



Release Notes

Scanner SDK for Windows v3.7

March 2025

Contents

Contents	1
Overview	1
Device Compatibility	3
Supported COM Protocols	3
Version History	4
Components	19
Installation	19

Overview

The Zebra Scanner Software Developer Kit (SDK) for Windows providing a single programming interface across multiple programming languages (such as MS .NET, C++, Java) for all scanners communication variants (such as IBMHID, SNAPI, HIDKB, Nixdorf Mode B, etc.).

The Zebra Scanner SDK includes a suite of components that provides a unified software development framework.

The SDK installation package includes the following components.

- Zebra Scanner SDK Core components and drivers (COM API, Imaging drivers)
- Scanner OPOS and JPOS Drivers
- Scale OPOS and JPOS Drivers
- TWAIN Imaging Driver



- Bluetooth support for Windows 7 and higher
- Remote Management Components
 - Scanner WMI Provider
 - Driver WMI Provider
- Web Link to latest Developer's Guide - Document(s) - <https://techdocs.zebra.com/dcs/scanners/sdk-windows/about/>
- Microsoft® Visual Studio Project Template for Zebra Scanner SDK
- Test & Sample utilities
 - Zebra Scanner SDK Sample Application (C++)
 - Zebra Scanner SDK Sample Application (Microsoft® C# .NET, using .NET Framework 4.0 Client Profile)*
 - Scanner OPOS Driver Test Utility (C++)
 - Scale OPOS Driver Test Utility (C++)
 - Scanner/Scale JPOS Driver Test Utility (Java)
 - TWAIN Test Utility (C++)
 - Scanner WMI Provider Test Utility (Microsoft® C# .NET, using .NET Framework 2.0) *
 - Driver WMI Provider Test Utility (Microsoft® C# .NET, using .NET Framework 2.0)*
 - Web link to latest source codes for test & sample utilities - <https://github.com/zebra-technologies/Scanner-SDK-for-Windows>

** Note – The Scanner SDK sample applications and test utilities do not support .NET Core and .NET Standards, instead they use the .NET Framework versions specified above per app/utility*

With this SDK, you can read bar codes, manage scanner configurations, capture images/videos and selectively choose a list of scanners on which to work. While one application is in one programming language using a scanner or a set of scanners, another application in a different language can be used differently within the same system environment.

The SDK can build an application with complete control of its scanner's capabilities.

- Barcode data
 - Simulated HID Keyboard output
 - OPOS/JPOS output
 - SNAPI output
- Command and Control
 - LED and Beeper Control
 - Aim Control
- Imaging
 - Capture / Transfer of Images
 - View Video
 - Simultaneous capture barcode data and an image with one trigger pull using Intelligent Image Capture (IDC)
- Remote Scanner Management
 - Asset Tracking
 - Device Configuration (Get, Set and Store Scanner attributes)
 - Firmware Update
 - Scanner Communication Protocol Switching
 - Service to Automate Configuration / Firmware Upgrade Process



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 the following page.

<https://www.zebra.com/us/en/support-downloads/software/developer-tools/scanner-sdk-for-windows.html>

Supported COM Protocols

SDK supported communication protocols include:

- IBM Table-Top USB
- IBM Hand-Held USB
- IBM OPOS - IBM Hand-held USB with Full Scan Disable
- HID Keyboard Emulation
- USB CDC Host
- Symbol Native API (SNAPI) with Imaging Interface
- Symbol Native API (SNAPI) without Imaging Interface
- Wincor-Nixdorf RS-232 Mode B
- Simple Serial Interface (SSI) over RS232
- Simple Serial Interface (SSI) over Bluetooth Classic

	Query Assets Information	Host Switching	Imaging and Video	Faster Firmware Update	Management and Firmware Update	Barcode	OPOS Driver	JPOS Driver
IBM Table-Top USB	X	X			X	X	X	X
IBM Hand-Held USB	X	X			X	X	X	X
IBM OPOS - IBM Hand-held USB with Full Scan Disable	X	X			X	X	X	X
HID Keyboard Emulation		X						
USB CDC Host		X						

Symbol Native API (SNAPI) with Imaging Interface	X	X	X	X	X	X	X	X
Symbol Native API (SNAPI) without Imaging Interface	X	X			X	X	X	X
Wincor-Nixdorf RS-232 Mode B						X	X	X
Simple Serial Interface (SSI) over RS232	X		X		X	X	X	X
Simple Serial Interface (SSI) over Bluetooth Classic	X		X		X	X	X	X
Simple Serial Interface (SSI) over Bluetooth Low-Energy (BLE)								
Simple Serial Interface (SSI) over MFI								

