

Relevant to SR Series Model(s):

**SR350N** SR350NE

SR500N SR500NE

**SR505N** 



## **Document History**

Version	Date	Author	or Description	
1.0	08/05/2012	M. Solomon	Document creation	
2.0	10/11/2012	P. Franzek	Addition of Custom Defaults Usage	

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# **SW Revision Summary**

SW	DSP/xDSL Line Driver	CFE	Wireless Driver	Release
Version		Version		Date
2.4.4.3	A2pD035j.d24a (SR350)	1.0.37-	5.100.138.2001.cpe4.12L04.3	10/11/2012
	A2pv6C035j.d24a (SR500)	106.24		
2.4.4.2	A2pD035j.d24a (SR350)	1.0.37-	5.100.138.2001.cpe4.12L04.3	7/30/2012
	A2pv6C035j.d24a (SR500)	106.24		
2.4.3.7	A2pD030n.d23c (SR350)	1.0.37-	5.60.120.11.cpe4.06L.03.8	5/31/2012
	A2pv6C032a.d23c (SR500)	106.24		
2.4.3.6	A2pD030n.d23c (SR350)	1.0.37-	5.60.120.11.cpe4.06L.03.8	4/26/2012
	A2pv6C032a.d23c (SR500)	106.24		

## **New Features**

New Features		
Ref#	Description	Notes
RB-6	SR505N VDSL2 Residential Gateway Launch	
RB-40	Updated GUI in SmartRG Colors	
RB-43	DHCP Option 121Support	
RB-82	Custom Default Support via file download	
RB-97	RG GUI Colors and Logo are now customizable via	
	the configuration file	
RB-126	Support PTM on ADSL	

# Changes & Fixes

Change	Changes & Fixes		
Ref#	Description	Notes	
RB-36	Default PPP Authentication Retry Limit set to		
	65535 (Infinite)		
RB-92	TR-098 IPPingDiagnostics fails to execute		

## **Known Issues**

Known	Known Issues		
Ref#	Description	Notes	
RB-21	Can't enable 40MHz in Wireless Advanced menu		
RB-23	Time blocking - browser redirect to block page may not		
	work		
RB-28	Can't Disable DNS Proxy		
RB-34	The Mirror Port can only be an Ethernet LAN port		





## Compatibility/System Notes

The introduction of Custom Default Settings feature requires the CFE to be upgraded when moving from any firmware version 2.4.4.2 or before. Firmware upgrades from any version below to 2.4.4.3 to 2.4.4.3 or newer requires the CFE to be upgraded by use of the firmware that includes a new CFE. Firmware files containing a CFE contain the string "cfe" in the filename. For example, the file, CA PBCA 2.4.4.3 24742 SR350N cfe fs kernel, would be used to upgrade the firmware on a SR350N gateway.

Failure to upgrade the CFE when moving from a firmware version before version 2.4.4.3 will result in unpredictable operation of the gateway and unknown factory default settings.

Downgrading from 2.4.4.3 and newer versions to pre 2.4.4.3 is not advised. If a downgrade must be accomplished, a factory default of the device via the reset button must be performed. The downgrade must be accomplished using the CFE image of the target firmware release. Factory default the device after the firmware has been downgraded by holding the reset button for at least 10 seconds after applying power to the device. Power must be off before pressing the reset button.

This 2.4.4.2 FW release is the first upgrade from Broadcom 4.06 to 4.12 SDK (software development kit). The image containing "CFE" in the file name should be used when upgrading from or downgrading to pre-4.06 versions. The Broadcom version can be determined by looking at the software version in the modem's device info page. For example this is a 4.12 version; '2.4.4.2\_4.12L.04.A2pD035j.d24a'. Target download protection has been enabled which prevents downloads of incompatible files.

**IGMP Snooping Definitions:** 

Standard Mode - in standard mode, if multicast traffic is present on a LAN port but no membership report (join) was received, the traffic will flood to all ports. If a membership report was received, multicast traffic will be forwarded only to the LAN ports on which the IGMP membership reports arrived.

Blocking Mode - in blocking mode, multicast traffic will be blocked from all ports until such time a report is received.

If IGMP snooping is disabled the CPE floods multicast packets to all its ports. IGMP Snooping is disabled by default.

This software supports Physical Layer Retransmission (PhyR) which operates at layer 1 and uses a mechanism similar to TCP where retransmits occur if errors are detected. This results in high effective INP with minimal interleave delay. Sync rate increases from 2 to 4Mbps have been reported in addition to the line being more robust and resistant to noise/interference generated from treadmills, ceiling fans, etc. PhyR is disabled by default but can be enabled in the DSL menu.

MAC address considerations – the source MAC address contained in upstream data equals the base MAC address. The second WAN interface uses the base MAC address plus 4 (counted in hex). Additional WAN interfaces will increment by one. TR-069 will report the base MAC address in the CWMP protocol.





