



EXPERION PKS

RELEASE 510.1

Software Change Notice

EPDOC-X166-en-5101C

November 2018

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ABOUT THIS DOCUMENT

This Software Change Notice contains information for all the users of Experion R510.1. This SCN must be read prior to installing and managing the system. The document describes the new features and enhancements introduced with the R510.1 release. Additionally, it contains resolved PARs, issues, special considerations, and last minute documentation updates.

1.1 Revision history

Revision	Date	Description
A	July 2018	Initial release of the document.
B	July 2018	Updated to include few known issues and changes in Chapter "Support for optional SCADA interfaces".
C	November 2018	Updated information on Infrastructural Change Impact.

The Experion Process Knowledge System provides a single, integrated platform encompassing continuous and batch control, safety, security, electrical, SCADA, and asset management. Experion introduces new features and enhancements that improve security, reliability, and performance.

Following are some of the new features and enhancements:

- Experion Batch Solutions
- Unit Operations Controller
- IEC 61850 SCADA enhancements
- UIS enhancements
- Engineering Tools for UOC
- Operating System Security
- Experion Software Installation Enhancements
- System Inventory Tool
- Experion OPC UA Client Interface
- ControlEdge PLC Integration Interface Enhancements
- ControlEdge RTU Integration Interface Enhancements
- Experion Personal Gas and Safety
- Equipment Display Enhancements
- Electronic Flow Measurement Enhancements
- SmartLine Transmitter Point Detail Displays and Faceplates
- Experion Server Platform Memory Specifications

2.1 Check for updates on Honeywell Process Solutions website

The Honeywell Process Solutions website, <http://www.honeywellprocess.com> contains the most up-to-date software updates, documentation, and recommended antivirus updates. You can find the latest version of this SCN on [Honeywell Process Solutions website](#).

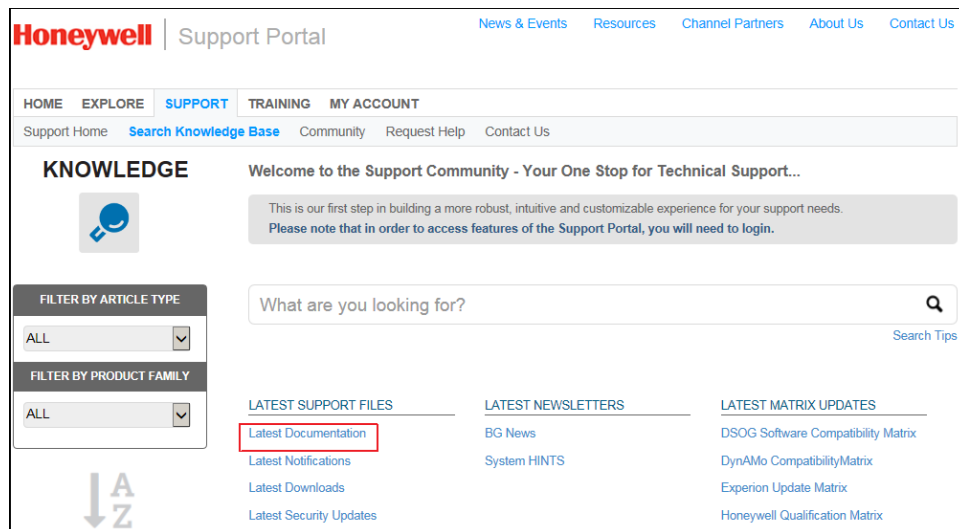
2.1.1 To access the Honeywell Process Solutions website

1. In a web browser, type the following URL.
<https://www.honeywellprocess.com/support>
The **SUPPORT** page appears, and the **Search Knowledge Base** tab is selected by default.
2. Select **Click Here to Login** in the top-right corner of the page.
The home page appears.
3. If you are a new user, register at this website. Click **Register**, and follow the on-screen instructions.
4. If you are already registered, type your **Account Login** user name and password, and click **Login**.
Your account name appears in the top-right of the page.

2.1.2

To download documents, security updates, or antivirus notifications

1. Click **Latest Documentation** as shown in the following image.



The **All Support Documentation** page appears as a new page.

2. In the **Search** box, type the name of the required document, security update, or antivirus notification.
For example, to download an SCN, type **Experion PKS General Release Software Change Notice** or **Experion PKS Support Media Software Change Notice** in the **Search** box.
3. Click **Search**.
The **All Support Search Results** page appears with the search results.

4. In the left pane, use the **Search Result Filters** to further filter the document, security update, or antivirus notification. For example, if you are locating a Software Change Notice:
 - a. Under **Document Type**, click **Software Change Notice**.
 - b. Under **Product Release**, click the required Experion product release.

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Experion PKS R311.2 General Release - Software Change Notice

www.honeywellprocess.com/library/support/Documents/Experion/Experion PKS R311.2 General Release - Software Change Notice.pdf

Document Type: Software Change Notice | **Release Date:** 2 Nov 2009 | **Size:** 1MB

This SCN includes the new features, the Change Requests fixed in the Experion R311.2 release, the LCPN4e updates, the New Dell platforms updates, and the new R311.5 EXPPlus media updates.

[Add to Download List](#)

5. Click the document, security update, or antivirus notification link to open it.

2.1.3 To download the Knowledge Base Articles

1. Go to Honeywell Process Solutions website (www.honeywellprocess.com).
2. Login using the required credentials.
3. Click **SUPPORT** tab.
4. Click **RECENTLY PUBLISHED** tab for the latest articles.
5. Click on the Article ID to view and download the article.
6. To download the older articles, type the keyword of the required article and press **Enter**.
7. Click on the article name to view and download the article.

