

Release Notes

SD50NBT

Version 3.5.4.20

May 2017

This document provides release notes for version **msd50n-laird-3.5.4.20** of SD50NBT radio software as well as previously distributed release notes.

Release notes are a summary of new and enhanced features, resolved issues, and known issues that are not resolved in this version. Consult the User's Guide for details on the features of this software release.

- [Software Version msd50n-laird-3.5.4.20](#)
- [Software Version msd50n-laird-3.5.3.11](#)
- [Software Version msd50n-laird-3.5.2.17](#)

SOFTWARE VERSION MSD50N-LAIRD-3.5.4.20

Released May 2017

Software part number: ARM architecture SD50LXLT1-170531
X86 architecture SD50LXLT2-170531

OS: Linux

New or Enhanced Features

- The Wi-Fi radio firmware is updated to version 3.5.0.10012. (10536)
- The Linux kernel on which backports is based has been upgraded to version 4.4.39. (10533)
- lighttpd has been upgraded to version 1.4.43. (10473)
- Redesigned WebLCM for enhanced usability, security and speed. (10363)
- Enhanced UAPSD support (10536)

Resolved Issues

Firmware

- Enhanced UAPSD and CAC to prevent sending action from when disabled and pstream is created for AP with ACM bit set. Prevent re-enabling of UAPSD when pstream is deleted. (10536)

Sdc_cli

- Enhanced the UAPSD configuration to allow for the selection of specific access classes. (10536)

SDK

- Resolved a buffer overflow issue with the SDK when attempting to set credential strings longer than the maximum length of 31 characters. (10420)
- Corrected the channel set for Russia (RU). (10427)
- Enhanced UAPSD support. The sdk, in conjunction with the radio driver, will handle adding and deleting pstreams as needed. (10536)

Supplicant

- Supplicant scanning is now used for initial connections. (10567)
- Cloak user password storage in memory to reduce the chance of disclosure due to buffer overruns or core dumps. (9747)

WebLCM

- Added the ability to enable driver and supplicant debugging through the WebLCM. (5188, 5261, 5484)
- Added the capability to generate and download a log file via the WebLCM. (5991)
- fw_update, when started from the WebLCM, is now logged to syslog. (7614)
- WebLCM now enforces strong passwords, requiring at least 8 characters, one capital, one lower case and one number. (10544)
- Added WebLCM support for the addition and configuration of IPv6 interfaces and addressing methods. (9576)
- Enhanced the UAPSD configuration to allow for the selection of specific access classes. (10536)
- Added WebLCM support for enabling Desktop Notifications. (10674)
- Support for UTF-8 characters has been added for the SSID and PSK configuration fields. (10547, 10841)
- If a firmware upgrade is interrupted, WebLCM now allows the firmware upgrade to be restarted. (10811)
- When configuring a profile, WebLCM now allows a currently installed certificate to be selected. (10750)
- Help text has been added to the WebLCM for the profile and global settings. (10748)
- WebLCM now allows WEP keys to be set as hex or ASCII characters when configuring a profile. (10481)
- WebLCM now dynamically updates to display valid credential or key options when Security or EAP types are modified while editing a profile. (10359)

Known Issues

Firmware

- CCX features cannot be disabled. (4470)
- When the 50 radio receives a CCX radio measurement request from a Cisco AP that requests an off-channel scan on multiple channels, the 50 radio only returns a measurement report for the first channel in the list. (8446)

General

- When in WW regulatory mode with radio mode ABGN and in a 5Ghz-only environment, there may be a delay for initial connection. (5556)

- If the radio is not in CAM mode, association, authentication, and dhcp interaction could take multiple attempts. (6733)
- The Scan DFS Time in the radio's Global settings is not configurable. (7304)
- FIPS mode is not currently operational on the SD50. (8876)
- The SDK is not thread safe. Making calls to the SDK from multiple separate threads concurrently may result in undefined behavior. Access to the SDK should be gated by a semaphore to serialize access in a multi-threaded environment. (8864)

SOFTWARE VERSION MSD50N-LAIRD-3.5.3.11

Released December 2016

Software part number: ARM architecture SD50LXLT1-161215
X86 architecture SD50LXLT2-161215

