COGNEX

In-Sight SDK

In-Sight® SDK 5.6.0 Release Notes

Revision: 5.6.0.6, 05/25/2018

Overview

This document describes the In-Sight Software Development Kit (SDK) for Microsoft® Windows®, including the following topics:

Please also refer to the In-Sight Display Control Release Notes for specific information regarding the CvsInSightDisplay control.

About the In-Sight SDK

The In-Sight SDK provides a platform for developing custom applications that interact with networked In-Sight vision systems. Programs developed with the In-Sight SDK can vary in complexity from a simple In-Sight Display Control docked on a form to robust applications that load jobs, save images and communicate via multiple I/O channels.

Visit the In-Sight Online Support Center to download the latest release notes and documentation, including localized versions.

Note: The In-Sight Micro 1020, In-Sight 2000 series and In-Sight 7020, 7010, 7230, 7430 and 7432 are not supported with the In-Sight SDK.

System Requirements

PC Hardware Requirements

Minimum

Note: The minimum hardware requirements are for PCs that you connect to a single low-resolution In-Sight vision system running at a slow production speed.

- Intel® Celeron® 1000M processor running at 1.8GHz (or equivalent)
- 2GB of available RAM
- 4GB of available hard-disk space
- Video card capable of displaying 1024 x 768 resolution at 24-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

Recommended

Note: The recommended hardware requirements are for PCs that you simultaneously connect to up to four In-Sight vision systems.

- Intel Core™ i7 processor running at 2.7GHz (or equivalent)
- 4GB of available RAM
- 8GB of available hard-disk space
- Video card capable of displaying 1920 x 1080 resolution at 32-bit color depth (the DPI Display setting must be set to 96 DPI)
- Gigabit network interface card for connecting to 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 7 Professional, Service Pack 1 (64-bit)
- Microsoft Windows Server 2016

Although the In-Sight SDK may function on other operating systems, systems not meeting the preceding requirements have not been tested and are not supported.

Supported Languages

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

Supported In-Sight Vision Systems/Sensors

Firmware Version Support

In-Sight 5.6.0 software contains three firmware versions:

- In-Sight 5.6.0
- In-Sight 5.2.2
- In-Sight 4.10.5

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 running older firmware to the most recent, supported firmware versions.

Note: For a complete list of models and supported firmware versions, see the Firmware Versions topic in the *In-Sight® Explorer Help* file.

In-Sight Firmware 5.6.0

- In-Sight 2000 series vision sensors
- In-Sight 5705 and 5705C vision systems

- In-Sight 7000 Gen2 series vision systems
- In-Sight 8000 series vision systems

In-Sight Firmware 5.2.2

- In-Sight Advantage Engine

In-Sight Firmware 4.10.5

- 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)

Notes:

- The In-Sight Micro 1020, In-Sight 2000 series and In-Sight 7020, 7010, 7230, 7430 and 7432 are not supported with the In-Sight SDK.
- When communicating with In-Sight vision systems running In-Sight 5.1.0 and later firmware, users are required to send a message to the vision system to get the latest image and results. When CvsInSightDisplay is used and visible, this is handled automatically. Otherwise, users should call CvsInSight.AcceptUpdate() or CvsInSightDisplay.AcceptUpdate() when they are ready to receive new results.
- Communicating with In-Sight vision systems running In-Sight 4.x.x firmware has not changed. Calling CvsInSight.AcceptUpdate() is not necessary, and will have no effect on receiving images and results.

Microsoft .NET Framework 4.5

In-Sight software requires Microsoft .NET Framework 4.5. If the In-Sight software installer fails to detect Microsoft .NET Framework 4.5, it will attempt to download and install it.

Supported Development Environments

- Microsoft Visual Studio 2013
- Microsoft Visual Studio 2012

Notes

- ActiveX controls are supported by Microsoft Visual Basic 6.0, Rockwell Automation FactoryTalk® View Site Edition (SE) and compatible ActiveX host applications.
- To create ToolBuilder EasyBuilder tools, the GUID Generation Utility (guidgen.exe) is also required. This utility is included with Microsoft Visual Studio. For more information on guidgen.exe, please consult MSDN.

ToolBuilder Support

The In-Sight SDK supports the ability to create custom EasyBuilder tools (please consult the ToolBuilder Programmer Reference guide for more information). All ToolBuilder-created EasyBuilder tools must be placed in the following directory to be available in the In-Sight Explorer application: C:\Program Files (x86)\Cognex\In-Sight\In-Sight Explorer 5.x.x\AddIns. When creating EasyBuilder tools using ToolBuilder, the DLL for the tool must be placed in the In-Sight Explorer 5.x.x\AddIns directory. Copy and paste all of the previously created ToolBuilder DLL files into the AddIns directory.

Installation

You must be logged on as a user with full administrative privileges in order to install the In-Sight SDK.

Note: COM/ActiveX applications developed with a different version of the In-Sight Display Control or the In-Sight SDK are not compatible with this version and will not function properly. Either the custom applications need to be recompiled against this version, or the original version must be reinstalled. (CR# 5084)

Sample Projects

In-Sight SDK Sample Projects are installed to the following folder:

- C:\Users\Public\Documents\Cognex\In-Sight\In-Sight Sample Projects 5.x.x

A shortcut on the Start Menu is available to open this location.

Known Issues

Note: The release notes include Change Request numbers (CR#) (where applicable) to improve tracking of Known Issues reported from Cognex Technical Support. For information about Known Issues regarding the Cognex In-Sight Display (CvsInSightDisplay) control, please consult the In-Sight Display Control Release Notes.

CR#	Issue
31753	In-Sight SDK items (such as CvsInSightDisplay) that require updates, will only request updates when they are visible, not when they are hidden or minimized. *Workaround*: If updates are required in this scenario, a call to either CvsInSight.AcceptUpdate() and/or CvsInSightDisplay.AcceptUpdate() should be added when new results should be retrieved from the In-Sight vision system. It is recommended that a handler be attached to the CvsInSight.ResultsChanged event, and once the results have been handled, CvsInSight.AcceptUpdate should be called.
15264	When building an In-Sight SDK application on a 64-bit operating system, you must set your Platform Target to x86. If the Platform Target is set to Any CPU or x64, your application may crash with a FileNotFoundException or BadImageFormatException. *Workaround*: To configure your application for an x86 Target Platform in Visual Studio: • In Solution Explorer, right-click your project and select **Properties**. • Select the **Build** tab. • Toggle the **Platform target** drop-down list to be **x86**. **Note**: Refer to the *In-Sight SDK Reference* help file for specific instructions to resolve this problem in the different project types.
11930	It is recommended to ensure that a vision system is offline before calling the SetExpression method.