2.2 Who must read this document?

The information in this the guide is useful if you are planning to install, migrate, or configure the Experion R510.1 system. See this guide to understand the overall product, release interoperabilities, system dependencies, problem resolutions, known issues, and special considerations. This SCNs must be readily available for reference at any stage of Experion R510.1 system setup.

2.3 Change impact

- [Control change impact](#)
- [Operational change impact](#)
- [Infrastructural change impact](#)

2.3.1 Control change impact

Not applicable..

2.3.2 Operational change impact

Not applicable.

2.3.3 Infrastructural change impact

Description

All TPS nodes are not supported as ELCN nodes in R510.1.

The migration to Experion R510.1 supports the migration of ESVT, ES-T, EAPP, ACE-T, HM, ENIM and non-redundant AM to the corresponding ELCN node types. The additional LCN nodes such as EPLCG, EHB, Redundant AM are not supported as ELCN nodes for R510.x series. However, this support is provided for R501.4 and other point releases for the R501 release series.

Therefore, users of R501.4 and later point releases should not migrate to R510 series. Instead, they should choose an appropriate point release of R511.x or later releases.

Impact

Users on R501.4 or later point releases should not migrate to R510 series. Their migration target should be an appropriate point release of R511.1 or later releases.

CONTENTS OF THIS RELEASE

- [Contents of Experion R510.1 software media kit](#)
- [Experion R510.1 PDF Collection](#)

3.1 Contents of Experion R510.1 software media kit

The **Experion R510.1 software media kit (EP-PKS510)** consists of following two DVD kits and Experion Read Me First Instructions.

- **Experion R510 Multi DVD Kit-1 (Part number 51156470)**
- **Experion R510 Multi DVD Kit-2 (Part number 51156471)**
- **Experion Read Me First Instructions (Part Number 51154497)**

3.2 Experion R510.1 PDF Collection

ATTENTION

Experion user documentation is available on the Honeywell Process Solutions website (<http://www.honeywellprocess.com/>), and the PDF Collection. The Honeywell Process Solutions website contains the latest user documentation, including document revisions after the Experion R510.1 release. To ensure that you are accessing the latest documentation, use the Honeywell Process Solutions website.

The PDF Collection media contains the following two installer files and the Adobe Reader folder.

- **Experion_PKS_R510.1_SCN_Installation_Migration_PDF_Installer.msi**
This Windows Installer Package installs the SCN, installation, and migration documentation.
- **Experion_PKS_R510.1_PDF_Collection_Installer.msi**
This Windows Installer Package installs all user documentation, such as, configuration, operations, and troubleshooting-related documents for Experion PKS R510.1.
- **Adobe Reader folder**
This folder includes the Adobe Reader (DC version) application.

3.2.1 Contents of Experion R510.1 System Documentation PDF Collection

The following table lists the Experion user documentation contained in the System Documentation PDF Collection.

Document name	Document ID
ABB TotalFlow Interface Reference	EPDOC-X340-en-510A
Allen-Bradley Drive Interface through ControlNet Reference	EPDOC-XXX2-en-510A
Allen-Bradley Interface Reference	EPDOC-XXX3-en-510A
Application Control Environment Rapid Restart Solution Guide	EPDOC-X405-en-510A
Application Control Environment Rapid Restart Upgrade Tool User's Guide	EPDOC-X404-en-510A
Application Control Environment User's Guide	EPDOC-XXX4-en-510A
Application Development Guide	EPDOC-XXX5-en-510A
ASEA Interface Reference	EPDOC-XXX6-en-510A
Bristol Babcock Interface Reference	EPDOC-XXX8-en-510A
Bristol Babcock OpenBSI Interface Reference	EPDOC-XXX9-en-510A
C200/C200E Troubleshooting and Maintenance Guide	EPDOC-XX10-en-510A
C300 Controller User's Guide	EPDOC-XX11-en-510A
CL Server User's Guide	EPDOC-XX12-en-510A
Configuration Studio Overview Guide	EPDOC-X113-en-510A
Configuration Utility User's Guide	EPDOC-XX14-en-510A
Control Builder Components Reference	EPDOC-XX15-en-510A
Control Builder Components Theory	EPDOC-XX16-en-510A
Control Builder Error Codes Reference	EPDOC-XX17-en-510A
Control Builder Parameter Reference	EPDOC-XX18-en-510A
Control Building User's Guide	EPDOC-XX19-en-510A
Control Component Library Reference	EPDOC-X152-en-510A
ControlEdge PLC Interface Reference	EPDOC-X467-en-510A
ControlEdge RTU Interface Reference (<i>New</i>)	EPDOC-X542-en-510A
ControlEdge 900 Hardware Planning and Installation Guide (<i>New</i>)	HWDOC-X430-en-H
Control Firewall User's Guide	EPDOC-XX20-en-510A
Control Hardware Installation Guide	EPDOC-XX21-en-510A