Version History

Version 3.07.0005 – 03/2025

1. Enhanced **OPOS Driver**
 - a. **Added** support to update a scanner’s firmware via DirectIO Command.
 - b. **Added** firmware update status events support through DirectIO events.
 - c. **Added** support to load a configuration file to a scanner via DirectIO Command.
 - d. **Added** configuration load status update events support through DirectIO events.
 - e. **Enhanced** the OPOS Scanner and Scale logs to include return values and return states for properties and methods.
 - f. **Renamed** the Vision Wedge Produce interface to VDI (Vision Data Interface).
 - g. **Bug fix** – Minor **sample app** fix – Resolved the issue of Data Event disabling after unchecking Auto-Enable option.
 - h. **Bug Fix** – Fixed incorrect value shown in Scale log when Zero Scale is called.
 - i. **Bug Fix** – Fixed the issue of not logging the weight reading in the Scale log file when asynchronous Read Weight is called.
 - j. **Bug Fix** – Fixed issue returning an intermittent error event when Read Weight is called with Auto Disable enabled.
 - k. **Bug Fix** – Minor **sample app** fix - Fixed the multiple Read Weight call executions when Read Weight button is clicked in Async mode.
 - l. **Bug Fix** – Fixed the GoodScanCount to return the correct value of barcode scans when auxiliary devices are connected to a scanner.
 - m. **Bug Fix** – Fixed identification of scale devices based on scanner family “7896”.
2. Enhanced **JPOS Driver**
 - a. **Added** support to update a scanner’s firmware via DirectIO Command.
 - b. **Added** firmware update status events support through DirectIO events.
 - c. **Added** support to load a configuration file to a scanner via DirectIO Command.

- d. **Added** configuration load status update events support through DirectIO events.
 - e. **Enhanced** the JPOS Scanner and Scale logs to include return values and return states for properties and methods that were missed in the logs.
 - f. **Renamed** the Vision Wedge Produce interface to VDI (Vision Data Interface).
 - g. **Added** the ability to skip unsupported property and method calls for a scanner discovered via the VDI interface.
 - h. **Bug Fix** – Fixed redundant log entries printed in the log file when calling MaximumWeight property.
 - i. **Bug fix** – Minor **sample app** fix – Restricted the ability to modify the Logical device name in the sample application for both Scanner and Scale.
 - j. **Bug Fix** – Fixed invalid error printed in the terminal when Retrieve Statistics is called without claiming or enabling the device for both Scanner and Scale.
 - k. **Bug Fix** – Minor **sample app** fix – Resolved the incorrect state of Power Notify checkbox when Device Enabled is used.
 - l. **Bug Fix** – Minor **sample app** fix – Resolved the incorrect state of Device Enable checkbox when Fast Mode is used.
 - m. **Bug Fix** – Fixed Label IDs to be appended for UPC-EAN supplementals in ScanData.
 - n. **Bug Fix** – Fixed the GoodScanCount to return the correct value of barcode scans when auxiliary devices are connected to a scanner.
 - o. **Bug Fix** – Fixed redundant exception thrown when scanning barcodes from JPOS instance.
- 3. C# and C++ Sample Applications
 - a. **Added** tooltips for new RTA events.
 - b. **Bug Fix** – Minor **sample app** fix – Resolved the incorrect aspect ratio in images represented in the C++ sample application.
 - 4. CoreScanner Driver
 - a. **Enhanced** the ScanRMDEvent type to support scanner configuration update.
 - b. **Renamed** the Vision Wedge Produce interface to VDI (Vision Data Interface).

Version 3.07.0004 – 12/2024

- 1. Enhanced **OPOS Driver**
 - a. **Added** produce interface support for Vision Wedge over OPOS.
 - b. **Added** beep indication for Produce events received in OPOS.
 - c. **Bug fix** – Minor **sample app** fix – Removed incorrect validation on the numbers entered on “Filter by” textbox for Statistics.
 - d. **Bug Fix** – Fixed issue in device power online state not getting notified when ExclusiveClaimLevel is enabled.
 - e. **Bug Fix** – Fixed the incorrect display of live weight when ScaleLiveWeight property is disabled.
 - f. **Bug Fix** – Fixed intermittent issue in weight data not delivered to OPOS layer when the scale is connected with multiple other scanner devices.
 - g. **Bug Fix** – Fixed NCR label ID type for symbologies with supplemental code types.



