In-Sight® Explorer 6.1.1 Release Notes

Revision: 6.1.1.25, 2020 December 17

Overview

This document describes the In-Sight Explorer software, including the following topics:

- System Requirements
- New Features
- Changes & Fixes
- Known Issues

> **Note**: For the latest release notes and documentation, visit: support.cognex.com/documentation/in-sight.

System Requirements

This section describes system requirements for In-Sight Explorer software.

PC Hardware Minimum and Recommended Requirements

> **Notes**:
>
> - The following minimum hardware requirements are for PCs that are connected to a single low-resolution In-Sight vision system running at a slow production speed.
>
> - The following recommended hardware requirements are for PCs that are simultaneously connected to up to four In-Sight vision systems.

Minimum	Recommended
Intel® Celeron® 1000M processor running at 1.8GHz (or equivalent)	Intel Core™ i7 processor running at 2.7GHz (or equivalent)
2GB of available RAM	4GB of available RAM
4GB of available disk space	8GB of available disk space
Video card that can display 1024 x 768 resolution at 24-bit color depth (the DPI Display setting must be set to 96 DPI)	Video card that can display 1920 x 1080 resolution at 32-bit color depth (the DPI Display setting must be set to 96 DPI)
Network interface card (at least 100Mbps) for connecting to an In-Sight vision system	Gigabit network interface card for connecting to multiple In-Sight vision systems

Operating System Requirements

In-Sight software has been tested on the following operating systems:

- Microsoft® Windows® 10 Professional (64-bit)
- Microsoft Windows Server 2016

Although you can install and run In-Sight Explorer on other Windows operating systems, PCs that do not meet the preceding requirements are not officially supported.

Supported Languages

- Chinese (Simplified)
- English
- French
- German
- Japanese
- Korean
- Spanish (European)

Firmware Version Support

In-Sight 6.1.1 software contains three firmware versions:

- In-Sight 6.1.1
- In-Sight 5.9.2
- In-Sight 4.10.5 PR1

In-Sight vision systems that have older firmware versions might work properly. However, some features are unsupported with older firmware versions and are not fully tested. For optimal performance, update vision systems that run older firmware to the most recent, supported firmware versions. For a list of models and supported firmware versions, see the Firmware Versions topic in the *In-Sight® Explorer Help* file.

In-Sight Firmware 6.1.1

- In-Sight 2000 series vision sensors
- In-Sight 7000 Gen2 series vision systems
- In-Sight 8000 series vision systems
- In-Sight 9000 series vision systems
- In-Sight Advantage Engine

In-Sight Firmware 5.9.2

- In-Sight 5705 and 5705C vision systems

In-Sight Firmware 4.10.5 PR1

- In-Sight Micro 1000 series vision systems
- In-Sight 5000 series vision systems (except In-Sight 5705 and 5705C vision systems)
- In-Sight 7000 series vision systems (except In-Sight 7000 Gen2 series vision systems)

Microsoft .NET Framework 4.5.2

In-Sight software requires Microsoft .NET Framework 4.5.2. If the In-Sight software installer fails to detect Microsoft .NET Framework 4.5.2, it attempts to download and install it.

New Features

New Features
Added support for the In-Sight 8500P and 8501P vision systems.
Added the SetSystemConfig("Gui.UpdateCustomViewRangeOnly",Update) Extended Native Mode command to specify whether In-Sight Explorer user interface updates are limited to cells within the defined Custom View range, cells emitting a graphic and cells within an active Dialog range.
Added the SetSystemConfig("Gui.SkipGuiUpdateAfterAcqStart",Update) Extended Native Mode command to specify if the In-Sight Explorer user interface updates if a new acquisition has started or a new acquisition has completed, but has not yet been inspected. This command can be used to prevent missed acquisitions and/or delayed inspection results when the inspection cycle does not allow enough time to update the user interface.
Added the SetSystemConfig("Gui.SkipGuiUpdateTime",Time) Extended Native Mode command to specify the latency time, in milliseconds, between acquisition complete and the beginning of spreadsheet execution. If the specified time is exceeded, the In-Sight Explorer user interface is not updated. This command can be used to prevent missed acquisitions and/or delayed inspection results when the inspection cycle does not allow enough time to update the user interface.
Added the SetSystemConfig("JobCompleteMode",Signal) Extended Native Mode command to specify when the Job Complete signal is sent, relative to post-inspection tasks.
When connecting to the Web HMI, you can now optionally append URL query parameters to the vision system or vision sensor's web address to control the appearance of the display and to suppress the credentials dialog.
Added the GetTotalArea Vision Data Access function for BeadInspect and InspectEdgeWidth, to return the total area in pixels.