Document name	Document ID
Control Hardware Planning Guide	EPDOC-XX23-en-510A
Controller Hardware Notifications Theory	EPDOC-XX22-en-510A
ControlNet Fiber Optic Implementation Guide	EPDOC-XX24-en-510A
ControlNet Installation Guide	EPDOC-XX25-en-510A
Custom Algorithm Block and Custom Data Block User's Guide	EPDOC-XX26-en-510A
DELL OPTIPLEX XE2 Planning Installation and Service Guide	HWDOC-X526-en-C
DeviceNet Interface Implementation Guide	EPDOC-XX27-en-510A
Diagnostic Studio User's Guide	ESDOC-XX28-en-2401A
Dictionary	EPDOC-XX29-en-510A
DNP3 Interface Reference	EPDOC-XX31-en-510A
Engineering Data Builder User's Guide	EPDOC-X417-en-510A
Enron Modbus Interface Reference	EPDOC-X233-en-510A
Enterprise Model Builder User's Guide	EPDOC-XX32-en-510A
Ethernet Interface Module Hardware and Common Platform User's Guide	EPDOC-X406-en-510A
Ethernet Interface Module with IEC 61850 User's Guide	EPDOC-X462-en-510A
Ethernet IP User's Guide	EPDOC-X399-en-510A
ETN Quick Start Guide	EPDOC-X329-en-510A
Experion Cluster Communication for ACE Interface Reference	EPDOC-XX13-en-510A
Experion LCN Overview and Implementation Guide	EPDOC-X478-en-510A
Experion LCN Planning, Installation, and Service Guide	HWDOC-X479-en-E
Experion LCN Quick Start Guide	EPDOC-X480-en-510A
Experion Legacy I/O Link Module Parameter Reference Dictionary	EPDOC-X151-en-500
Experion Network Best Practices	WP-07-02-ENG
Experion Node Configuration Tool User's Guide	EPDOC-X427-en-510A
EXTIO 2 Remote Peripheral Solutions Installation Instructions	EP-DPCX24
Fault Tolerant Ethernet Bridge Implementation Guide	EPDOC-XX35-en-510A
Fault Tolerant Ethernet Installation and Service Guide	EPDOC-XX36-en-510A
Fault Tolerant Ethernet Overview and Implementation Guide	EPDOC-XX37-en-

Document name	Document ID
	510A
Fault Tolerant Ethernet Status Server and Auxiliary Display User's Guide	EPDOC-XX38-en-510A
Fisher ROC Interface Reference	EPDOC-X341-en-510A
FMC 722 on ACE Configuration Guide	EPDOC-X332-en-510A
FMC 722 on ACE Parameter Reference	EPDOC X333-en-510A
GE Fanuc Series 90 Interface Reference	EPDOC-XX39-en-510A
GEC GEM80 Interface Reference	EPDOC-XX40-en-510A
Getting Started with Experion Software Guide	EPDOC-X112-en-510A
Guidelines for Replacing Hiway Boxes with LCN-connected C300 Emulations	EPDOC-X268-en-510A
GUS Basic Script User's Guide	EPDOC-XX41-en-510A
GUS Basic Scripting Language Reference	EPDOC-XX42-en-510A
GUS Display Authoring Tutorial	EPDOC-XX43-en-510A
GUS Display Builder User's Guide	EPDOC-XX44-en-510A
GUS Display Scripting User's Guide	EPDOC-XX45-en-510A
GUS Display Search Tool User's Guide	EPDOC-XX46-en-510A
GUS Display Translator User's Guide	EPDOC-XX47-en-510A
GUS Faceplate, Alarm, and Message Scripting User's Guide	EPDOC-XX48-en-510A
GUS Remote Display User's Guide	EPDOC-XX49-en-510A
Hardware and Point Build Reference	EPDOC-XX50-en-510A
HART I/O Implementation Guide	EPDOC-XX51-en-510A
HART Point Parameter Access User's Guide	EPDOC-X516-en-510A
HCI/OPC Data Access User's Guide	EPDOC-XX52-en-510A
High Availability Seamless Redundancy User's Guide	EPDOC-X474-en-510A
Hitachi Interface Reference	EPDOC-XX53-en-510A
Hiway Slot Emulation Creator User Guide	EPDOC-X267-en-500
HMIWeb Display Building Guide	EPDOC-XX54-en-510A

Document name	Document ID
HMIWeb Object Specification	EPDOC-X174-en-510A
HMIWeb Solution Pack Operator and Alarm Philosophy	EPDOC-X173-en-510A
Honeywell DPR Interface Reference	EPDOC-XX55-en-510A
Honeywell FSC Integration Reference	EPDOC-XX56-en-510A
Honeywell Icon Series Console Planning, Installation, Service Guide	EP-DCNXX4-510A
Honeywell Icon Series Console Read Me First	EP-DCNXX3
Honeywell LCS620 Interface Reference	EPDOC-XX57-en-510A
Honeywell Modbus TCP Firewall User's Guide	EPDOC-X162-en-510A
Honeywell Series 9000 Integration Reference	EPDOC-XX60-en-510A
Honeywell TDC 3000 Data Hiway Interface Reference	EPDOC-XX61-en-510A
Honeywell Turbine Control Solution Parameter Reference	EPDOC-XX62-en-510A
Honeywell UDC Integration Reference	EPDOC-XX63-en-510A
Honeywell Universal Modbus Interface Reference	EPDOC-XX64-en-510A
HP ProLiant DL360P Gen8 Honeywell Server Planning, Installation, and Service Guide	HWDOC-X330-en
HPE ProLiant DL360P Gen9 Honeywell Server Planning, Installation, and Service Guide (<i>New</i>)	HWDOC-X528-en-A
HPE ProLiant DL360P Gen9 Server Upgrade Kit Instruction (<i>New</i>)	51195915-417-A
IEC 61850 Client Interface SCADA Configuration Guide	EPDOC-X412-en-510A
IEC 60870 SCADA Configuration Reference Guide	EPDOC-X358-en-510A
IEC 60870 SCADA Parameter Reference Guide	EPDOC-X376-en-510A
IEC 61850 SCADA Configuration Guide (<i>New</i>)	EPDOC-X375-en-510A
Integrated Experion-TPS User's Guide	EPDOC-XX66-en-510A
LCNP Status User Guide	EPDOC-XX67-en-510A
LLMUX2 TC and RTD FTAs User Guide	EPDOC-XX68-en-510A
MasterLogic Experion Integration User's Guide	EPDOC-X365-en-510A
MeterSuite Configuration Guide	MSDOC-X307-en-200A
MeterSuite Installation Guide	MSDOC-X306-en-200A
MeterSuite User's Guide	MSDOC-X308-en-200A