- h. **Bug Fix** – Fixed OPOS ScanDataType property to report SCAN_SDT_UNKNOWN for 2-Stage barcodes scanned in IBM HandHeld, IBM TableTop and USB OPOS host modes.
 - i. **Enhanced** the log view field to represent states of properties and method calls in Sample Application for Scanner and Scale.
- 2. **Enhanced JPOS Driver**
 - a. **Added** produce interface support for Vision Wedge over JPOS.
 - b. **Added** beep indication for Produce events received in JPOS.
 - c. **Added** logging the Direct IO command names when Direct IO commands are executed.
 - d. **Bug Fix** – Fixed NCR label ID type for symbologies with supplemental code types.
 - e. **Bug Fix** – Fixed OPOS ScanDataType property to report SCAN_SDT_UNKNOWN for 2-Stage barcodes scanned in IBM HandHeld, IBM TableTop and USB OPOS host modes.
 - f. **Bug Fix** – Fixed the incorrect display of live weight when ScaleLiveWeight property is disabled or after performing scale release.
- 3. **CoreScanner Driver**
 - a. **Added** Real Time Alerts (RTA) support for SSI over USB CDC and SSI BT host modes.
 - b. **Added** Produce interface to support Vision Wedge.
 - c. **Added** a new method Opcode 5020 to push scanner configuration file (.scnplg) through CoreScanner.

Version 3.07.0001 – 09/2024

- 2. **Enhanced OPOS Driver**
 - a. **Added “Real Time Alert (RTA)”** support for OPOS. RTA configurations are supported through new DirectIO commands and RTA events are captured and delivered through OPOS.
 - b. **Added** a new **log view field** to represent states of properties and method calls in OPOS Sample Application. Initially this supports RTA event status notifications.
 - c. **Bug Fix** – Fixed issue in disabling scanner after a barcode is read through interactive health check option, when AutoDisable is enabled.
 - d. **Bug Fix** – Fixed appending the correct label ID for symbology “ISSN”.
 - e. **Bug Fix - Minor sample app fix** – Implemented validations for values set for properties “DeviceEnabled” and “PowerNotify” to indicate invalid values to user through the sample application’s log view.
 - f. **Bug Fix** – Enhanced OPOS logging to include weight data when performing ReadWeight, LiveWeight and ZeroScale calls.
- 3. **Enhanced JPOS Driver**
 - a. **Bug fix** – Fixed issue in not throwing an **exception pop up window** upon performing **zero scale** in **overweight** scenario.
 - b. **Bug Fix** – Corrected **PIDXScan_ScanDataType** getting set to 0 incorrectly after performing interactive checkhealth.

- c. **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.
 - d. **Enhancements in log file.**
 - i. Log entries are added to indicate the status of the “Zero Scale” command.
 - ii. Removed incorrect exception log entry upon performing zero scale process while PIDXScal_ZeroValid is false.
 - e. **Bug Fix** – Fixed issue in disabling scanner after a barcode is read through interactive health check option, when AutoDisable is enabled.
 - f. **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.
 - g. **Bug Fix** – Corrected the text representations for Health Check options (Internal, External and Interactive) in log view.
4. C# and C++ Sample Applications
- a. **Added** a new tab in the C++ sample application to configure **Real Time Alert** (RTA) configurations and view RTA event notifications (The RTA tab will only be visible if connected scanner firmware supports RTAs).
5. CoreScanner Driver
- a. **Bug Fix** – Fixed handling discovery of scanners, when the scanner configuration name contained non-printable characters.
 - b. **Bug Fix** – Fixed invalid representation of “Space” character in simulated HID, for languages English, French and Italian.

Version 3.06.0038 – 07/2024

1. Enhanced OPOS Driver

- a. **Bug Fix** - The OPOS Scale sample application now clears error notifications displayed previously (if any), when a valid weight reading is delivered.
- b. **Bug Fix** – Fixed issue in incorrect update of good scan count in statistics after releasing and re-claiming a scanner.
- c. **Bug Fix** – Fixed issue in scale live weight displaying status as “Not Ready” when performing read weight calls while scale is in async mode.
- d. **Bug Fix** – ResultCode and ResultCodeExtended properties of Scale are now updated correctly when read weight is performed while scale is in async RTA mode.
- e. **Added** implementations for Statistics methods (Reset Statistics, Retrieve Statistics and Update Statistics) for Scale.
- f. **Updated** OPOS Scanner and **Scale Sample application names** to “ScannerSDK_SampleApp_OPOS_Scanner” and “ScannerSDK_SampleApp_OPOS_Scale” respectively.

2. Enhanced JPOS Driver

- a. **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.
- b. **Bug Fix** - Minor **sample app** fix - Fixed PIDXScan_ScanData field to display label IDs (if configured) in the JPOS Sample application.



