



SRstackware ATCA-F140 Release 2.1.4 Build 14

Release Notes

6806800M61C

June 2012

Copyright

Copyright 2012 Emerson Network Power

All rights reserved.

Emerson Network Power is registered in the U.S. Patent and Trademark Offices.

All other product or service names mentioned in this document are the property of their respective owners.

Notice

While reasonable efforts have been made to assure the accuracy of this document, Emerson assumes no liability resulting from any omissions in this document, or from the use of the information obtained herein. Emerson reserves the right to revise this document and to make changes from time to time in the content hereof without obligation of Emerson to notify any person of such revision or changes.

Electronic versions of this material may be read online, downloaded for personal use, or referenced in another document as a URL to the Emerson Embedded Power Web site. The text itself may not be published commercially in print or electronic form, edited, translated, or otherwise altered without the permission of Emerson.

It is possible that this publication may contain reference to or information about Emerson products (machines and programs), programming, or services that are not available in your country. Such references or information must not be construed to mean that Emerson intends to announce such Emerson products, programming, or services in your country.

Table of Contents

1	Introduction.....	4
1.1	Format of the Delivery	4
1.1.1	Software and Binaries.....	4
1.1.2	Supported features.....	4
1.1.3	Documentation.....	4
2	Functionality	6
2.1	Corrected Incident Reports.....	6
2.2	Change Log	7
2.3	Limitations.....	7
2.4	Known Issues.....	9

1 Introduction

This document is the Release Notes for SRstackware 2.1.4 Build 14 software.

1.1 Format of the Delivery

1.1.1 Software and Binaries

The table below lists the SRstackware rpms delivered along with the BBS software.

Table 1 SRstackware 2.1.4 Software Deliverables

Deliverable	Description
srstackware-config-f140-2.1.4-14.powerpc.rpm	SRstackware Configuration files RPM
srstackware-f140-2.1.4-14.powerpc.rpm	SRstackware Binaries RPM
srstackware-demo-config-f140-2.1.4-14.powerpc.rpm	SRstackware demo configuration for the supported protocols
srstackware-enhanced-f140-2.1.4-14.powerpc.rpm	SRstackware Enhanced RPM

1.1.2 Supported features

At a high level this release supports L2 and L3 layer protocols and features, such as STP, RSTP, MSTP, CoS/QoS, LACP, IGMP, OSPFv2, Static Routing, GVRP, VLAN, GMRP, QinQ, bridge configuration, Flow Control using Pause frames , IPv6 Static routing, RIP, RIPng, VRRP, Load balancing, and SRS-API.

1.1.3 Documentation

The following table lists the documentation delivered with this release.

Title	Description
<i>6806800N94B_SRstackware_2.1.4_Build14_Document_Collection</i>	Contains the following documents: <ul style="list-style-type: none"> •SRstackware Intelligent Network Software Switch Configuration Command Reference •SRstackware Intelligent Network Software OSPF

Title	Description
	<p>Command Reference</p> <ul style="list-style-type: none"> •SRstackware Intelligent Network Software Layer 2 Command Reference •SRstackware Intelligent Network Software Layer 2 Configuration Guide •SRstackware Intelligent Network Software Layer 3 Configuration Guide •SRstackware Intelligent Network Software VRRP Command Reference •SRstackware Intelligent Network Software RIP Command Reference •SRstackware API Developer Guide •SRstackware FAQ •SRstackware Intelligent Network Software Troubleshooting Guide •SRstackware Intelligent Network Software Layer 3 Command Reference •SRstackware Intelligent Network Software Protocol Demo Guide
<p><i>6806800M61C_SRstackware_ATCA-F140-2.1.4_Build14_Release_Notes</i></p>	<p>Refers to this document.</p>
<p><i>SRstackware_2.1.4_Build14_MIB_constraints.xls</i></p>	<p>This document lists the working status of MIB operations, pre-requisites, and constraints for all the L2 and L3 MIB objects.</p>
<p><i>SRS-MIB.txt</i></p>	<p>This file refers to the SRstackware proprietary MIB.</p>

2 Functionality

For an overview of the SRstackware functionality, refer the *ATCA-F140 Blade Services Programmer's Reference Guide*.