Document name	Document ID
METTLER TOLEDO Integration Reference	EPDOCXX69-en-510A
ML200 CPU and SoftMaster User's Guide	EPDOC-X367-en-510A
ML200 Installation and Commissioning Guide	EPDOC-X366-en-510A
Modbus Interface Reference	EPDOC-XX71-en-510A
Moore Mycro Interface Reference	EPDOC-XX73-en-510A
Native Windows User's Guide	EPDOC-XX74-en-510A
Network and Security Planning Guide	EPDOC-XX75-en-510A
OEP IKB and Touch Screen Device Adapters Installation Instructions	EP-DPCXX3
Omni Interface Reference	EPDOC-XX77-en-510A
OPC Client Interface Reference	EPDOC-XX78-en-510A
OPC UA Client Interface Reference (<i>New</i>)	EPDOC-X523-en-510A
OPC Gateway for ACE Interface Reference	EPDOC-XX79-en-510A
Operator's Guide	EPDOC-XX80-en-510A
Operator Touch Panel Installation, Configuration, and Operation Guide	EPDOC-X356-en-510A
Operational Application Suite Configuration Guide	EPDOC-X264-en-510A
Operational Application Suite User's Guide	EPDOC-X265-en-510A
Orion Console Configuration Guide	EPDOC-X343-en-B
Orion Console Installation Guide	EPDOC-X313-en-B
Orion Console Read Me First	EPDOC-X312-en-B
Parallel Operation Keyboard User's Guide	EPDOC-XX82-en-510A
Parallel Redundancy Protocol User's Guide	EPDOC-X410-en-510A
Parameter Definition Editor Reference	EPDOC-XX83-en-510A
Peer Control Data Interface Implementation Guide	EPDOC-XX84-en-510A
Personal Gas Safety Installation, Configuration, and Operations Guide	EPDOC-X524-en-510A
PM I/O Hardware Troubleshooting and Maintenance Guide	EPDOC-XX85-en-510A
Procedure and Sequence Custom Display Building Guide	EPDOC-XX86-en-510A
PROFIBUS Gateway Module Parameter Reference	EPDOC-XX87-en-510A
PROFIBUS Gateway Module User's Guide	EPDOC-XX88-en-

Document name	Document ID
	510A
PROFIBUS Interface Implementation Guide	EPDOC-XX89-en-510A
Profit Controller User's Guide	EPDOC-X463-en-510A
Project Engineering User's Guide	EPDOC-X471-en-510A
Qualification and Version Control User's Guide	EPDOC-XX90-en-510A
Quick Builder User's Guide	EPDOC-XX91-en-500
R320 Honeywell Server Planning Installation Service Guide	HWDOC-X238-en
R330XL Honeywell Server Planning Installation Service Guide	HWDOC-X452-en
R430 Honeywell Server Planning Installation Service Guide	HWDOC-X453-en
R5500 Honeywell Workstation Planning Installation and Service Guide	EP-DPCX25
R7610 Honeywell Workstation Planning Installation Service Guide	HWDOC-X273-en
R7910XL Honeywell Workstation Planning Installation Service Guide	HWDOC-X369-en
Rail I/O Series A Implementation Guide	EPDOC-X114-en-510A
Rail I/O Series H Implementation Guide	EPDOC-X115-en-510A
Redirection Manager Users Guide	EPDOC-X116-en-510A
Redundant Power Supply Installation Guide	EPDOC-X117-en-510A
Remote Fieldbus Interface Module Solution Guide	EPDOC-X331-en-510A
Safety Manager Integration Guide	EPDOC-X119-en-510A
SafeView User's Guide	EPDOC-X120-en-510A
Search Utility User's Guide	EPDOC-X121-en-510A
Sequential Control User's Guide	EPDOC-X122-en-510A
Serial Interface Module Implementation Guide	EPDOC-X123-en-510A
Series A Fieldbus Interface Module User's Guide	EPDOC-X124-en-510A
Series C Fieldbus Interface Module User's Guide	EPDOC-X125-en-510A
Series C I/O User's Guide	EPDOC-X126-en-510A
Server and Client Configuration Guide	EPDOC-X127-en-510A
Server and Client Overview and Planning Guide	EPDOC-X128-en-510A
Server Scripting Reference	EPDOC-X129-en-510A
Siemens S7 Interface Reference	EPDOC-X130-en-