- c. **Bug Fix** - Fixed JPOS zero scale feature limits up to 0.05 lbs only when it should be 0.60 lbs.
- 3. C# and C++ Sample Applications
 - a. **Added** a new tab in the C# sample application to configure **Real Time Alert** (RTA) configurations and view RTA event notifications (The RTA tab will only be visible if connected scanner firmware supports RTAs).
 - b. **Bug Fix** – Fixed the C++ application crash occurring upon closing the application.
 - c. **Updated** the C# sample application name to ScannerSDK_SampleApp_CSharp”.
- 4. CoreScanner Driver
 - a. **Added** a new feature called “Real Time Alert (RTA)”.
 - i. This feature sends a RTA from the scanner (originating from the scanner’s firmware meeting a RTA criteria) to the driver stack.
 - ii. For a list of available RTAs, see TechDocs for CoreScanner Driver for Windows at <https://techdocs.zebra.com/dcs/scanners/sdk-windows/api/>
 - iii. RTA is supported in select scanners and requires a firmware update
 - iv. Supported com protocols include SNAPI, IBM TableTop, IBM Handheld and IBM OPOS.

Version 3.06.0037 – 04/2024

- 1. Enhanced OPOS Driver
 - a. **Bug fix** – Resolved a handle leak occurring in OPOS logging module on both Scanner and Scale service objects.
 - b. **Bug fix** – Resolved a memory leak occurring in OPOS Scale when live weight is enabled.
 - c. **Bug fix** – Resolved a handle leak occurring in OPOS Open and Close methods on both Scanner and Scale service objects.
 - d. **Bug fix** – Fixed an invalid character returned within the Device Description property call for OPOS Scale.
 - e. **Bug fix** – Minor **sample app** fix – State of Auto Enable checkbox is now enabled after successfully opening an OPOS Scanner profile.
 - f. **Bug fix** – OPOS now returns OPOS_E_ILLEGAL when “ZeroScale” is called with a weight that exceeds the scanner’s zeroing weight limit.
 - g. Added a new registry key “ClearQueueOnRelease” to configure clearing the data queue when device is released.
 - h. Enhanced OPOS logs to include DirectIO command name in the logged Information when DirectIO commands are used.
- 2. Enhanced JPOS Driver
 - a. **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.
 - b. **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.



- c. **Bug fix** – Minor **sample app** fix – Synchronized state of “Device Enable” checkbox when “Auto Device Enable” or “Enable Live Weight” selections are used.
 - d. Added a new attribute as “ClearQueueOnRelease” to JPOS.xml file, to configure clearing the data queue when device is released.
 - e. **Bug Fix** – An exception is fired upon performing Zero Scale with weights greater than the firmware implemented scale zeroing weight limit.
 - f. **Bug Fix** – Prevented incorrectly throwing “Timed out with zero stable weight” exception after setting PIDXScal_ZeroValid to true in JPOS Scale live weight DIO.
- 3. C# and C++ Sample Applications
 - a. Added “Configuration Name” column to the C# and C++ sample applications in the grid representing the discovered scanners.
 - 4. CoreScanner Driver
 - a. Added the code types of Han Xin Code and Dot Code to the USB IBM HandHeld and TableTop host modes.
 - b. Added the Configuration Name into the XML response of the “GetScanners” API call.

Version 3.06.0034 – 01/2024

- 1. Enhanced **OPOS Driver**
 - a. Two OPOS Check Health modes were supported (Internal and External Check Health), added a third mode. The third mode is called **Interactive Check Health**. Note all three modes are supported in the OPOS sample app.
- 2. 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.
- 3. CoreScanner Driver
 - a. Digital Signing of **Zebra SNAPI Driver** – Updated the digital signature of Zebra SNAPI Imaging Interface to support SHA256 algorithm.
 - b. **Bug Fix – Fixed rare issue** when switching to USB OPOS mode if you are already in that mode. Now the scanner no longer goes into an unresponsive state when attempting to switch to the USB OPOS while already in the same host mode.
- 4. IoT Connector
 - a. Added support for **logging of environment variables** (pulled from operating system) into the URL and request headers in the HTTP sink. Note the environmental variable check is performed real-time on each logging occurrence.
 - b. **Security fix** – Updated library “libcurl” used in IoT Connector from v7.78.0 to v8.4.0 to resolve security vulnerabilities.



Version 3.06.0033 – 10/2023

1. Enhanced OPOS Driver

- a. Bug Fix – **GoodScanCount** no longer returns negative values when a large count value is set using Update Statistics method.
- b. Bug Fix – **Sample App** no longer shows incorrect **weight** when ReadWeight is called with Freeze Events enabled.
- c. Bug Fix – **Sample App** addressed **situationally driven utility hang** when retrieving Read Weight and Live Weight events after calling the retry option in asynchronous error events.
- d. Bug Fix – **Removed redundant log** on “FireHeadDataEvent” in OPOS log files.
- e. Bug Fix – Driver now returns “**Not Ready**” **scale status**, when scale is unplugged, while having live weight enabled.
- f. Bug Fix - **Check Health** (Internal and External) now returns “No hardware” response, when no scanner(s) is connected on the USB bus.
- g. Bug Fix – Driver now represents “**Non-Printable Characters**” in the scan data in their original form (unmodified by the OPOS driver).