Changes & Fixes

Notes:

- For changes and fixes in previous releases, see past In-Sight Explorer release notes. Release notes for previous releases are available in the *In-Sight Explorer® Help* file.

- The release notes include issue numbers (where applicable) to better track known issues reported by Cognex Technical Support.

Issue#	Change/Fix	Applicable Firmware Version
FFP-1835	This release resolves an issue where having the device IP address set to 0.0.0.0 with PROFINET running would prevent PROFINET from starting after a device reboot.	6.1.1
IS-4605	If a job contains a Dialog function that is included in a Custom View and the job has been protected with a password and license, the Dialog can now be opened from the Web HMI. Previously, the Dialog function was visible from the Web HMI, but could not be opened.	6.1.1
IS-4586	If an In-Sight 2000 series vision sensor is configured to use the Sensor Filmstrip and the job contains many filtered images, when the image and job results are saved, the vision sensor no longer runs out of memory and become unresponsive.	6.1.1
IS-4542	When using the InspectEdgePosition spreadsheet function or the Edge EasyBuilder tool, the edges are now properly found within the defined region. Previously, edges may have been incorrectly found outside the defined Region, the circle constructed by InspectEdgePosition may not consistently fit the found edges, or the Edge EasyBuilder tool may have failed with an error message stating, "The Straight/Circle Line Fit Tool failed to Execute".	6.1.1
IS-4530	The In-Sight 6.1.1 installer includes the correct GSD and XML files for PROFINET Class B devices (GSDML-V2.34-Cognex-InSightClassB-20200529.xml). The In-Sight 6.1.0 installer included the incorrect version of the GSD and XML files for PROFINET Class B devices (GSDML-V2.34-Cognex-InSightClassB-20190809.xml).	6.1.1
IS-4479	EasyView items are now displayed and editable from the Web HMI. Previously, EasyView items were only displayed and editable from the Web HMI if also included in a Custom View.	6.1.1

Issue#	Change/Fix	Applicable Firmware Version
IS-4468	The GetBeadDefectWidth Vision Data Access function now correctly returns the minimum and maximum run time bead width in pixels. Previously, only the run time bead width in percentage format was correct.	6.1.1
IS-4463	When the In-Sight Explorer user interface language is set to Japanese, Chinese, Korean, French, German or Spanish, the EasyBuilder ReadText (OCRMax) tool settings are now properly displayed. Previously, a portion of the tool settings may not have been displayed and/or accessible for these languages.	6.1.1
IS-4380	The SetSymbolMinStringLength Vision Data Access function has been updated to support Codabar 1D symbologies for the referenced IDMax structure.	6.1.1
IS-4335	FTP spreadsheet functions and EasyBuilder tools now leave the connection to the FTP server open. Previously the connection was opened and closed each time the function or tool was executed.	6.1.1
IS-4703	When the remote device specified in a UDPDevice function disconnects and then reconnects to the network, the UDPDevice function will now automatically reconnect and clear its ERROR state. In earlier releases, you needed to change the port value before reconnecting.	6.1.1
IS-4733	Fixed an issue causing vision systems assigned to a DHCP address to not fail over to a link local IP address after the DHCP timeout when a DHCP server is unavailable.	6.1.1

Known Issues

Note: The release notes include issue numbers (where applicable) to better track known issues reported by Cognex Technical Support.