Wireless is enabled by default with SSID = SmartRGxxxx (x = last four characters of base MAC). Wireless security is Mixed WPA2/WPA-PSK, passphrase = OneCpeToRuleThemAll, Rekey interval = 0 and encryption = TKIP+AES.

#### **Included PBCA Features:**

- Control Panel
- **Content Filtering**
- Time Blocking
- Captive Portal
- Connect and Surf
- STUN and UDP Connection Request
- Advanced Connected Device Monitor
- Bandwidth Monitor
- WiFi Performance Monitor
- **Dynamic Content Filtering**

## **Prior SW Releases**

2.4.4.2			
Ref#	Description		Notes
RB-3	Port Mirroring		New Feature
RB-29	Resolved Primary DNS failure not triggering switch to Secondary		
RB-4	Resolved issue with Add Port Forward script		
RB-11	Number of PPPoE retries on authentication error is now configurable		
RB-11	Resolved device not retrying PPPoE authentication error	on after	
RB-9	Changed SSID: "ClearAccessxxxx" to "SmartRGxxxx" where xxxx is last 4 digits of MAC		
RB-9	Changed Default WEP Key from "ClearAccessWA" "SmartRGWireless"	' to	
RB-33	Resolved changing the LAN IP address range to o than the default resulting in a failure of Content F and Time Blocking		

2.4.3.7			
Ref#	Description		Notes
	Resolved issue where DNS resolution could take	up to 4	
	seconds		
	Allow SIP ALG enable/disable from GUI		

2.4.3.6			
Ref#	Description		Notes
	Fixed a DNS Proxy issue where some sites such as www.cisco.com couldn't be resolved		
	Resolved wireless bandwidth selection not retained after a Save	being	





Resolved losing WAN access after enabling DMZ	
Resolved Internet LED not flashing when data is	
present	
Resolved daylight savings time feature not	
working properly	
Resolved issue with local GUI locking up if STUN	
was enabled but there was no WAN connection	
Resolved issue where editing IPoE WAN Service	
was not redirecting to "WAN IP Settings" page,	
instead it was redirecting to the "NAT Settings"	
page	
Resolved an intermittent issue where if the WPA	
key was configured on the CPE GUI prior to	
checking into the ACS the ACS might corrupt the	
key after initiation	
Resolved issue where the CPE was still reporting	
the existence of a Wi-Fi client to the ACS long after	
it was disconnected	
Resolved Content Filtering configuration not being	
updated after a Save	
Resolved Content Filtering not blocking any	
configured URLs	
Resolved MAC address parameter not being	
populated for any WAN interface	
Resolved CPE reflecting incorrect LAN ports in the	
Interface Grouping menu	





## SW Upgrade Procedure

Upgrade	Software	
Step	Description	
1.0	Open a web browser, connect to 192.168.1.1/admin, and login with username admin and	
	password <b>admin</b> (or appropriate IP address and login info)	
2.0	Click Management→Update Software and select the Browse button	
3.0	Locate and select the appropriate software image	
4.0	Select the Update Software button. The software image will be uploaded to the device and the device will reboot automatically upon completion	
Verify		
Step	Description	
1.0	Hit the F5 Key to refresh your browser and reconnect to 192.168.1.1/admin to log back into the device	
2.0	Click on Device Info	
3.0	Verify the correct code is shown in the Software Version field	
Restore	Defaults	
Step	Description	
1.0	Hit the F5 Key to refresh your browser and reconnect to 192.168.1.1/admin to log back into the	
	modem	
2.0	Click on the Management Link	
2.1	Click on Settings	
2.2	Click on Restore Default	
Note:	Restoring device defaults can also be accomplished by momentarily pressing the reset button while powering on the device	

## **Custom Defaults**

The Custom Defaults feature allows the importation of a set of defaults to the gateway that will be restored when the Restore Default Settings is activated. This set of defaults can be defined and updated via the GUI, CLI or CWMP support of the gateway.

To create a set of Custom Default settings, configure the gateway as required. Use the Backup Running Configuration button on the Backup Settings to upload a configuration file from the gateway. After the file is uploaded, choose the file and use the Update Working Settings button on the Update Settings window to download the file to the gateway. The gateway will use the downloaded settings as the custom default whenever the Restore Default operation is invoked.

# **Tech Support:**

#### **CPE Issues:**

Submit a ticket using our Customer Portal at <a href="https://smartrg.atlassian.net">https://smartrg.atlassian.net</a>

## RMAs:

Open a Customer Portal ticket with description "RMA" and attach a spreadsheet which includes Model, MAC address, Issue and Firmware version tested with

#### Firmware:

Login to the Customer Portal to download firmware





### **Additional Contact Info:**

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