



Release Notes

JPOS Driver for Linux v4.4
September 2024

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Overview

These release notes describe the JPOS driver for Linux, including its functionality, supported scanners and supported distributions.

Functionality,

1. JPOS driver.
2. Development libraries and header files for Java application developers.
3. Test and Sample utilities
 - a. Scanner/Scale JPOS Driver Test Utility (Java).



JPOS Driver

1. XML configuration of scanner attributes.
2. Access to Zebra specific functionality through Direct I/O calls
3. Sample applications
 - a. JPOS sample app
4. Logging support
5. JPOS exceptions for failures (Troubleshooting)

Host Device Details

See the “Installation Options (Supported Distributions)” table – shown below.

For the latest SDK updates, please visit [Zebra Scanner SDK](#)

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/developer-tools/scanner-sdk-for-linux.html>

Supported COM Protocols

JPOS driver for Linux support following communication protocols:

1. IBM Table-Top USB
2. IBM Hand-Held USB
3. Symbol Native API (SNAPI) with Imaging Interface
4. Symbol Native API (SNAPI) without Imaging Interface

Version History

Version 4.4.1-55 – 09/2024

1. **Bug fix** – Fixed issue in not throwing an **exception pop up window** upon performing **zero scale** in **overweight** scenario.
2. **Bug Fix** – Corrected **PIDXScan_ScanDataType** getting set to 0 incorrectly after performing interactive checkhealth.
3. **Bug Fix** – Minor **sample app** fix - Enable Live Weight checkbox now gets set to disabled state after enabling “Auto Device Enable” or after setting property for **PIDX_DeviceEnabled** to true.
4. **Enhancements** in **log** file.



- a. Log entries are added to indicate the status of the “Zero Scale” command.
 - b. Removed incorrect exception log entry upon performing zero scale process while PIDXScal_ZeroValid is false.
5. **Bug Fix** – Fixed issue in disabling scanner after a barcode is read through interactive health check option, when AutoDisable is enabled.
6. **Bug Fix** - Minor **sample app** fix – Implemented validations for values set for properties “DeviceEnabled”, “EnableLiveWeight” and “PowerNotify” to indicate invalid values to user through the sample application’s log view.
7. **Bug Fix** – Corrected the text representations for Health Check options (Internal, External and Interactive) in log view.

Version 4.4.1-53 – 07/2024

8. **Bug fix** – Minor **sample app** fix – State of Power Notify checkbox in JPOS Sample application now shows the correct state after releasing the JPOS Scale profile.
9. **Bug Fix** – Minor **sample app** fix - Fixed PIDXScan_ScanData field to display label IDs (if configured) in the JPOS Sample application.
10. **Bug Fix** - Fixed JPOS zero scale feature limits up to 0.05 lbs only when it should be 0.60 lbs.

Version 4.4.1-52 – 06/2024

1. Updated “logback” library to version 1.2.13.

Version 4.4.1-50 – 04/2024

1. **Bug Fix** – Minor sample app fix – State of Data Event Enable and Device Enable checkboxes in JPOS Sample application now shows the correct state when JPOS Scale profile is not opened.
2. **Bug Fix** – Fixed intermittent exception caused in the JPOS Scale live weight thread when attempting to restart or configure the scale while live weight is in progress.
3. **Bug Fix** – Minor sample app fix – Synchronized state of “Device Enable” checkbox when “Auto Device Enable” or “Enable Live Weight” selections are used.
4. Added a new attribute as “ClearQueueOnRelease” to JPOS.xml file, to configure clearing the data queue when device is released.
5. **Bug Fix** – An exception is fired upon performing Zero Scale with weights greater than the firmware implemented scale zeroing weight limit.
6. **Bug Fix** – Prevented incorrectly throwing “Timed out with zero stable weight” exception after setting PIDXScal_ZeroValid to true in JPOS Scale live weight DIO.

Version 4.4.1-49 – 01/2024

1. Enhanced the JPOS driver to send device enable/disable commands without checking the current status.

Version 4.4.1-47 – 01/2024

1. Enhanced **JPOS Driver**
 - a. **Bug Fix** – Minor sample app fix – State of Data Event Enable checkbox in JPOS Sample application after a barcode is scanned now works as expected.



- b. **Bug Fix** – Minor **sample app** fix – State of Device Enable checkbox in JPOS Sample application after a barcode is scanned with AutoDisable enabled now works as expected.

Version 4.4.1-45 – 10/2023

1. **Bug Fix - Check Health** (Internal and External) now returns “No hardware” response, when no scanner(s) is connected on the USB bus.
2. **Bug Fix – Sample App** no longer shows incorrect **weight** when ReadWeight is called with Freeze Events enabled.
3. **Bug Fix** – Driver now returns “**Not Ready**” **scale status**, when scale is unplugged, while having live weight enabled.