2.1 Corrected Incident Reports

IR Number	Description	Severity
IR00131236	SR186363 - snmp trap issue at customer site	2-Major
IR00131249	[ATCA-F140-LACP] Removal of second aggregator port configuration results in nsm crash	2-Major
IR00155823	ATCA-F140: Need to change the sequence of SRS sys-up script and sfptool	3-Medium
IR00130716	Packet filtering on an Ingress port to modify the VLAN is not working for F140	3-Medium
IR00130718	[ATCA-F140] [Packet Filtering] modify-dstmac action is failing on F140	3-Medium
IR00130721	QoS API "bcm_cosq_port_mapping_set" is failing on F140	3-Medium
IR00130797	CoS and QoS Implementation is not working for F140 - Trident Chipset	3-Medium
IR00130837	Invoking srs_api_exec_command(apd, cmd_str, mode) with inappropriate parameters may lead to kernel panic	4-Minor
IR00130848	[RIP] Command "clear ip rip route all" is not deleting the entries in RIP Routing table	4-Minor
IR00131273	[STP]Stp functionality is failing on xe1 and xe2 ports after reboot	4-Minor
IR00131230	[ARP] When Static ARP entry is added through SRS, MAC address of it is invalid in Linux ARP table.	4-Minor
IR00156195	ATCA-F140: error in ekeysync.sh file	

2.2 Change Log

Documentation Changes

Document	Change
SRstackware Intelligent Network Software Protocol Demo Guide	Added the Chapter QoS Configuration
BBS on ATCA-F140 with SRstackware Programmer's Reference	Updated the Chapter Telco Clocking Module

2.3 Limitations

- ◇ This SRS build is for F140 RevB blades.
- ◇ The MSTP instances with same VLANs cannot be configured across bridges.

In MSTP configuration, the VLANs are associated to MSTP instances. The instances with same VLANs cannot be configured across bridges. For example avoid the configuration such as

```
instance 1 vlan 5
bridge 1 instance 1
bridge 2 instance 1
```

- ◇ The following error messages in */var/log/messages* and console logs, do not have any impact and should be ignored:
 - kernel: ERROR: Not Deleted [MAC:0:80:42:27:35:9c] from FDB
 - ERROR: hsl_bcm_if_l2_flags_set lport : unit port failed po2
 - If the above interface name is a logical interface and not a physical interface.
 - ERROR: Cannot install IGMP Snooping field entry
 - hpibsnmpd startup - FAILED
- ◇ Storm control functionality works based on the fixed frame size of 1512 bytes, so number of frames to be forwarded does not vary with the different frame size.
- ◇ Avoid configuration using BCM shell as it interferes with SRstackware configuration.

- ◇ It is not recommended to use Linux IP configuration along with SRS as it may lead to conflicts. If a default route needs to be added through SRS, first remove the default route in Linux if exists and then add the default route through SRS.
- ◇ The maximum pause delay (flow control) supported by SRS is 0.033 seconds due to the hardware limitation of 512 bit times.
- ◇ IP based load balancing

The IP based load balancing will not work for unlearned traffic on fabric 10G ports. So use the enhanced mode to configure IP based load balancing on these ports.

NOTE: An unlearned traffic is the one in which the destination MAC address is not known to the switch port in that VLAN.

The load balancing can be visibly seen when there are multiple flows, typically more than three to four flows of random traffic.

- ◇ The configuration of normal or enhanced load balanced algorithm can be performed only at chipset level.
- ◇ MSTP daemon crashes when “a port is attached to a MSTP bridge, configured to a channel-group, removed from channel-group and then trying to associate the port to an MSTP instance.” To avoid this add the instance on the port and then configure the port to channel-group.
- ◇ If the blades at both the ends (with two ports aggregated at both ends) of a static-aggregator channel are rebooted at the same time, there may be a chance of forming a loop and one or more member ports may go to STP blocking state. To avoid such scenario, keep a delay of 10seconds to boot the blades in static-channel configuration. Alternatively you can use “channel-group” instead of static-channel in this configuration.
- ◇ The removal of aggregator configuration (“no channel-group”) on a port should be done only after removal of any corresponding match-list on the aggregated port. If this is not done then a stale aggregator entry exists even though it does not exist on any other port. The workaround to this problem is:
 1. Add the port back to the aggregator
 2. Remove the matchlist configuration
 3. Remove the aggregator configuration on the port
- ◇ When installation of match-list rule with multiple actions fail, refer to /var/log/messages for appropriate failure reason. Review the validity of the combination.
- ◇ A maximum of five actions are supported per match-list rule.
- ◇ When match-list rule to modify-tos is installed, the 3 least significant bits are replaced in the precedence field of ToS. This is due to the behavior of BCM.

- ◇ When F140 is connected to switch/PC and if you observe that the link is down, check whether the port has been configured to auto negotiation. Try manual configuration of the port using duplex and bandwidth commands. If the link is up, save this configuration for subsequent reboots.
- ◇ Due to hardware limitations, MTU cannot be configured on router ports.