2. Enhanced JPOS Driver

- a. 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.
- b. Added ability to “**Filter Scanner Discovery**” on 1) Host Communication Mode, 2) Model (a.k.a DS9908...) and 3) Serial Number. JPOS now matches OPOS functionality.
- c. Bug Fix - **Check Health** (Internal and External) now returns “No hardware” response, when no scanner(s) is connected on the USB bus.
- d. Bug Fix – **Sample App** no longer shows incorrect **weight** when ReadWeight is called with Freeze Events enabled.
- e. Bug Fix – Driver now returns “**Not Ready**” **scale status**, when scale is unplugged, while having live weight enabled.

3. Enhanced CoreScanner Driver

- a. Access to **Corescanner Version Info** – Modified how-to-access Corescanner Version info. Now read from registry key, Instead of Corescanner binary file.
- b. **Bug Fix** – “Grave” accent no longer, incorrectly converting into CR/LF when scanner is operating in RS232 NIXMODB communication mode.
- c. **Bug Fix** – Fixed “Simulated HID Keyboard” issue. Scancode now properly generated for a “Group Separator” character, when in simulated HID Keyboard.

Version 3.06.0029 – 07/2023

1. Enhanced OPOS driver

- a. Bug fix – Fixed issue on incorrect check health text returned from query.
- b. Bug fix – Resolved issue in reading the weight when multiple reads are requested via API call (almost simultaneously) and DataEvent is enabled.



- c. Bug Fix – Fixed incorrectly clearing of both ScanData and ScanDataLabel properties when ClearInput is called.
- d. Sample App Bug fix – Fixed incorrect value set for GoodScanCount when Updating Statistics via JPOS Sample application, using a non-numeric value.
- 2. Enhanced JPOS driver
 - a. Bug fix – Fixed issue that incorrectly appended a Label ID for “NCR label” with barcode type ISSN.
 - b. Bug fix – Fixed issue relevant to error arguments (locus and response) in JPOS read weight events.
 - c. Sample App Security fix – Updated library “xercesImpl.jar” used in JPOS Sample application from v2.11.0 to v2.12.2 to resolve security vulnerabilities.
 - d. Sample App Bug fix – Device enable button’s state now gets updated upon enabling auto device enable (button) in JPOS scale.
 - e. Sample App Bug fix – Barcode name now correctly displayed for Han Xin Code.
- 3. CoreScanner Driver
 - a. Added a new call (Opcode) to configure DDF (Driver Data Formatting) programmatically. Previously this was only supported manually from Config.xml file.
 - b. Simulated HID Keyboard - Added support to configure ScanCode, in addition to existing Virtual Key code support, in simulated HID Keyboard. Configured through settings in the Config.XML file.
 - c. Driver Data Formatting - Added ATL key combination support to Driver Data Formatting (DDF). This functionality enables an ALT key combination to be added to barcode data when using Simulated HID Keyboard.
 - i. Configuring this capability is located in the CoreScanner configuration xml file.
 - ii. An example of this capability is appending "ALT [+ Data + Enter" to the barcode data. Another example is "ALT [+ Data + TAB".
 - iii. Solution supports sending ALT + one ASCII key sequence like “ALT [“.
 - iv. Solution supports appending a Prefix only. Appending a Suffix is not supported.
 - d. Bug fix - Fixed intermittent MP7000 Reset during GetScanners call.
 - e. Bug fix – Fixed intermittent CoreScanner reset when a cascaded device like the DS8178 rebooted/disconnected, causing the MP7000 to reset.
 - f. Bug fix – Fixed intermittent CoreScanner error when reading Scale Weight from MP7000 when a cascaded scanner like DS8178 gets disconnected/reconnected or rebooted.

Version 3.06.0028 – 04/2023

- 1. Add support for BT (SSI over Bluetooth) support through the OPOS and JPOS drivers.
- 2. Enhanced OPOS driver
 - a. Bug fix – Now only OPOS log files created by the OPOS driver that reside in the OPOS log file path are deleted by the circular log management system.
 - b. Bug fix – Fixed log file path issue for file deletion when max log file count is reached in a custom log file path.



- c. Updated the Scale status update events to be fired either when a change of weight reading is detected or when a change in scale status is detected.
 - d. Bug fix – Fixed rare case of incorrectly deleting a log file based on its maximum file size specified in the OPOS log configuration registry keys.
- 3. 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 update 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.
- 4. CoreScanner Driver
 - a. Added device re-enumeration logic to make the CoreScanner more robust against USB failures occurring at device discovery and device initialization.
 - b. Bug fix – Improved methodology to detect if device is already available in the discovered scanners list. Now uses device path instead of device serial number.