Document name	Document ID
	510A
SIM-ACE User's Guide	EPDOC-X131-en-510A
SIM-C300 User's Guide	EPDOC-X133-en-510A
SIM-C200E Implementation Guide	EPDOC-X132-en-510A
SIM-FFD User Guide	EPDOC-X134-en-510A
Site Planning Guide	EPDOC-X135-en-510A
Spirit IT Flow-X Interface Reference	EPDOC-X297-en-510A
Startup and Shutdown Guide	EPDOC-X137-en-510A
Supplementary Installation Tasks Guide	EPDOC-X138-en-510A
Switch Configuration Tool User's Guide	EPDOC-X246-en-510A
System Administration Guide	EPDOC-X139-en-510A
System Management Configuration Guide	EPDOC-X141-en-510A
System Management Operations Guide	EPDOC-X142-en-510A
T130 Honeywell Server Planning Installation Service Guide	HWDOC-X450-en
T320 Honeywell Server Planning Installation Service Guide	HWDOC-X239-en
T330 Honeywell Server Planning Installation Service Guide	HWDOC-X451-en
T610 Honeywell Server Planning Installation Service Guide	EP-DPCX15-en-F
T3600XL Honeywell Workstation Planning Installation Service Guide	HWDOC-X230-en
T5810XL Honeywell Workstation Planning Installation Service Guide	HWDOC-X398-en
TPN Server User's Guide	EPDOC-X143-en-510A
TPS File Transfer Installation and User's Guide	EPDOC-X144-en-510A
Troubleshooting Guide	EPDOC-X243-en-510A
Turbine Control User's Guide	EPDOC-X145-en-510A
UOC User's Guide (<i>New</i>)	EPDOC-X512-en-510A
Virtualization Planning and Implementation Guide	EPDOC-X147-en-510A
Virtualization with Premium Platform Guide	EPDOC-X241-en
Windows Domain and Workgroup Implementation Guide	EPDOC-X148-en-510A
Windows Domain and Workgroup Planning Guide	EPDOC-X250-en
Windows Domain Implementation Guide for Windows Server 2008 R2	EPDOC-X251-en
Windows Domain Implementation Guide for Windows Server 2012	EPDOC-X263-en

Document name	Document ID
Windows Domain Implementation Guide for Windows Server 2016	EPDOC-X472-en-B
Wyse Z90 Thin Client Planning Installation Service Guide	HWDOC-X280-en
Yamatake MA500 Interface Reference	EPDOC-X149-en-510A
Z440 Honeywell Planning Installation and Service Guide	HWDOC-X368-en
Z620 Honeywell Planning Installation and Service Guide	HWDOC-X223-en

The following table lists the documents that have been removed from R510.1 System Documentation PDF Collection.

Document name	Document ID
Batch Overview and Planning Guide Note that the content of this document has been merged across several documents . They are Sequential Control User's Guide, Server and Client Overview Planning Guide and Operator's Guide	EPDOC-XXX7-en
Batch Implementation Guide Note that the content of this document has been merged across several documents . They are Sequential Control User's Guide, Server and Client Overview Planning Guide and Operator's Guide	EPDOC-X161-en
Overview Guide Note that the contents of this guide has been integrated into Server and Client Overview and Planning Guide	EPDOC-XX81-en
Experion Mobile Access User's Guide	EPDOC-X150-en
Secure Communications User's Guide	EPDOC-XX72-en

3.2.2 Contents of Experion R510.1 SCN, Installation, and Migration PDF Collection

Document name	Document ID
ACE and SCE Off-Process Migration Guide	EPDOC-XXX1-en-510A
ACE Rapid Restart Upgrade Tool User's Guide	EPDOC-X404-en-510A
Collaboration Station Off-Process Migration Guide	EPDOC-X355-en-510A
Control Hardware and I/O Modules Firmware Upgrade Guide	EPDOC-X150-en-510A
Controller Interoperability Reference for Controller Migration	EPDOC-X240-en-510A
EApp Off-Process Migration Guide	EPDOC-X176-en-510A
EAS Off-Process Migration Guide	EPDOC-X242-en-510A
eServer Off-Process Migration Guide	EPDOC-XX33-en-510A
Experion On Process Migration Guide for Virtualized Environment	EPDOC-X328-en-510A
Experion R510.1 General Release Software Change Notice	EPDOC-X166-en-510A
Experion Support and Maintenance Software Change Notice	ESDOC-X183-en-242A
Experion Support and Maintenance Installation Guide	ESDOC-X165-en-242A
Firmware Manager User's Guide	EPDOC-X470-en-510A
Getting Started with Experion Software Guide	EPDOC-X112-en-510A
HMIWeb Solution Pack Installation Guide	EPDOC-X171-en-510A
HMIWeb Solution Pack Migration Guide	EPDOC-X170-en-510A
HMIWeb Solution Pack Software Change Notice	EPDOC-X172-en-510A
Installation Builder User's Guide	ESDOC-XX65-en-242A
MeterSuite Software Change Notice	MSDOC-X309-en-200A
Migration Planning Guide	EPDOC-XX70-en-510A
R500.x to R510.1 BCC Migration Guide	EPDOC-X521-en-510A
R505.x to R510.x Process System Off-process Migration Guide (<i>New</i>)	EPDOC-X552-en-510A
RPS Migration Guide for Extio2	EPDOC-X163-en-510A
Software Installation User's Guide	EPDOC-X136-en-510A
Supplementary Installation Tasks Guide	EPDOC-X138-en-510A
System Initialization Media Software Change Notice (SCN)	EPDOC-X185-en-124A
Upgrade Tool Components Media Software Change Notice (SCN)	EPDOC-X153-en-510A
Upgrade Tool User's Guide	EPDOC-X146-en-510A

GETTING STARTED

- [About Experion installation and migration documents](#)
- [Supported server/client migration paths](#)
- [Supported controller migration paths](#)

4.1 About Experion installation and migration documents

The Read Me First-Experion PKS is provided in printed form with the Experion R510.1 media. All the other documents, such as, the Software Change Notices, Software Installation User's Guide are available in a printer-friendly PDF format in the Experion R510.1 PDF collection CD. For migrations from Experion R41x.x to R510.1, see the Upgrade Tool Components Media Software Change Notice.

