Zhone Firmware/Software/Hardware Release Notes

ZHONE PROPRIETARY

Release Number: 02.05.27	**Date:** July 19, 2013			
Release Type: GA Release	**Country Type:** N/A			
Release History	**Affected Product Models**			
Release	**Type**	**Date**	**Model**	**Priority**
BS2600_ALL_020527	Released	July 19, 2013	26xx / 42xx	Minor
BS2600_ALL_020526	Released	May 15, 2011	26xx / 42xx	Minor
BS2600_ALL_020522	Released	April 30, 2010	26xx / 42xx	Minor
BS2600_ALL_020521	Released	January 27, 2010	26xx / 42xx	Minor
BS2600_ALL_020520	Released	August 14, 2009	26xx / 42xx	Minor
BS2600_ALL_020517	Released	April 30, 2009	26xx / 42xx	Minor
BS2600_ALL_020516	Released	March 16, 2009	26xx / 42xx	Minor
BS2600_ALL_020515	Released	July 15, 2008	26xx / 42xx	Major
BS2600_ALL_020513	Released	June 12, 2008	26xx / 42xx	Minor
BS2600_ALL_020511	Released	November 12, 2007	26xx / 42xx	Minor
BS2600_ALL_020507	Released	July 25, 2007	26xx / 42xx	Minor
BS2600_ALL_020505	Released	May 17, 2007	26xx / 42xx	Minor
BS2600_ALL_020501	Released	January 23, 2007	26xx / 42xx	Minor

Resolved Customer Issues in 02.05.27:

Issue Identifier	Issue Description
DSLAM- 15561	System crash at 497.1 days ... system uptime 32-bit counter rollover (hundreth seconds)

Model to Software Level Support – 26xx/42xx.

The following table lists the models and associated loads for the 2600 and 4200 family. All but the ReachDSL units have been Manufacturer Discontinued.

Model	Software		Model	Software		Model	Software	
2611 – ReachDSL GigE uplink								
2611-A2-420	2.05.27		2611-A2-420-0HY	2.05.23		2611-A2-420-0JP	2.05.15	
2611-A2-424	2.05.27		2611-A2-425	2.05.27		2611-A2-430	2.05.27	
2611-A2-430-0HY	2.05.23		2611-A2-433	2.05.27		2611-A2-434	2.05.27	
2611-A2-435	2.05.26							
2621 – ADSL2+ GigE uplink								
2621-A3-420	2.05.27		2621-A3-423	2.05.27		2621-A3-423-0HY	2.05.23	
2621-A3-424	2.05.27		2621-A3-425	2.05.27		2621-A3-430	2.05.27	
2621-A3-433	2.05.27		2621-A3-433-0HY	2.05.23		2621-A3-434	2.05.27	
2621-A3-435	2.05.27		2621-A3-430-0MT	2.04.25				
2631 – ADSL2+ Annex B GigE uplink								
2631-A3-425	2.05.27		2631-A3-435	2.05.27				
Model	**Software**		**Model**	**Software**		**Model**	**Software**	
2671 – SHDSL GigE uplink								
2671-A2-420	2.05.27		2671-A2-420-0HY	2.05.23		2671-A2-424	2.05.27	
2671-A2-425	2.05.27							
2674 – SHDSL T1/E1 MLPPP								
2674-A1-420	2.05.27							
Model	**Software**		**Model**	**Software**		**Model**	**Software**	
4211 – ReachDSL ATM T1								
4211-A1-530	2.03.06							
4213 – ReachDSL T1/E1 IMA								
4213-A1-522	2.03.06		4213-A1-530	2.03.06		4213-A1-532	2.03.06	
4214 – ReachDSL T1/E1 MLPPP								
4214-A1-530	2.05.27		4214-A1-531	2.05.27				
4219 – ReachDSL GigE uplink								
4219-A2-520	2.05.27		4219-A2-530	2.05.27		4219-A2-531	2.05.27	
4223 – ADSL T1/E1 IMA								
4223-A1-530	2.03.06		4223-A1-530-0VC	2.03.06		4223-A1-532	2.03.06	
4224 – ADSL2+ T1/E1 MLPPP								
4224-A1-522	2.05.27		4224-A1-530	2.05.27		4224-A1-531	2.05.27	
4229 – ADSL2+ GigE uplink								
4229-A3-520	2.05.27		4229-A3-520-0HY	2.05.23		4229-A3-530	2.05.27	
4229-A3-530-0MT	2.04.25		4229-A3-531	2.05.27				
4239 – ADSL2+ Annex B GigE uplink								

