



Release Notes

Scanner Management Solution (SMS) for Linux v1.3 *October 2023*

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Overview

The Scanner Management Solution (SMS) enables your enterprise to remotely manage its Zebra scanners. In addition to accessing asset tracking information and statistics, the SMS (which runs on the scanner's host PC) can remotely set parameters and update firmware.

Remote Management Functionality

1. SMS tool can be executed in both Admin and Non-admin modes.
2. Asset information is available within the log file
 - a. The SMS detects scanners, if they are connected to the host at the time the SMS is launched.
 - b. The scanner will be detected if it is in a supported "Communication Protocol Switching" mode, see section below.
3. Configuration settings can be loaded to a scanner using a SMS Package
4. Firmware can be loaded to a scanner using a SMS Package



5. Both configuration settings and firmware can be loaded using a SMS Package
6. A log file is available with asset information and actions performed.
7. Not supported
 - a. Ability to query statistics

Supported Scanners

1. The SMS for Linux supports the connection of the following scanners to a Linux computer.
 - a. One corded scanner plugged in at a time like the DS8108
 - b. One cordless scanner and cradle like the DS8178 / std cradle
 - c. One MP7000
 - d. One MP7000 and CSS
 - e. One MP7000 and CSS and DS4308
2. Not supported
 - a. One MP7000 is plugged directly into the POS using a USB cable and DS8178/ cradle is plugged into the MP7000

Supported Communication Protocols

1. Cable Type
 - a. The SMS for Linux requires a USB cable.
2. Data
 - a. For details on the supported data communication protocols (transmission of bar code data), see the “Linux SDK Release Notes” document.
3. Communication Protocol Switching
 - a. The SMS for Linux supports com protocol switching to and from these com modes:
 - b. USB HID Keyboard
 - c. USB SNAPI
 - d. USB IBM Handheld
 - e. Not supported – USB IBM Tabletop
4. Management - The management of the scanner occurs over
 - a. USB SNAPI
 - b. USB IBM Handheld
 - c. Not supported – USB IBM Tabletop

SMS Package Generation

1. The SMS Package for Linux is generated using the SMS wizard within 123Scan.
2. To use the SMS, put a SMS Package into SMS’ download folder. For the download folder location, see the Components section below.

Note: SMS for Linux only operates in “application mode”. So if your SMS package specifies any “Service Mode” settings, they will be ignored by the Linux SMS.

Installation of the SMS

1. The SMS is installed using a Debian or RPM packages depending on your OS distribution.
2. The installation path must use the folder structure listed below
3. The installation software can be configured for a silent installation

Launching the SMS



1. The SMS is a Linux application that is launched using a Linux's Cron job (a time-based job scheduler in Linux) or the SMS can be launched manually.

Log File Capabilities

1. The SMS logs are contained within the log folder
2. The SMS' customer facing log contains the following:
 - a. Asset tracking information before running and after running the SMS
 - b. If a configuration file was loaded
 - c. If firmware was loaded
 - d. A time date stamp on an event
3. The SMS generates debug logs, available for engineering analysis

For the latest SMS updates, please visit [Zebra SMS for Linux](#)

For support, please visit <http://www.zebra.com/support>.

Device Compatibility

For the compatible devices list, please visit following page.

<https://www.zebra.com/us/en/support-downloads/software/utilities/scanner-management-solution-for-linux.html>

Version History

Version 1.3.1-23 – 10/2023

1. Bug Fix – Enhanced scanner protocol switching during firmware update

Version 1.3.1-22 – 07/2023

2. Bug Fix – Corrected hash value generation of SMS configuration file when notes section contains formatted texts (newline, tab, etc.)

Version 1.3.1-21 – 01/2023

1. Added Arm 32bit and 64bit support
2. Added security feature – Before loading an SMS package, an integrity check is performed on the package's contents.

Version 1.3.1-19 – 04/2022

1. Enhanced SMS – Added ability to force reload of configuration settings, even if already present. Setting available in 123Scan SMS wizard Name and Notes screen.
2. Bug fix – Resolved issue on scanner not switching to the correct management mode during the firmware and configuration update retry.



Version 1.3.1-17 – 10/2021

1. Added support for SNAPI without Imaging scanner host comm mode.
2. Added support for executing SMS in non-admin user mode.
3. Bug fix – Resolved issue on missing SMS status file.

