command

Interface gigabitEthernet/fastEthernet [slot/port] lldp tx-tlv med med-network-policies app-type

ACLI Examples

PURPOSE: ACLI LLDP-MED: app-type voice
PROCEDURE: Execute the command
Interface gigabitEthernet/fastEthernet [slot/port] lldp tx-tlv med med-network-policies app-type voice

PURPOSE: ACLI LLDP-MED: app-type Voice-signaling
PROCEDURE: Execute the command
Interface gigabitEthernet/fastEthernet [slot/port] lldp tx-tlv med med-network-policies app-type voice-signalling

PURPOSE: ACLI LLDP-MED: Vlan ID set
PROCEDURE: Execute the command
Interface gigabitEthernet/fastEthernet [slot/port] lldp tx-tlv med med-network-policies app-type [voice/voice-signalling] vlan [Value]

PURPOSE: ACLI LLDP-MED: dscp set
PROCEDURE: Execute the command
Interface gigabitEthernet/fastEthernet [slot/port] lldp tx-tlv med med-network-policies app-type [voice/voice-signalling] dscp [Value]

PURPOSE: ACLI LLDP-MED: priority set
PROCEDURE: Execute the command
Interface gigabitEthernet/fastEthernet [slot/port]
lldp tx-tlv med med-network-policies app-type
[voice/voice-signalling] priority [Value]

PURPOSE: ACLI LLDP-MED: Add Voice and Voice Signaling and then delete Voice and Voice-Signaling
PROCEDURE: Execute the command
Interface gigabitEthernet/fastEthernet [slot/port]
lldp tx-tlv med med-network-policies app-type voice
lldp tx-tlv med med-network-policies app-type voice-signalling
no lldp tx-tlv med med-network-policies app-type voice
no lldp tx-tlv med med-network-policies app-type voice-signalling

PURPOSE: LLDP-MED: Show Info
PROCEDURE: Execute the command **show lldp local-sys-data med**

MIB Object Summary

The following MIB objects are added to provide the SNMP support.

rcLldpXMedLocMediaPolicyTable
rcLldpXMedLocMediaPolicyEntry
rcLldpXMedLocMediaPolicyPortNum
rcLldpXMedLocMediaPolicyAppType
rcLldpXMedLocMediaPolicyPriority
rcLldpXMedLocMediaPolicyDscp
rcLldpXMedLocMediaPolicyUnknown
rcLldpXMedLocMediaPolicyTagged
rcLldpXMedLocMediaPolicyRowStatus

MIB Object Details

File: rapid_city.mib.head

In the Import section:

