



**SX-550-270x
Firmware Release Notes
V2.04**

2011.03.10

Classification:

Firmware

Description:

This firmware supports the SX-550-270x Serial Server

Version:

V2.04 2011.03.10

Part Number:

75183-030B

Purpose:

Test version to improve performance.

Files Released:

bbath204.bin

Installation Instructions:

Use TFTP protocol to download across the LAN.

Limitations:

1. Ad hoc operation may not work with some PC radios [65]
2. TTLS with forced certificate on Steel Belted Radius not supported
3. WPA-TLS fails on DLink DWL-7100 AP [76]
4. Dynamic WEP does not work with Aruba AP.
5. WPA2-LEAP with FreeRadius does not work with Aruba AP.
6. Dynamic WEP does not work with EAP-FAST.
7. Some Meru APs do not support multiple IP addresses per client, so wireless configuration bridge mode cannot be used when a bridged device is connected.
8. Some Cisco LWAP APs do not support multiple IP addresses per client, so wireless configuration bridge mode cannot be used when a bridged device is connected.

Revision History:**V2.04 (2011.03.10)**

1. Renamed V2.03a for release

V2.03e (2011.03.10)

1. Disabled DHCP Server ID modification (item 3 in V2.03b) since it no longer seems to be required for Cisco LWAPs with the latest firmware code. Added a configuration flag (SET NW LWAOPT EN / DIS) so it can be re-enabled if needed.
2. Disabled wireless idle connection timer in bridge mode, since few packets will be sent to the unit in this mode, and the idle probe mechanism will not work in bridge wired configuration mode.
3. Added optional disable of the spanning tree delay (SET NW SPANDELAY EN / | DIS) on connection start, for use with APs that pass no broadcast or other traffic until traffic seen from the client.
4. Increased the number of receive buffers in the HTTP server for fast browsers that do a lot of prefetching.

V2.03d (2011.02.09)

1. If gateway not configured, restored previous gratuitous ARP notification disabled by mistake in V2.03b.
2. Modified IP address verification probes to have a source IP address of zero to be RFC 5227 compliant.

V2.03c (2011.01.13)

1. Modified test version warning notice to be in gray instead of red.

V2.03b (2010.12.08)

1. Added bridge mode option, (SET NW BRCONSIG EN/DIS) so that when the wireless connection comes up, the wired link is reset, to signal to the attached client (if any) that a connection change has occurred. Disabled by default.
2. In wireless mode, added periodic pings to gateway after wireless connection is established to notify the AP that we are present.
3. Modified DHCP relay agent for bridge mode so that it works in the wired configuration mode (removed reliance on gateway address which may not be valid for the main network in this case).
4. Modified DHCP handling so that notification packets are sent after the DHCP address is acquired.
5. Fixed PEAP acknowledgement packet format – version number was not being set to match request. This bothered the BlueSocket Radius.

V2.03a (2010.11.11)

1. Upgraded bridge mode/wired config DHCP handling to match wireless config mode.
2. Fixed potential stack overflow in bridge mode/wired config mode.
3. Fixed EAP-FAST handshake.
4. Modified IP startup w/DHCP to start the stack with address 0.0.0.0 until an address is acquired, to avoid confusing routers/bridges that acquire the first IP address seen.
5. Fixed problem with EAP-FAST and Cisco ACS [94]
6. Fixed problem with EAP-FAST and Steel Belted RADIUS [80]
7. Fixed problem with Dynamic WEP on Aruba and Meru APs [79]
8. Modified EAP state machine to ignore EAPOL key message sent when no valid PMK is present, and send EAPOL-START instead [105]

V2.02 (2010.05.17)

1. Renamed V2.01p for production release.

V2.01p (2010.05.17)

1. Added SET NW ROAMHYST <0-16>
2. Disabled DFS channels
3. Fixed channel scan mask web problem
4. Added option for eCable destination address to be entered as a symbolic name, and support for a related DNS lookup.
5. Modified WPA-PSK handshake to inhibit the sending of an EAPOL-START message, which bothers Siemens APs. SET NW WPASTART command added to allow message to be sent if needed in some case.
6. Fixed memory leak during wireless disconnect/reconnect operations.
7. Modified WPA supplicant to support APs (Symbol, Proxim) that support multiple authentication/key management methods at the same time (EAP+PSK).
8. Fixed network flow control bug in RFC2217 data processing. If receive window went to zero, it would never be re-opened.
9. Put work-around in host certificate parsing during the EAP-TLS handshake to allow the code to ignore the certificate signature if an unsupported signature algorithm is present in the certificate chain (TLSSIGIGNORE command).
10. Added configuration value to enable disabling of preauthentication support notification in the WPA2 IE (Linksys WRT54G seem to require this bit to be off).
11. Fixed buffer overflow in HTTPS firmware download which caused processor trap and download failure.
12. Fixed bug in EAP state machine – after disconnect/reconnect to the AP, EAP timers were not being started which could hang the state machine.
13. Modified EAP state machine so that EAP ID request received during EAP-HELD state transitions to EAP-CONNECTING instead of EAP-ACQUIRED. With Proxim AP, which sends ID requests very frequently even when the handshake has not been started, this prevented return to the EAP-CONNECTING state, and so no EAPOL-start was sent, and so no connection ever occurred.
14. Fixed bug in PEAP state machine – TLV phase II response was not being properly decoded, which could lead to false negatives from the PEAP handshake.
15. Fixed bug in HTTPS firmware download – host transfer of certain size packets could cause memory overwrite.
16. Disabled EAP-FAST since it does not currently work reliably.

V2.01k (2009.04.28)

1. Fixed text errors on the French wireless web configuration page.

V2.01h (2009.04.13)

1. Added RFC2217 modem control line & break support
2. Fixed problem with WPA2-WPA mode with EAP authentication.
3. Fixed user channel scan mask so it works with background scans as well as foreground scans.

4. Fixed problem with PEAP created when exponent length problem fixed.
5. Fixed problem with TTLS created when LWAPP problem fixed.

V2.01f (2009.02.27)

1. Blocked 802.11a DFS channels (50-144) in all regulatory domains, not just the US.

V2.01e (2009.02.11)

1. Fixed problem with signal quality check during GDL testing.
2. Fixed problem with local certificate loaded via web not being saved properly

V2.01d (2009.01.16)

1. Added radio sleep support for low power modes.
2. Changed model name reported to SX-550.

V2.01c (2009.01.06)

1. Improved signal strength reporting algorithm to handle cases where the unit is not transmitting data.
2. Fixed problem with parsing certificates with 1 byte exponents.
3. Fixed memory leak in self signed certificate key precomputation task

V2.01b (2008.10.31)

1. Fixed problem with client DHCP requests in bridging mode from V2.01a.

V2.01a (2008.09.10)

1. Initial test version with Atheros radio support.

V1.91 (2008.09.10)

1. Test version with Atheros radio support for FCC testing.

**** END OF RELEASE NOTES ****