Version 3.06.0024 – 01/2023

- 1. Enhanced OPOS driver
 - a. Added log file configurations via registry settings. Configuration now available on log level, log file length and maximum file count. This new functionality is applicable to both OPOS Scanner and OPOS Scale.
- 2. CoreScanner Driver for Windows
 - a. Added device re-enumeration logic to make the CoreScanner more robust against USB failures occurring at device discovery and device initialization.
 - b. Bug fix – Improved methodology to detect if device is already available in the discovered scanners list. Now uses device path instead of device serial number.
- 3. IoT Connector
 - a. Added VIQ (Visibility IQ) endpoint support
 - b. Added 5 new events as JSON formatted log entries for DEVICE ATTACHED, DEVICE DETACHED, STATISTICS, BARCODE and BATTERY Events.
 - c. Added ability to remove displaying empty curly brackets ({}) when no data is available for JSON formatted log messages.
 - d. Bug fix - Network location can be specified as log file path.
 - e. Bug fix - Fixed intermittent crash on IoT Connector when multiple devices are used, AND network connection is disconnected.

Version 3.06.0023 – 10/2022

- 1. Enhanced OPOS driver



- a. Updated driver to meet newest GS1 specification: Scan Data Type displayed for GS1 Databar is now "SCAN_SDT_GS1DATABAR" and for GS1 Databar Expanded is now "SCAN_SDT_GS1DATABAR_E".
2. 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. Bug fix - Deliver an error event with Error response, ER_CONTINUEINPUT, when all items of the queue are delivered and DataEvent is enabled.
 - d. Minor UI optimizations in the JPOS Sample Application for Windows.

Version 3.06.0022 – 08/2022

1. Windows 11 support added.
2. Enhanced JPOS driver,
 - a. Enhanced driver to support Freeze Events in JPOS Scale.
 - b. Bug fix - ReadWeight events now reported correctly when DataEventEnabled is false and LiveWeight is true.

Version 3.06.0021 – 06/2022

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
2. Enhanced OPOS driver
 - a. Enhanced driver to support all NCR requested "ScanData" label IDs

Version 3.06.0018 – 04/2022

1. Bug fix – ScanData property now populating in OPOS Scanner driver when compatibility mode is enabled.
2. Bug fix – Barcode data now passing properly through the CoreScanner Driver when the scanners connected in serial (RS-232) Nixdorf Mode B.
3. Enhanced Toshiba Global Commerce Solutions (TGCS) POS system support
 - a. OPOS driver enhanced to supports System Management information calls from TGCS POS systems
 - i. CoreScanner enhanced to support TGCS' UPOS WMI = "UPOS_BarcodeScanner" queries
 - b. 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 3.06.0015 – 01/2022

1. Logging Agent renamed "IoT Connector".
2. Enhanced JPOS driver
 - a. Updated Windows JPOS sample application to support smaller/lower resolutions monitors.



- b. Fixed rarely seen JPOS statistics retrieval issue.

Version 3.06.0013 – 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.
2. Enhanced Logging Agent capabilities
 - a. Added support for logging of operating system environment variables like “host PC name”. The environmental variable check is performed real time on each logging occurrence
 - b. Added support for real time logging via a JSON call to cloud-based consoles like Splunk.

Version 3.06.0010 – 08/2021

1. Enhanced options associated with the OPOS driver’s “ScanData” property. Option now exists to only display scanned data (without displaying the communication protocol specific details).
2. Enhanced logging in JPOS driver including access to barcode data, scale weight, and what API calls have been made.
3. Fixed statistics and health parameters reporting from the parent scanner device in a cascaded device setup.

Version 3.06.0006 – 04/2021

1. Enhanced JPOS driver.
 - a. Add support for “extended error codes” for NCRDIO_SCALE_LIVE_WEIGHT DirectIO command in JPOS.
 - b. Add support for JPOS Scale status responses.
2. Fixed JPOS Scale Open command to enable the “DeviceEnabled” property to execute.
3. Fixed JPOS DirectIO RESET command.
4. Fixed JPOS Scanner Not of File Direct IO Command.
5. Fixed JPOS Sample application, which now shows the scale weight value when DirectIO NCR_LIVE_WEIGHT command executes.
6. Fixed Scale OPOS crash issue when retrieving Check Health Text after executing Check Health command.

Version 3.06.0003 – 01/2021

1. OPOS and JPOS enhancements
 - a. Added support for Scanner DirectIO RESET command.
 - b. Added support for custom MP7000 scale result codes for ErrorOverWeight, ErrorUnderZero and ErrorSameWeight.
2. Enhanced Logging Agent capabilities
 - a. Log agent can now retrieve Host/PC name and IP address



- b. "Scan Avoidance" functionality renamed to "Non-Decode Event"
- c. The reporting interval can be customized. Set unique programming interval by attribute. Note a small interval (less than 30 seconds) may impact POS system performance.