PolicyAppType
FROM LLDP-MED-MIB

Under rcport Node:

```
--------------------------------------------------------------------------
---
-- LLDP-MED - Local Device Information
--------------------------------------------------------------------------
```

```
---
---
--- rcLldpXMedLocMediaPolicyTable: Local Media Policy
---                      Information Table
---
---
rcLldpXMedLocMediaPolicyTable OBJECT-TYPE
   SYNTAX      SEQUENCE OF RcLldpXMedLocMediaPolicyEntry
   MAX-ACCESS  not-accessible
   STATUS      current
   DESCRIPTION
           "This table contains one row per policy type per port
           of media policy information (as a part of the MED
           organizational extension) on the local system known
           to this agent."
   ::= { rcPort 12 }

rcLldpXMedLocMediaPolicyEntry OBJECT-TYPE
   SYNTAX      RcLldpXMedLocMediaPolicyEntry
   MAX-ACCESS  not-accessible
   STATUS      current
   DESCRIPTION
           "Information about a particular policy on a specific
           port component."
   INDEX   { rcLldpXMedLocMediaPolicyPortNum, rcLldpXMedLocMediaPolicyAppType }
   ::= { rcLldpXMedLocMediaPolicyTable 1 }

RcLldpXMedLocMediaPolicyEntry ::=
            SEQUENCE {
               rcLldpXMedLocMediaPolicyPortNum       InterfaceIndex,
               rcLldpXMedLocMediaPolicyAppType       PolicyAppType,
               rcLldpXMedLocMediaPolicyVlanID        Integer32,
               rcLldpXMedLocMediaPolicyPriority      Integer32,
               rcLldpXMedLocMediaPolicyDscp          Integer32,
               rcLldpXMedLocMediaPolicyUnknown       TruthValue,
               rcLldpXMedLocMediaPolicyTagged        TruthValue,
               rcLldpXMedLocMediaPolicyRowStatus     RowStatus
}

rcLldpXMedLocMediaPolicyPortNum OBJECT-TYPE
   SYNTAX      InterfaceIndex
   MAX-ACCESS  not-accessible
   STATUS      current
   DESCRIPTION
           "."
   ::= { rcLldpXMedLocMediaPolicyEntry 1 }

rcLldpXMedLocMediaPolicyAppType OBJECT-TYPE
   SYNTAX      PolicyAppType
   MAX-ACCESS  not-accessible
```

```
    STATUS      current
    DESCRIPTION
            "The media type that defines the primary function of the
             application for the policy advertised by an endpoint."
    REFERENCE
            "ANSI/TIA-1057, Section 10.2.3.1"
    ::= { rcLldpXMedLocMediaPolicyEntry 2 }

rcLldpXMedLocMediaPolicyVlanID  OBJECT-TYPE
    SYNTAX      Integer32 (0|1..4094|4095)

    MAX-ACCESS  read-create
    STATUS      current
    DESCRIPTION
            "An extension of the VLAN Identifier for the port,
             as defined in IEEE 802.1P-1998.
             A value of 1 through 4094 is used to define a valid PVID.
             A value of 0 shall be used if the device is using priority tagged
             frames, meaning that only the 802.1p priority level is significant
             and the default VID of the ingress port is being used instead.
             A value of 4095 is reserved for implementation use."
    REFERENCE
            " ANSI/TIA-1057, Section 10.2.3.5"
    ::= { rcLldpXMedLocMediaPolicyEntry 3 }

rcLldpXMedLocMediaPolicyPriority  OBJECT-TYPE
    SYNTAX      Integer32 (0..7)
    MAX-ACCESS  read-create
    STATUS      current
    DESCRIPTION
            "This object contains the value of the 802.1p priority
            which is associated with the given port on the
            local system."
    REFERENCE
            " ANSI/TIA-1057, Section 10.2.3.6 "
    ::= { rcLldpXMedLocMediaPolicyEntry 4 }

rcLldpXMedLocMediaPolicyDscp  OBJECT-TYPE
    SYNTAX      Integer32(0..63)
    MAX-ACCESS  read-create
    STATUS      current
    DESCRIPTION
            "This object contains the value of the Differentiated Service
            Code Point (DSCP) as defined in IETF RFC 2474 and RFC 2475
            which is associated with the given port on the local system."
    REFERENCE
            " ANSI/TIA-1057, Section 10.2.3.7"
    ::= { rcLldpXMedLocMediaPolicyEntry 5 }

rcLldpXMedLocMediaPolicyUnknown  OBJECT-TYPE
```

```
    SYNTAX      TruthValue
    MAX-ACCESS  read-create
    STATUS      current
    DESCRIPTION
          "A value of 'true' indicates that the
           network policy for the specified application type is
           currently unknown.  In this case, the VLAN ID, the
           layer 2 priority and the DSCP value fields are ignored.
           A value of 'false' indicates that this network policy
           is defined  "
    REFERENCE
          " ANSI/TIA-1057, Section 10.2.3.2"
    ::= { rcLldpXMedLocMediaPolicyEntry 6 }

rcLldpXMedLocMediaPolicyTagged  OBJECT-TYPE
    SYNTAX      TruthValue
    MAX-ACCESS  read-create
    STATUS      current
    DESCRIPTION
          "A value of 'true' indicates that the application is using a

           tagged VLAN.
           A value of 'false' indicates that for the specific application
           the device either is using an untagged VLAN or does not
           support port based VLAN operation.  In this case, both the
           VLAN ID and the Layer 2 priority fields are ignored and
           only the DSCP value has relevance "
    REFERENCE
          " ANSI/TIA-1057, Section 10.2.3.3"
    ::= { rcLldpXMedLocMediaPolicyEntry 7 }

rcLldpXMedLocMediaPolicyRowStatus OBJECT-TYPE
    SYNTAX      RowStatus
    MAX-ACCESS  read-create
    STATUS      current
    DESCRIPTION
          "Used to create/delete entries."

    ::= { rcLldpXMedLocMediaPolicyEntry 8 }
```

Copyright © 2010 Avaya Inc. Avaya is a registered trademark of Avaya Inc. All other trademarks are the property of their respective owners.
While reasonable efforts have been made to ensure that the information in this document is complete and accurate at the time of printing, Avaya assumes no liability for any errors. Avaya reserves the right to make changes and corrections to the information in this document without the obligation to notify any person or organization of such changes.
For the most current versions of documentation, see the Avaya Support Web site: http://www.avaya.com/support