4239-A3-520	2.05.27		4239-A3-532	2.05.27				
4279 – SHDSL GigE uplink								
4279-A2-520	2.05.27		4279-A2-520-0HY	2.05.23				

Release Structure and Identification

Filename	Target Destination
BS2600_REVA_020527.bin	**Binary for units with Wintegra Revision A**
BS2600_ALL_020527.bin	**Management Download – combined boot and application load.**

Note: DSLAMs running firmware versions **prior to 2.1.0** will need to be upgraded with file **BS2600_REVA_020527.bin** first before upgrading to later builds. Otherwise the Download will fail.

DSLAMs with firmware **2.1.0 or later** use file **BS2600_ALL_020527.bin**

This build may upgrade the unit's bootrom. Customers should not power cycle the unit while a firmware switch is in progress. The bootrom update may take 5-10 minutes.

Unresolved Customer Issues

None.

System Co-Requirements in 02.05.27

Model	Description	Incorporated Code Base
4214-A1-xxx 4219-A2-xxx	24 Port ReachDSL	Reach DSP Release code 02040
2674-A1-xxx 4279-A2-xxx	24 Port SHDSLbis Annex A	Infineon DSP Release 0.9.3.1
4224-A1-xxx 4229-A3-xxx	24 Port ADSLS2+ Annex A	Broadcom DSP Release 06.04.08
4239-A3-xxx	24 Port ADSLS2+ Annex B	Broadcom DSP Release 06.04.08

Operational Considerations

Filtering: The 1U DSLAM supports Filtering, but this feature was compromised in the 2.5.0 release. The most common consumer filtering requirement has been for preventing up-bound DHCP offers. This feature (DHCP filtering) was added to the 1U DSLAM on a per-port basis in release 2.5.22. Should filtering be required, DHCP filtering is the only supported option. Zhone currently has no plans to revive the filtering option other than this per-port DHCP filtering. See the figure on the next page for details, and refer to the 2.5.22 release notes for feature information.