The following table lists the documents to be used during the installation or migration. These documents must be read and followed to install or migrate an Experion system.

Name of the document	Document usage
Experion R510.1 Software Change Notice	Before installing or upgrading to Experion R510.1.
Getting Started with Experion Software Guide	To get an overview of the Experion system, and the overall installation or migration task flow.
Software Installation User's Guide	To perform a clean installation of Experion R510.1.
Migration guides	Site-specific migration guides: The Upgrade Tool uses the migration guides available on the Experion Upgrade Tool Components media and depending on the site configuration, generates the site-specific migration guides. The site-specific migration guides contain complete information about the migration instructions for a component or node with a particular configuration. The site-specific migration guides are specifically for the R3xx from to R510.1 migration path.
Supplementary Installation Tasks Guide	To complete additional tasks once you have completed installation or upgrade of Experion.
Integrated Experion-TPS User's Guide	If you have TPS nodes in your system, use this document to perform additional mandatory tasks after the Experion installation is complete.
System Initialization Media Software	The SCN provides the latest information about the Experion PKS System Initialization media and the platforms supported through that Initialization media.

Change Notice	
Windows Domain and Workgroup Planning Guide	<p>The document provides the planning information for the Windows domain and workgroups.</p> <p>For R510.1, the Experion domain controller user documentation is aligned with the qualification of domain controller operating systems. For more information about instructions to install and configure a domain controller for Experion, see the following documents.</p> <ul style="list-style-type: none"> • Windows Domain Implementation Guide for Windows Server 2008 • Windows Domain Implementation Guide for Windows Server 2008 R2 • Windows Domain Implementation Guide for Windows Server 2012 • Windows Domain Implementation Guide for Windows Server 2012 R2 • Windows Domain Implementation Guide for Windows Server 2016

4.2 Supported server/client migration paths

The following are the supported server migration paths for Experion R510.1.

- Experion R410.1 to R510.1 (on-process and off-process migration)
- Experion R410.2 (with or without R410.3/R410.4/R410.5/R410.6/R410.7/R410.8/R410.9 patch) to R510.1 (on-process and off-process migration)
- Experion R430.1 (with or without R430.2/R430.3/R430.4/R430.5/R430.6 patch) to R510.1 (on-process and off-process migration)
- Experion R431.1 (with or without R431.2/R431.3/R431.4/R431.5 patch) to R510.1 (on-process and off-process migration)
- Experion R432.1 (with or without R432.2 patch) to R510.1 (on-process and off-process migration)
- Experion R500.2 to R510.1 (on-process and off-process migration)
- Experion R501.1 to R510.1 (on-process and off-process migration)
- Experion R505.1 to R510.1 (Off-Process)

4.3 Supported controller migration paths

ATTENTION

Contact HPS Migration Center of Excellence (COE) or your local Honeywell Technical Assistance Center (TAC) before migrating.

The following controller migration paths are qualified for Experion R510.1.

Experion R410.1	R410.8 HOTFIX7	R431.2 HOTFIX4
R410.1 Controller Patch Controlled Release 1	R410.8 HOTFIX8	R431.2 HOTFIX5
R410.1 Controller Patch Controlled Release 2	R410.8 HOTFIX9	Experion R431.3
R410.1 Controller Patch Controlled Release 3	R410.8 HOTFIX10	R431.3 HOTFIX1
R410.1 Controller Patch Controlled Release 4	Experion R410.9	R431.3 HOTFIX2
Experion R410 Controller Patch 3	R410.9 HOTFIX2	R431.3 HOTFIX3
Experion R410 Controller Patch 4	R410.9 HOTFIX3	R431.3 HOTFIX4
Experion R410.2	R410.9 HOTFIX4	R431.3 HOTFIX5
R410.2 Controller Patch Controlled Release 1	R410.9 HOTFIX5	R431.3 HOTFIX6
R410.2 Controller Patch Controlled Release 2	R410.9 HOTFIX6	Experion R431.4
R410.2 Controller Patch Controlled Release 3	R410.9 HOTFIX7	R431.4 HOTFIX1
R410.2 Controller Patch Controlled Release 4	R410.9 HOTFIX8	R431.4 HOTFIX2
Experion R410.3	R410.9 HOTFIX9	R431.4 HOTFIX3
R410.3 Controller Patch Controlled Release 1	R410.9 HOTFIX10	R431.4 HOTFIX4
R410.3 Controller Patch Controlled Release 2	Experion R430.1	Experion R431.5
R410.3 Controller Patch Controlled Release 3	R430.1 Controller Patch Controlled Release 1	R431.5 HOTFIX1
Experion R410.4	Experion R430.2	Experion R432.1
R410.4 Controller Patch Controlled Release 1	R430.2 Controller Patch Controlled Release 1	ExperionPKS_R432.1_C200-C300_FTEB-SeriesA_QVCS_Patch
R410.4 Controller Patch Controlled Release 2	R430.2 Controller Patch Controlled Release 2	R432.1 HOTFIX1
R410.4 Controller Patch Controlled Release 3	Experion R430.3	R432.1 HOTFIX2
R410.4 Controller Patch Controlled Release 4	R430.3 Controller Patch Controlled Release 1	R432.1 HOTFIX3
Experion R410.5	R430.3 Controller Patch Controlled Release S2	R432.1 HOTFIX4
R410.5 Controller Patch Controlled Release 1	Experion R430.4	R432.1 HOTFIX5
R410.5 Controller Patch Controlled Release 2	R430.4 HOTFIX1	R432.1 HOTFIX6
R410.5 Controller Patch Controlled Release 3	R430.4 HOTFIX2	Experion R432.2
Experion R410.6	R430.4 HOTFIX3	Experion PKS R432.2 EHB Hotfix 1
R410.6 Controller Patch Controlled Release 1	R430.4 HOTFIX4	R432.2 HOTFIX1
R410.6 Controller Patch Controlled Release 2	R430.4 HOTFIX5	R432.2 HOTFIX2