Version 1.3.1-13 – 10/2020

1. Bug fix – Resolved issue on firmware update of scanner showing incorrect host mode when the scanner in IBMHID.

Version 1.3.1-12 – 04/2020

1. Added asset information (model number, serial number, date of manufacture, firmware version, configuration file name) to SMS log file. A default package is now present in the download folder. The default package causes the logging of asset information at SMS startup, even if the customer has not loaded a SMS Package.
2. A default package is now present in the download folder.

Version 1.3.1-9 – 10/2019

1. Added CentOS 7.3 support.
2. Added Debian 9.5 support.
3. Added C++ 11 support.

Version 1.3.1-7 – 07/2019

1. Added ability to execute the SMS using an external Java program.

Version 1.3.0 – 11/2018

1. Added Retry logic, if firmware update fails, will attempt to reload firmware up to 3 times
2. Support added for following distributions
 - a. CentOS 6.0 32bit
 - b. SLES 11 SP2 32bit
 - c. SLES 11 SP3 64bit and 32bit
 - d. Open SUSE 13.1 64bit and 32bit
 - e. Redhat 6.3 32bit
 - f. Ubuntu 12.04 32bit and 64bit
 - g. Debian 8 64bit and 32bit

Version 1.2.0 – 08/2018

1. Firmware/Configuration update through management mode IBMHH.
2. Firmware/Configuration update for cascaded and Bluetooth scanners.
 - a. Direct connected cradle paired Bluetooth scanner.
 - b. Direct connected MP6000/MP7000 with auxiliary scanner.
 - c. Multiple directly connected scanner support (up to 5 devices).
3. Supported distributions
 - a. SUSE Linux Enterprise Server 12, 64bit architecture.
 - b. Ubuntu 14.04, 64bit architecture.



- c. Ubuntu 14.04, 32bit architecture.

Version 1.1.0 – 06/2017

1. Scanner Management Solution support for Linux CoreScanner driver v4.0.

Version 1.0.0 – 04/2017

1. Initial release of the Scanner Management Solution.
2. Firmware update for corded scanners through SNAPi.
3. Configuration push for corded scanners through SNAPi.
4. Parameter barcode scanning enabling/disabling through SNAPi.
5. Assets tracking information before/after scanner management.

Components

If the default install location is not changed, the components are installed in the following folders:

Component	Location
SMS Program folder	/usr/share/zebra-scanner/sms
SMS Package download folder	/usr/share/zebra-scanner/sms/download
SMS Default log folder	/usr/share/zebra-scanner/sms/logs
Launch SMS as an Application	/usr/share/zebra-scanner/sms/SMS
Release notes (This file)	/usr/share/doc/zebra-scanner-managementsolution/ Release_Notes.pdf

Installation Options (Supported Distributions)

The Scanner Management Solution can only run as an application. Service mode is not supported. This application can be initiated using a terminal command.

- For the installation of Scanner Management Solution, CoreScanner Driver v4.1 or an above version is required.
- Installation of the software can be done through Software Center or the terminal command.

Package Types

Supported Architecture for SMS for Linux

Supported Distribution	RPM_x86_64bit	RPM_x86_32bit	Debian_x86_64bit	Debian_x86_32bit	Debian_ARM_32bit	Debian_ARM_64bit
	CentOS 8	X	NA	NA	NA	NA
	CentOS 7	X	X	NA	NA	NA
	CentOS 6.3	X	X	NA	NA	NA
	SLES 11 SP3	X	X	NA	NA	NA
	SLES 11 SP2	X	X	NA	NA	NA
	SLES 12	X	X	NA	NA	NA
	Open Suse 13.1	X	X	NA	NA	NA
	Red Hat 7.4	X	NA	NA	NA	NA
	Ubuntu 22.04	NA	NA	X	NA	NA
	Ubuntu 20.04	NA	NA	X	NA	NA
	Ubuntu 18.04	NA	NA	X	NA	NA
	Ubuntu 16.04	NA	NA	X	X	NA
	Ubuntu 14.04	NA	NA	X	X	NA
	Ubuntu 12.04	NA	NA	X	X	NA
	Debian 9.5	NA	NA	X	X	NA
	Debian 8	NA	NA	X	X	NA
	Raspberry Pi OS	NA	NA	NA	NA	X

Minimum PC Requirements

- Hardware Requirements
 - Pentium Dual-Core E214 1.6GHz or Pentium Mobile Dual-Core T2060 or Pentium Celeron E1200 1.6GHz.
 - 2GB RAM 1.2 GB free hard drive space.
 - USB port, 1.1 or higher, for the connection of USB Scanners.

NOTE: SMS v1.3 must use SMS packages created with 123Scan2 v 4.1 or higher.