Version 3.06.0002 – 10/2020

- 1. Updated Visual C++ redistributable package from 2017 to 2019. Note redistributable package for 2017 is no longer included with the SDK.
- 2. Add support for the scanner page motor action to the sample applications (C++ and C#).
- 3. JPOS driver update. Removed Apache Xerces XML parser dependency from the Zebra JPOS Service Object (SO).

Version 3.05.0005 – 07/2020

- 1. Logging Agent bundled with Windows SDK.
 - a. The Logging Agent allows a 3rd party management console, like Microsoft's SCCM, to track scanner information including the scanner's health by parsing a Logging Agent generated log file.
 - b. The Logging Agent will output a log file, one file per scanner/host.
 - c. The Logging Agent is configurable and can document one or all of the following information:
 - i. Asset information
 - ii. Statistics for example battery charge level or UPCs scanned
 - iii. Firmware failures and or firmware success
 - iv. Parameter value(s) changed. Achieved by tracking parameter 616 (config file name changed to "Modified")
 - v. Scanned barcode data (all scanned items)
 - vi. Scan avoidance for MP7000
 - d. The logging agent can have its output stored locally on its host PC or output to a network shared folder.
- 2. Added support for Data Parsing (supports UDI, GS1 Label Parsing and Blood Bag) symbology to sample applications (C++ and C#).
- 3. Added support for CDC switching on SDK sample applications (C++ and C#).
- 4. OPOS Scanner/Scale CCO update from version 1.14 to version 1.14.1.

Version 3.05.0003 – 04/2020

- 1. For NCR based retail POS customers- Added support for NCR Direct I/O command in OPOS and JPOS drivers (Scanner and Scale).
- 2. Faster wireless firmware update for select scanners over the Bluetooth Classic communication protocol. See 123Scan's release notes per scanner for product support details.
- 3. OPOS driver updated to comply with all Symbologies specified in the OPOS 1.14 specification.
- 4. JPOS driver update. JPOS driver now uses a common code base with the more mature Linux JPOS driver.



5. JPOS driver operation now also validated on OpenJDK 11, in addition to existing validation on the Oracle JDK.
6. Updated the version of Visual C++ redistributable package from 2012 to 2017. Note redistributable package for 2012 is no longer included with the SMS.
7. Removed Windows XP support.

Version 3.05.0001 – 01/2020

1. Enhanced the OPOS driver to comply with the OPOS 1.14 specification on supported Symbologies
2. JPOS Driver
 - a. Enhanced the JPOS driver to meet fully JPOS 1.14 specification compliance.
 - b. Enhanced JPOS demo app to display barcode data in HEX format.
 - c. Enhanced JPOS driver to support scanner configuration through a jpos.xml file.

Version 3.04.0011 – 10/2019

1. Fixed WMI agent enabling filtering of scanner(s) when the configuration name contained unreadable characters.
2. Fixed Windows 10 issue preventing scanner from returning barcode data in HIDKB mode after host PC logoff/logon or sleep mode event.
3. Fixed a conflict when CoreScanner installed and pairing Bluetooth devices by searching the host PC.

Version 3.04.0007 – 07/2019

1. Add support within OPOS driver for the following Symbologies: GS1 Data Matrix, QS1 QR and Grid Matrix.
2. Enhanced the C# demo application: Added a RFID tab with Scan Scan Write functionality.

Version 3.04.0002 – 04/2019

1. Added customizable logging module to CoreScanner. A user can now format the log file output to include parameters and layout from predefined options.
2. Simulated HID Keyboard output, now handles German by setting "Keyboard emulation/locale" to "Default". Other languages supported include English and French.

Version 3.03.0016 - 02/2019

1. Fixed some bugs and improved stability in TWAIN driver.
2. Fixed an issue in Scanner WMI provider regarding firmware download events.
3. Fixed an issue with OPOS binary conversion.

Version 3.03.0013 – 11/2018

1. Fixed firmware update failure (low occurrence problem).
2. Updated SNAPI driver. It now includes a Microsoft signature.



3. Implemented Scale OPOS driver beep on good read weight. This is a custom feature implemented to address a customer issue which can be enable through Windows registry configurations.
4. Added support for NCR Direct IO command (DIO_NCR_SCAN_TONE)
5. Introduced support for barcodes encoded with Windows' code pages like Russian and Korean.
6. Introduced registry entries
 - a. to control the value of the OPOS Power State property.
 - b. to configure scale behavior.
 - c. to configure Windows' code pages.
7. Introduced support for the NCR direct I/O command to get the "Scale live weight" data.
8. Fixed a security vulnerability – Exe execution can no longer introduce a shell command injection via filename.
9. Fixed firmware update progress event missing issue with Scanner WMI provider.
10. Minor bug fixes.