Version 4.4.1-44 – 10/2023

1. Added support for **multiple JPOS Scanner instances** when communicating to one application. This enables the JPOS driver to communicate to and track multiple scanners simultaneously and independently, like the MP7000 and DS8178/cradle.
2. Added support to **filter scanner discovery by** host mode, model and serial number. The scanners are filtered by comm protocol. Additional filters can include Model Name and/or Serial number.
3. **JPOS Sample application** - Added support to create **multiple JPOS Scanner instances**.

Version 4.4.1-36 – 04/2023

1. Enhanced JPOS driver
 - a. Bug fix in Sample App – Fixed error message incorrectly displayed in JPOS Sample application when Zero Scale command is called and weighing item below 30 grams.
 - b. Update JPOS driver to fire Scale status update events whenever a status updates and a weight change is detected.
 - c. Bug fix in Sample App – Made the display format for scale weight consistent in the sample application for Read Weight, Live Weight and Direct IO NCR Live Weight calls.
 - d. Bug fix in JPOS Sample App – Fixed application lockup if enabling both live weight and auto disable simultaneously.

Version 4.4.1-33 – 10/2022

1. Enhanced JPOS driver
 - a. Enhanced driver to support NCR requested “HealthCheck” label IDs.
 - b. Bug fix – “Get Error Response” API now returns the correct error on Read Weight in Scale.
 - c. Minor UI optimizations in the JPOS Sample Application for Windows.

Version 4.4.1-32 – 04/2023

1. Enhanced JPOS driver



- a. Bug fix in Sample App – Fixed error message incorrectly displayed in JPOS Sample application when Zero Scale command is called and weighing item below 30 grams.
- b. Update JPOS driver to fire Scale status update events whenever a status updates and a weight change is detected.
- c. Bug fix in Sample App – Made the display format for scale weight consistent in the sample application for Read Weight, Live Weight and Direct IO NCR Live Weight calls.
- d. Bug fix in JPOS Sample App – Fixed application lockup if enabling both live weight and auto disable simultaneously.

Version 4.4.1-30 – 10/2022

- 1. Enhanced JPOS driver
 - a. Enhanced driver to support NCR requested “HealthCheck” label IDs.
 - b. Bug fix – “Get Error Response” API now returns the correct error on Read Weight in Scale.
 - c. Minor UI optimizations in the JPOS Sample Application for Windows.

Version 4.4.1-29 – 05/2022

- 1. Enhanced JPOS driver
 - a. Bug fix, ReadWeight events now reported correctly when DataEventEnabled is false and LiveWeight is true.
 - b. Enhanced driver to support all NCR requested “ScanData” label IDs.

Version 4.4.1-28 – 04/2022

- 1. Enhanced Toshiba Global Commerce Solutions (TGCS) POS system support
 - a. JPOS driver enhanced to support System Management Information calls from TGCS POS systems
 - i. Corescanner enhanced to support TGCS’ CIM Service Provider = “UPOS_BarcodeScanner” queries

Version 4.4.1-27 – 01/2022

- 1. Enhanced JPOS driver - Fixed rarely seen JPOS statistics retrieval issue on scanners.

Version 4.4.1-24 – 10/2021

- 1. Enhanced JPOS driver
 - a. Added support to execute DirectIO commands without claiming the device.
 - b. JPOS sample application enhancement to display the “Live Weight” and the logs on live weight status update events.
 - c. Enhanced logging in JPOS driver including access to barcode data, power state, scale weight, and what API calls have been made.

Version 4.4.1-19 – 04/2021

- 1. Enhanced JPOS driver v1.14 to include support for PNP events for both Scanner and Scale.



2. Bug fix – The JPOS driver v1.14 for code 49 now returns the correct Symbology types when the Zebra scanner is in IBM Hand-Held or IBM Table-Top host modes.

Version 4.4.1-15 – 10/2020

1. Common JPOS driver bundled in both Linux and Windows SDKs. With this common code driver, the same features are now supported across both Linux and Windows.
2. Removed Apache Xerces XML parser dependency from the Zebra JPOS Service Object (SO).

Version 4.4.1-8 – 04/2020

1. Bug fix - Synchronization block introduce when consuming the events from CoreScanner to JPOS driver. Otherwise, the single core POS system is missing different events from different logical devices (JPOS)

Version 4.4.1-2 – 10/2019

1. Added “DotCode” and “GridMatrix” symbology support to JPOS and SDK Sample Applications. Note the Linux SDK already supported these symbologies.
2. Added Java 12 UI enhancements to JPOS Sample Application. Note no change required in the JPOS driver.

Version 4.4.0-18 – 08/2019

1. Added Scale Live Weight event support for Multi-Plane scanners.
2. Vendor specific capability, ‘CapStatusUpdate’ enabled in JPOS Scale driver.
3. Implemented ‘StatusNotify’ property in JPOS driver.