R410.6 Controller Patch Controlled Release 3	Experion R430.5	R432.2 HOTFIX3
R410.6 Controller Patch Controlled Release 4	R430.5 HOTFIX1	Experion R500.1
Experion R410.7	R430.5 HOTFIX2	R500.1 HOTFIX1
R410.7 Controller Patch Controlled Release 1	R430.5 HOTFIX3	R500.1 HOTFIX2
R410.7 Controller Patch Controlled Release 2	Experion R430.6	Experion R500.2
R410.7 Controller Patch Controlled Release 3	R430.6 HOTFIX1	R500.2 HOTFIX1
Experion R410.8	R430.6 HOTFIX2	R500.2 HOTFIX2
R410.8 HOTFIX1	Experion R431.1	R500.2 HOTFIX3
R410.8 HOTFIX2	R431.1 HOTFIX1	R500.2 HOTFIX4
R410.8 HOTFIX3	Experion R431.2	R501.1
R410.8 HOTFIX4	R431.2 HOTFIX1	R501.1 HOTFIX1
R410.8 HOTFIX5	R431.2 HOTFIX2	R505.1 (Only Off-Process)
R410.8 HOTFIX6	R431.2 HOTFIX3	R505.1 HOTFIX1

The Controller Migration wizard is used for migrating process controller firmware and control hardware firmware. This wizard automates many of the tasks performed during controller migration and is used for both on-process and off-process migration. It can be accessed from the Controller menu in Control Builder.

For more information, see the *Experion Migration Planning Guide* and the *Upgrade Tool User's Guide*.

- [Platform hardware](#)
- [Antivirus software](#)
- [Microsoft Office compatibility](#)
- [Microsoft security updates](#)
- [Windows operating system](#)
- [Experion Backup and Restore](#)
- [Application Whitelisting](#)
- [Procedure Analyst](#)

5.1 Platform hardware

The following physical and virtual platforms are qualified.

ATTENTION

Variations from the tested configuration may negatively impact the operation and/or performance of the hardware when used as the specified node types.

5.1.1 Physical platforms

- **HP platforms**

The following HP platforms are qualified.

Workstation	Server
HP Z440 workstation	HP Proliant DL360p Gen8 server
HP Z620 workstation	HP Proliant DL360p Gen9 server

- **Dell platforms**

The following Dell servers and workstations are qualified.

Workstation	Server
Dell Precision R5500 workstation	Dell PowerEdge T320 server
Dell Precision T3600XL workstation	Dell PowerEdge R320 server
Dell Precision R7610 workstation	Dell PowerEdge R330 server
Dell Precision R7910 workstation	Dell PowerEdge T330 server
Dell Precision T5810XL workstation	Dell PowerEdge T130 server
Dell OptiPlex XE2	Dell PowerEdge R430 server

ATTENTION

- The performance workstation hardware can be used as a Experion Flex Server - ESV on Windows Client Operating System.
- To plug in FTE cables on a Dell Precision R7610 workstation, refer to the **NIC connection requirements** section in the *Fault Tolerant Ethernet Installation and Service Guide*.

5.1.2 Virtual platforms

Honeywell provides qualified virtual platforms that can be used with supported applications. The entire solution is supplied and supported by Honeywell. The virtual platforms can be used for clean installation or migration.

The following virtual platforms are qualified.

- VMware Virtual workstation
- vSphere

For more information about virtualization support, see the following documents on the Honeywell Process Solutions website.

- [HPS Virtualization Specification](#)
- [Experion Virtualization Planning and Implementation Guide](#)

For more information about the hardware supported for Experion, see the latest *System Initialization Media Software Change Notice*.

In addition, you may download the following spreadsheet from <http://www.honeywellprocess.com>.

- Experion Update Matrix

5.2 Antivirus software

To obtain the latest antivirus software information, you may access the following links in the Honeywell Process Solutions website. If you are a new user, you must register at <http://www.honeywellprocess.com>.

- Click the following link for Antivirus Software Guidelines.
<https://www.honeywellprocess.com/library/support/Documents/Trusted/Experion/anti-virus-software-guidelines.pdf>
- Click the following link for Antivirus Quick Reference.
<https://www.honeywellprocess.com/library/support/notifications/Experion/anti-virus-quick-reference-guide.pdf>

5.3 Microsoft Office compatibility

Click the following link for latest information about the qualified Microsoft Office packages for the Experion products.