Version 3.02.0000 – 08/2017

1. Updated JPOS sample application to demonstrate Direct I/O functionality.

Version 3.01.0000 – 09/2016

1. Bluetooth support for cordless scanners without a cradle on Windows 7, 8 and 10 using Microsoft's Bluetooth stack.
2. OPOS support for "Not On File Beep" NCR capability.
3. Source codes of Sample Applications updated to support Microsoft Visual Studio 2010 and above.

Version 3.00.0000 – 03/2016

1. Rebranded Scanner SDK from Motorola to Zebra.
2. Supports Windows 10 (32 and 64 bit).

Version 2.06.0000 – 11/2015

1. Support for RFD8500 firmware update.

Version 2.05.0000 – 07/2015

1. Support for new MP6000 firmware features.
2. Stability enhancements.

Version 2.04.0000 – 08/2014

1. OPOS Direct IO support.
2. JPOS supports both 64bit and 32bit JVMs on 64bit platforms.
3. Added support for 32bit OPOS drivers on 64bit platforms.
4. Bug fixes.
5. Security enhancements to address potential security vulnerabilities.



Version 2.03.0000 – 05/2014

1. Driver ADF support.
2. MP6000 Scale Live Weight Event support.
3. Microsoft® Visual Studio Project Template provided for Zebra Scanner SDK.
4. Bug fixes.

Version 2.02.0000 – 12/2013

1. Supports Windows 8/8.1 (32 and 64 bit).
2. Bug fixes.

Version 2.01.0000 – 08/2013

1. Inter key delay feature in HID Keyboard emulation.
2. Bug fixes.

Version 2.00.0000 – 06/2013

1. Optimized log file operation.
2. IBM Table Top host interface support.
3. MP6000 scale commands added.
4. MP6000 scale support for OPOS and JPOS.
5. DWORD attribute support.
6. Unsolicited scanner events (Topology changes and Decode data) support (Scanner firmware support required).
7. Statistics support (Scanner firmware support required).

Version 1.02.0000 – 08/2012

1. Codeless scanner plug-n-play events added (Require Firmware update, check scanner PRGs for firmware support availability).
2. Simple Data Formatting feature added for emulated keyboard data.
3. TWAIN Custom capabilities added.
4. SNAPI scanner support added to Scanner WMI Provider.
5. Enhanced InstallShield with more custom installation options.
6. OPOS driver modified to support Multi-threaded apartment (in-proc/out-proc) POS applications (clients).
7. Host variant switching support added for scanners with NULL synapse buffer

Version 1.01.0000 – 03/2012

1. 64-bit Windows 7 support added.
2. TWAIN imaging interface supported.
3. USB-CDC Serial Emulation mode supported. Com protocol switching partially supported – able to programmatically switch into USB-CDC host mode but not exist.

Version 1.00.0000 – 07/2011

1. Supports Windows XP SP3 (32-bit) and Windows 7 (32-bit)
2. RSM 2.0 Scanner Support
3. SNAPI faster firmware download support



4. Programmatic Host Variant Switching support
5. HID Keyboard Emulation support for English and French language keyboards

Components

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

Component	Location
Common Components	%ProgramFiles%\Zebra Technologies\Barcode Scanners\Common
Scanner SDK	%ProgramFiles%\Zebra Technologies\Barcode Scanners\Scanner SDK
Scanner OPOS Driver	%ProgramFiles%\Zebra Technologies\Barcode Scanners\Scanner SDK\OPOS
Scanner JPOS Driver	%ProgramFiles%\Zebra Technologies\Barcode Scanners\Scanner SDK\JPOS
Scanner WMI Provider	%ProgramFiles%\Zebra Technologies\Barcode Scanners\Scanner SDK\WMI Provider Scanner
Driver WMI Provider	%ProgramFiles%\Zebra Technologies\Barcode Scanners\Scanner SDK\WMI Provider Driver
TWAIN Driver	%WinDir%\twain_32\Zebra – On 32/64bit version %WinDir%\twain_64\Zebra – On 64bit version

Component specific binaries, Sample applications, Sample Application source (code) projects will be installed under components base folders.

Installation

Installation of a new release replaces previous versions of Zebra Scanner SDK and common components.

Supported operating systems:

- Windows 10 32bit and 64bit
- Windows 11 64bit

Microsoft .Net framework and/or Java JDK/JRE, will not be installed with this installation package. Users are advised to install both the components independently.

External Dependencies

1. C# .Net Sample Applications require .NET framework to be available on the target computer.
2. JPOS requires JRE/JDK 1.6 or above to be available on the target computer.