Version 4.4.0-14 – 06/2019

1. “EAN13 Supplementary of 5” symbology support added into JPOS Sample Application.

Version 4.4.0 – 03/2019

1. Added JPOS 1.14 standard compatibility for the JPOS driver.
2. Introduced a JPOS based asset query capability (model #, serial #, date of manufacture, firmware version).

Version 4.3.1 – 08/2018

1. Added support for JPOS Scale Asynchronized Read Weight -1 (forever) timeout support.

Version 4.2.4 – 04/2018

1. JPOS Scale Read Weight Asynchronized mode support.
2. JPOS Statistics reporting support for Scale.

Version 1.3.0 – 08/2015

1. Concurrent application support for Scanner and Scale of MP6200 in JPOS.



Components

Component or Module	File	Installation Path
JPOS driver and SDK libraries	xml-apis.jar	/usr/lib/zebra-scanner/javapos/jpos/
	xercesImpl.jar	
	JposServiceScanner.jar	
	JposServiceScale.jar	
	JposServiceOnScanner.jar	
	JposServiceOnScale.jar	
	JposServiceJniScanner.jar	
	JposServiceJniScale.jar	
	JposLogger.jar	
	javaPOS114.jar	
	JLogger.jar	
	logback-core-1.2.3.jar	
	logback-classic-1.2.3.jar	
	lsf4j-api-1.7.25.jar	
CoreScanner libraries for JPOS JNI	libcs-jniscanner.so.4.0.0	/usr/lib/zebra-scanner/javapos/jni/
	libcs-jniscale.so.4.0.0	
	libcs-jniscanner.so -> libcs-jniscanner.so.4.0.0	
	libcs-jniscale.so -> libcs-jniscale.so.4.0.0	
JPOS sample application	JposTest.jar	/usr/share/zebra-scanner/samples/jpos-sample-app/
	jpos-sample-app.sh	
	build.xml	
JPOS based Remote	jposRemoteManagement.jar	/usr/lib/zebra-

Management Solution		scanner/javapos/jpos
	jposRemoteManagementTool.jar	/usr/share/zebra-scanner/remote-management
	remote-management.sh	
	jpos-remote-management.xml	/usr/share/zebra-scanner/javapos/xml/
JPOS configuration and property files	xml/jpos.xml	/usr/share/zebra-scanner/javapos/
	config/rsm-id.xml	
	config/rsm-id.dtd	
	config/jpos_trace.properties	
Source code for JPOS sample application	All .java files located inside the directory	/usr/share/zebra-scanner/samples/jpos-sample-app/src/com/jpos/POStest

Installation Options (Supported Distributions)

Supported distributions and their installation options.

Supported Architecture for CoreScanner and JPOS Drivers for Linux

Supported Distribution

	RPM_x86_64bit	RPM_x86_32bit	Debian_x86_64bit	Debian_x86_32bit	Debian_ARM_32bit	Debian_ARM_64bit
CentOS 8.1	X	NA	NA	NA	NA	NA
CentOS 7.9	X	NA	NA	NA	NA	NA
CentOS 7.3	X	NA	NA	NA	NA	NA
CentOS 7	X	X	NA	NA	NA	NA
CentOS 6.3	X	X	NA	NA	NA	NA
SLES 15 SP3	X	NA	NA	NA	NA	NA
SLES 12 SP5	X	NA	NA	NA	NA	NA
SLES 11 SP3	X	X	NA	NA	NA	NA
SLES 11 SP2	X	X	NA	NA	NA	NA
Open SUSE 15.2	X	NA	NA	NA	NA	NA
Open SUSE 13.1	X	NA	NA	NA	NA	NA
Red Hat 7.4	X	NA	NA	NA	NA	NA
Ubuntu 22.04	NA	NA	X	NA	NA	NA
Ubuntu 20.04	NA	NA	X	NA	NA	NA
Ubuntu 18.04	NA	NA	X	NA	NA	X
Ubuntu 16.04	NA	NA	X	X	NA	NA
Ubuntu 14.04	NA	NA	X	X	NA	NA
Ubuntu 12.04	NA	NA	X	X	NA	NA
Debian 10.10	NA	NA	X	X	NA	NA
Debian 9.5	NA	NA	X	X	NA	NA
Debian 8	NA	NA	X	X	NA	NA
Debian 7	NA	NA	X	X	NA	NA
Raspberry Pi OS	NA	NA	NA	NA	X	X
Other *	NA	NA	NA	NA	NA	NA
	x86_64	i386	x86_64	i386	armhf arm7l	arm64

* Customer Testing Required



Dependencies and Package Installation

Dependencies for CoreScanner Driver for Linux and Scanner SDK for Linux are as follows,

Library	Version
Zebra CoreScanner driver for Linux	4.4.1-0 or above
Java	6 (JDK 1.6) or above