2.4 Known Issues

IR Number	Description	Severity
IR00130396	The no bridge X acquire command is persistent after reboot, but the functionality fails.	2-Major
IR00130860	SR172291- Configured MAC aging time is automatically changed to default.	2-Major
IR00130526	When RIPng IPv6-Static Routing is configured, some of the routes are missing from the routing table.	2-Major
IR00093370	[VLAN] [IXIA] DUT with GVRP disabled on it is not forwarding GVRP PDUs to all ports.	3-Medium
IR00093448	[MSTP] [IXIA] Config BPDUs are not ignored when the mdelayWhile timer is running.	3-Medium
IR00093410	[RSTP] [IXIA] Designated Port's Forwarding Flag is incorrectly set during port transitions.	3-Medium
IR00094533	QoS: The 'match traffic-type udp traffic-type-or-queue' class is not getting associated on interface.	3-Medium
IR00094020	[SNMP] snmpset fails for objects dot1qForwardAllForbiddenPorts, dot1qForwardAllStaticPorts, and dot1qForwardUnregisteredStatic.	3-Medium
IR00130178	[SNMP] There are issues when performing SNMP operations on objects of dot1qStaticUnicastTable.	3-Medium
IR00094546	The no ip forwarding command do not cleanup the routes from the underlying chip.	3-Medium
IR00130286	There is a segmentation fault at GMRP node when it is continuously receiving the GMRP join PDU's.	3-Medium
IR00155872	ATCA-F140: The ekeysh - stack smashing is detected	3-Medium
IR00130298	The GVRP registration forbidden option is not working as per the standard.	3-Medium
IR00131053	MTU for aggregated ports is zero when aggregated ports are L3 ports.	4-Minor
IR00131045	Match-list rules based on src-ip action is applied on ARP packets too.	4-Minor
IR00131112	[MSTP] Configuration of "no bridge 2 multiple-spanning-tree enable bridge-forward" leads to all the ports to Discarding state.	4-Minor

IR Number	Description	Severity
IR00131036	The show interface command output is not clear for tagged multicast traffic.	4-Minor
IR00127972	[SNMP] When setting a port as forbidden for a given VLAN, it is getting set as egress for the remaining VLANs.	4-Minor
IR00130816	[OSPF] Failed to establish OSPF adjacency after reboot, when 500 OSPF processes are created, saved, and rebooted.	4-Minor
IR00130817	[OSPF] Error messages logged while rebooting the blade with 500 OSPF processes enabled.	4-Minor
IR00093368	[VLAN] [IXIA] [IPI-FAILED] Any BPDUs or GVRP PDUs that carry a tag header are not recognized as well-formed BPDUs or GVRP PDUs.	4-Minor
IR00145627	[Documentation] <i>Switch Configuration Command Reference Manual</i> needs to be updated for Paired Links.	4-Minor
IR00131277	[OSPF] OSPF adjacency is not reached in NBMA networks.	4-Minor
IR00131278	[OSPF] Route summarization is not working in the OSPF enabled topology.	4-Minor
IR00131272	[FP] Match l2param under match-list command is taking wrong mac-address as input.	4-Minor
IR00131275	The STP command spanning-tree restricted-role does not have any impact on the selection of root.	4-Minor
IR00131276	[OSPF] The OSPF md5 authentication is not working.	4-Minor
IR00131279	[OSPF] The access list configuration on OSPF is not showing any effect. The routes are distributed irrespective of access-list.	4-Minor
IR00130538	The mac address table gets cleared after a much longer time, when the "mac-aging-timer" expires.	4-Minor
IR00131214	[QoS] The set vlan-priority command is not working as expected.	4-Minor
IR00130264	There is an error message during execution of no bridge # command without any functionality impact.	4-Minor
IR00131229	[Switch_CR]The Password command is not supported, but documented in Switch Config Command Reference document.	4-Minor
IR00130992	[LACP] The nsm option in debug lacp command is not available.	4-Minor
IR00131302	SR196927-SRS: The S99sys-up is pause for 60 seconds due to timeout of BCM 0.	4-Minor
IR00131217	[ACL] The Access list is still applied on the traffic, even though it is deleted.	4-Minor
IR00131224	[Documentation] The route-map configuration blocks the redistribution, even though the match parameters are not met.	4-Minor
IR00130894	[RIP] The Offset-list is not effective immediately after configuration.	4-Minor

IR Number	Description	Severity
IR00130495	[Documentation] The <i>SRS FAQ manual</i> needs an update in Storm Control Section.	4-Minor
IR00131196	[OSPF] The te-metric command is not available.	4-Minor
IR00131258	[Switch_CR] The log trap debugging configuration is not shown in configuration file even after being enabled.	5-Minimal
IR00131270	[F140] The <i>Protocol Demo Guide</i> and <i>Demo Configurations</i> are not consistent as compared to other blade <i>Demo Configuration</i> .	5-Minimal
IR00145685	[F140-fabric] With some of the load balancing configuration, the traffic is redirecting to one port instead of getting distributed.	5-Minimal