Issue#	Issue	Affected Firmware Version
IS-4432	If the ReadIDMax function is configured to read Data Matrix symbols, the Enable Training option is checked, and Train Perspective is selected from the Perspective drop-down, subsequent attempts to read the symbol will fail.	6.1.1
IS-2854	After a power-cycle, if the vision system/sensor receives a new trigger, no new results are added to the Sensor Filmstrip queue. However, the image and spreadsheet continue to update correctly. Conditions: • An In-Sight vision system/sensor is configured to use the Sensor Filmstrip. • In the Sensor Filmstrip Settings dialog, the Queue drop-down is configured as **Separate Pass and Fail Results**. • In the Sensor Filmstrip Settings dialog, the **Queue Size** is increased or decreased. • The vision system/sensor is power-cycled. • After the power-cycle, the vision system receives a new trigger. Workaround: 1. Within In-Sight Explorer, click **Sensor menu > Sensor Filmstrip Settings** to launch the Sensor Filmstrip Settings dialog. 2. From the Queue drop-down, select an option other than Separate Pass and Fail Results and click **OK**. 3. Relaunch the Sensor Filmstrip Settings dialog. 4. From the Queue drop-down, select **Separate Pass and Fail Results** and click **OK**. When the vision system/sensor is triggered, results are correctly added to the queue.	6.1.1

Issue#	Issue	Affected Firmware Version
FFP-1646	In-Sight 2000 series vision sensors running In-Sight firmware version 5.9.1 and later are not certified for PROFINET Conformance. To run In-Sight 2000 series vision sensors with PROFINET Conformance, you can downgrade the In-Sight 2000 series vision sensors' firmware version to In-Sight 5.9.0 or 5.8.x.	5.9.1 & 6.1.1
IS-2195	If In-Sight Explorer is installed to a PC with a Microsoft Windows 10 operating system and the **Beta: Use Unicode UTF-8 for worldwide language support** is checked in the Region dialog, the vision system or emulator may not be able to connect to the In-Sight Explorer Spreadsheet View. Workaround: Uncheck the **Beta: Use Unicode UTF-8 for worldwide language support** checkbox. 1. In the search box on the Windows taskbar, type **Control Pane** and select the **Control Panel** App. 2. From the Windows Control Panel search box, type **Region** and select the **Region** text. 3. In the Region dialog that opens, click the **Administration** tab and click the **Change system locale...** button. 4. In the Region Settings dialog that opens, uncheck **Beta: Use Unicode UTF-8 for worldwide language support** and click **OK** to close the Region Settings dialog. 5. Click **OK** to close the Region dialog. 6. Reboot the PC.	N/A
FFP-1053	When the vision system is configured to load a job at startup (Sensor menu > Startup) and the EV SetSystemConfig OPCUA.TimeSync Extended Native Mode command is issued, OPC UA Job Tags are missing in the OPC UA client when browsing the address space (Objects > Server > VisionSystem > Results > JobTags node). Workaround: Use the LoadJob method to reload the job file to the vision system/sensor. For more information, see the *In-Sight® Explorer Help* file.	6.1.1
FFP-875	Sending the communication settings, such as the IP address, from Mitsubishi iQ Sensor Solution (GX Works) to the In-Sight vision system/sensor is not supported.	6.1.1
IS-334	When you try to connect your vision system/sensor to the Web HMI for the first time, you may receive a permission error and connection is denied. Workaround: Reinstall or update the firmware on the vision system/sensor and then retry the Web HMI connection.	6.1.1
48478	If an In-Sight vision system that runs firmware 5.6.0 or later has a job with many instances of the ReadIDMax function, the job might require more memory than is available on the vision system. Any instances of the ReadIDMax function that exceed the available memory returns #ERR. For example, if an In-Sight 8405 vision system job contains more than 100 instances of the ReadIDMax function, you might encounter this problem.	6.1.1
45581	For In-Sight 7000 Gen2 series and 9000 series vision systems configured for CIP-Sync/PTP, 1588 synchronization accuracy through a transparent clock-switch might increase to more than 10µs offset from master.	6.1.1
35828	If an industrial Ethernet communication protocol triggers the vision system, the JobPass signal is sent only if the job contains a WriteResultsBuffer function. This issue does not occur with EasyBuilder applications once the Communication application step has been configured.	6.1.1

Issue#	Issue	Affected Firmware Version
32479	If you update the In-Sight vision system firmware while it is connected to a POWERLINK network, it results in a code 13710, with the vision system needing to be power cycled and the files restored (the firmware will be successfully updated, however). Workaround: Before you update the vision system firmware, complete the following steps: 1. Remove the vision system from the POWERLINK network and connect the vision system to a network port on the same subnet as the computer that runs In-Sight Explorer. 2. Power cycle the vision system. 3. Update the firmware while the vision system in Ethernet mode. 4. Place the vision system back onto the POWERLINK network. 5. Power cycle the vision system.	4.10.5 PR1