OS: Linux

New or Enhanced Features

- The Wi-Fi radio firmware has been updated to version 3.5.0.10011. (10398)
- The Wi-Fi radio board data file has been updated to version 0xc02. (9557)
- The msd-x86 software package now has support for 50 series radios. (8859)
- The Linux kernel on which backports is based has been updated to version 4.4 (9700)
- The OpenSSL FIPS module has been updated to version 2.0.10 (10407)

Resolved Issues

Firmware

- Radio is no longer slow to connect on DFS channels. (9177)
- Corrected .11h power constraint handling and removal. (9036, 9260)
- Regulatory updates for FCC. (9465, 9541)
- Modified the noise floor update algorithm to consistently pass the ETSI EN300 328 v1.9.1 requirement for short control signalling transmissions during the adaptivity tests. (9540)
- Corrected issues with CCX RM request handling that could cause the firmware to become unresponsive. (7542, 10325)

General

- Msd release packages now untar into a subdirectory tagged with the release version number instead of build date. (9217)

Sdc_cli

- The BT Coexist option has been removed from the sdc_cli global settings since BT coexistence is enabled at driver load time. (9163)

- Attempting to add a 21st profile via the sdc_cli application now results in an error message indicating that the maximum number of profiles is already present rather than a message that the profile already exists. (9174)
- The sdc_cli scan output now displays the security type for a WPA2/AES PSK network as WPA2-PSK rather than WPA2-PSK-AES to be consistent with the sdc_cli profile configuration options. (9454)

SDK

- Profiles found in /etc/summit/defaults.conf are now copied over into a new profiles.conf. Previously only template defaults were copied over. (9176)
- A connected device will no longer disconnect and reconnect to the wireless network when a non-active network profile is deleted, if auto-profile is not enabled. (9180)
- LRD_WF_GetSuppLevel() now validates the input parameter to prevent a segfault if called with a NULL pointer. (9233)
- Resolved an issue where profiles exist, but are not displayed when using the sdc_cli profile list command. (9390)

Supplicant

- The supplicant now uses "sdcsupp" to prefix syslog entries. (8792)
- Added work-arounds for APs which send WPA2/TKIP EAPOL-Key packets with the key field un-encapsulated or with incorrect AES-WRAP padding in the key data field. (9475)
- Disabled TLSv1.2 for EAP-TTLS due to incorrect operation by some authentication servers. Specifically this addresses incorrect operation with freeradius version 2.2.8 and earlier versions that also support TLSv1.2. (9554)
- Resolved an issue that would cause TLS middle certificate validation to fail. (9598)

WebLCM

- WebLCM now checks that the profile name is unique before attempting to add a new profile. (9741)
- WebLCM no longer accepts multiple words for the profile name when creating a new profile. (9742)

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SOFTWARE VERSION MSD50N-LAIRD-3.5.2.17

Released April 2016

Software part number: SD50LXLT1-160405

OS: Linux

New or Enhanced Features

- Initial SD50 software release

Known Issues

Firmware

- Radio is sometimes slow to connect on DFS channels. This is seen predominantly at first boot when operating with APs with a beacon time configured to be approximately 100ms. (9177)
- CCX features cannot be disabled. (4470)
- When the 50 radio receives a CCX radio measurement request from a Cisco AP that requests an off-channel scan on multiple channels, the 50 radio only returns a measurement report for the first channel in the list. (8446)

General

- Msd release packages untar into a subdirectory tagged with the build date instead of the release version number. While this is a cosmetic issue, it may cause difficulty in correlating a particular build with the package from which it came. However, the subdirectories are still unique and traceable for each release build. **tar tfj <filename>** helps you determine what the internal directory name is for a given release package. (9217)
- When in WW regulatory mode with radio mode ABGN and in a 5Ghz-only environment, there may be a delay for initial connection. (5556)
- If the radio is not in CAM mode, association, authentication, and dhcp interaction could take multiple attempts. (6733)
- The Scan DFS Time in the radio's Global settings is not configurable. (7304)
- The SDK is not thread safe. Making calls to the SDK from multiple separate threads concurrently may result in undefined behavior. Access to the SDK should be gated by a semaphore to serialize access in a multi-threaded environment. (8864)

sdc_cli

- Attempting to add a 21st profile via the sdc_cli application results in an error indicating the profile exists. This is the wrong error message. No profile is added in this case. (9174)