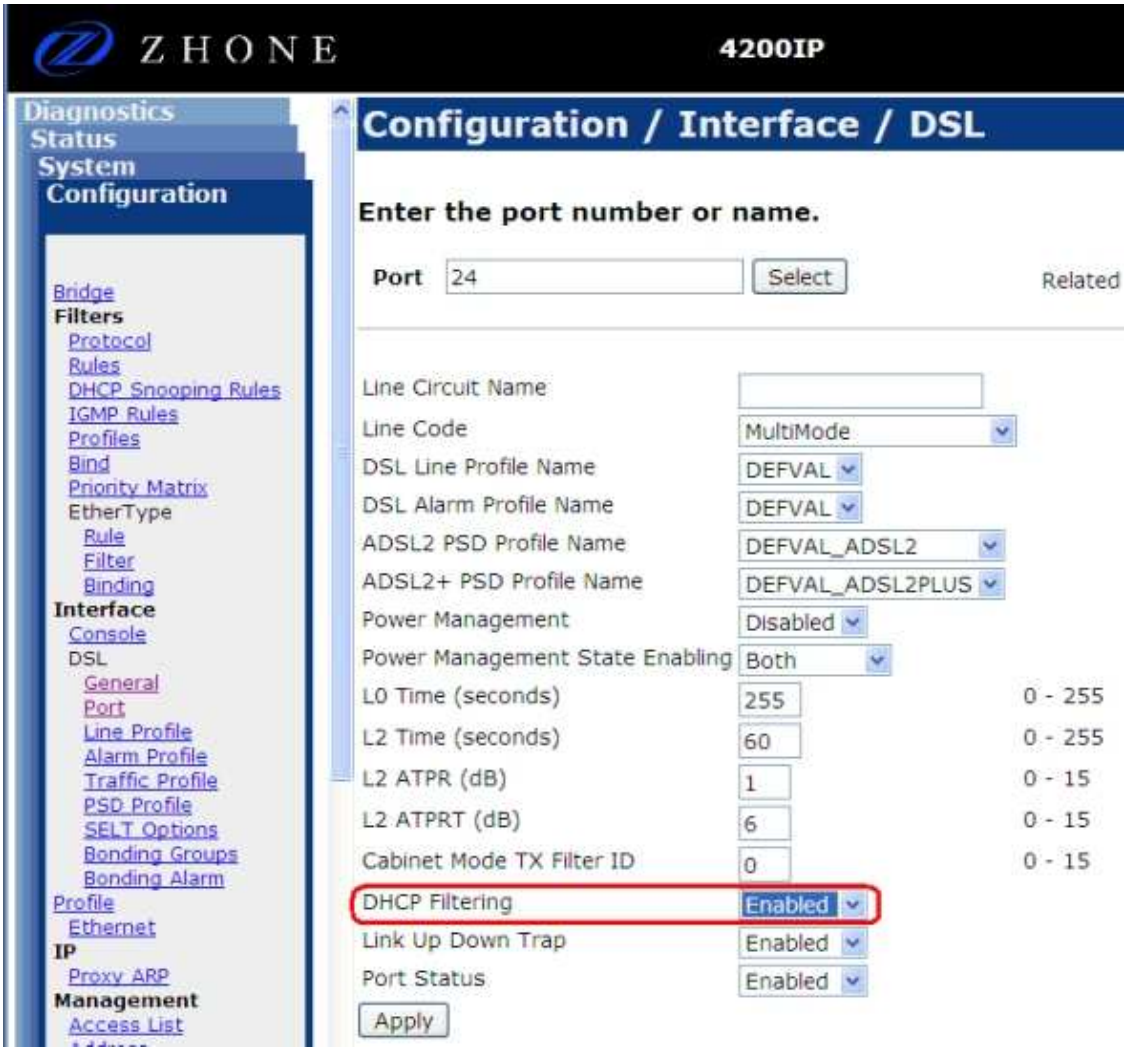

Figure 1: DHCP line filtering

6-Wire SHDSL:

Currently the 1U DSLAM supports 2, 4, 6 and 8 wire SHDSL. Although all of these settings are supported, the 6-wire SHDSL requires that the configured bandwidth must be one of the 6-Wire rates that is 7128 Kbps or greater from the "Valid SHDSL Rates" chart in the "Configuration - Line Profiles" help (See below). The modem will not sync to the DSLAM when 6-wire values less than 7128 Kbps are configured. The 2, 4 and 8-wire settings work correctly at all values listed in the "Valid SHDSL Rates" chart.

Valid SHDSL Rates

For Annex A or B:
2-Wire: 200 - 2312 in increments of 64 kbps
4-Wire: 400 - 4624 in increments of 128 kbps
6-Wire: 600 - 6936 in increments of 192 kbps
8-Wire: 800 - 9248 in increments of 256 kbps

For Annex F or G and Extended Rate Mode = 4104:
2-Wire: 200 - 4104 in increments of 64 kbps
4-Wire: 400 - 8208 in increments of 128 kbps
6-Wire: 600 - 12312 in increments of 192 kbps
8-Wire: 800 - 16416 in increments of 256 kbps

For Annex F or G and Extended Rate Mode = 5704:
2-Wire: 200 - 5704 in increments of 64 kbps
4-Wire: 400 - 11408 in increments of 128 kbps
6-Wire: 600 - 17112 in increments of 192 kbps
8-Wire: 800 - 22816 in increments of 256 kbps

ADSL Bonding

When using the ADSL Bonding feature, the maximum downstream data throughput is approximately 23 Mbps regardless of how the ADSL bonding group's aggregate rate is set.