<https://www.honeywellprocess.com/library/support/Documents/Trusted/Experion/certified-microsoft-office-packages.pdf>

The latest Microsoft Office package information is available at the Honeywell Process Solutions website. If you are a new user, you must register at <http://www.honeywellprocess.com>.

5.4 Microsoft security updates

You can access the latest Microsoft security updates at the Honeywell Process Solutions website. If you are a new user, you must register at <http://www.honeywellprocess.com>.

- To access the latest Microsoft security update information at the Honeywell Process Solutions website, click the following link.
<https://www.honeywellprocess.com/library/support/security-updates/Customer/Honeywell-Qualification-Matrix.zip>
- After you register at the website, click the following link for ISO User Guide.
<https://www.honeywellprocess.com/library/support/security-updates/Entitled/suit-iso-user-guide.pdf>

5.5 Supported operating system

Honeywell has an Original Equipment Manufacturer (OEM) agreement with Microsoft for supplying operating system media for Experion releases. The following Windows operating systems (English edition) are supported.

- On client nodes
 - Microsoft Windows 10 Enterprise 2016 LTSC (x64)
- On server nodes
 - Microsoft Windows Server 2016 Standard
- On Virtual machines
 - Microsoft Windows Server 2016 Datacenter
 - Microsoft Windows Server 2016 Standard

NOTE

Microsoft Datacenter operating system is only applicable for virtualized environments.

5.6 Experion Backup and Restore

Experion Backup and Restore (EBR) R501.x will be qualified with Experion R510.1. For more information, please refer to *Experion Backup and Restore User's Guide*.

5.7 Application Whitelisting

This is not supported in Experion R510.1.

5.8 Procedure Analyst

Procedure Analyst is an analysis and reporting tool for procedure history that enables you to collect, examine, analyze, and report procedural and continuous information pertaining to procedure production.

Procedure Analyst extends the usefulness of procedural event data by bridging applications such as Experion Batch Manager and continuous process applications such as OPC HDA-compliant historians. Procedure Analyst also integrates procedure event data with time series data and Experion process event data.

Procedure Analyst R500.1 with Patch1 is qualified with Experion PKS R510.1, and supports the Unit Timeline functionality that has been introduced in Experion PKS R510.1. For more information on Unit Timeline, see "Experion Batch Solutions" on page 32.

Procedure Analyst is contained in a separate media package which is included as part of the Experion PKS R510.1 Bill of Materials. The Procedure Analyst media package will be delivered when you order the Experion PKS R510.1 installation media.

NOTE

Procedure Analyst is not installed as part of the Experion PKS installation; you must install it manually. For more information, see the Procedure Analyst R500.1 Software Change Notice and the Procedure Analyst R500.1 Patch 1 Software Change Notice.

NEW FEATURES AND ENHANCEMENTS

6.1 Experion Batch Solutions

Experion R510.1 introduces significant new human machine interface (HMI) capabilities for the Experion Batch Solution with intuitive visual analytics to help plant Operators better anticipate and respond to abnormal situations. Using capacity and performance improvements provided by the Unit Operations Controller (UOC) and the virtual Unit Operations Controller (vUOC), Experion Batch gives flexibility in recipe development and optimizes Batch configuration and execution capacity limits.

Enhancements for Experion Batch Solutions for R510.1 include:

- Unit Timeline
- Procedure Explorer
- Interactive Instructions Improvements
- Master Recipe User Defined Template
- SCM Step/ Transitions Details Visibility

6.1.1 Unit Timeline

Unit Timeline is an out of box System Status display with interactive controls to enable Operators to monitor and manage batch execution within the Units in their SOR. Past events and upcoming critical phases and tasks are displayed, enabling Operators to prepare and plan for them in advance.

The Unit Timeline provides:

- A Now Card, and Unit Lanes which, at first glance, provide an overview of what is happening now in the batches running on each unit in an Operator's SOR. The interactive controls provided a view of active phases and parent elements, as well as past and future timing information of the running batch.
- The ability to pan and zoom batches to see upcoming important procedural elements and interactive instructions, thus enabling better preparation and overall process efficiency.
- Visual indication of delays in running batches when compared to previously completed Reference Batches, and controls enabling navigation to the Procedure Explorer where delays can be analyzed and addressed at a step or transition level.
- Notification of messages and alarms related to a batch or unit, and navigation links to the relevant summary display where the Operator can either follow the Interactive Instructions provided, or analyze and troubleshoot alarm conditions as required.
- Navigation to associated items for a unit including process graphics, detail displays, trends, and faceplates for monitoring, analysis, and control of the unit and its running batches.

6.1.2 Procedure Explorer

Procedure Explorer is an intuitive recipe visualization interface enabling Operators to explore the procedural elements of a batch, showing the procedural hierarchy of the batch, the current state and execution status of each procedure, and the active steps and transitions within each procedure.

Being able to access such detailed information about a batch helps the Operator identify and access the source of any problem that is preventing the batch from proceeding, thus providing a seamless workflow of batch operation and control.

The Procedure Explorer provides:

- Tree, Header, and Chart controls enabling monitoring and navigation of the procedural hierarchy according to the S88 procedural model
- Popup or Full view display of procedures
- State icons, modifiers, and callouts enabling active element monitoring
- Navigation to associated point detail displays and faceplates to facilitate batch control
- Indication of step block output instructions and navigation to the Message Summary

6.1.3 Interactive Instructions Improvements

Batches often contain instructions at the step output level that you need to act on before the batch can proceed. Interactive instructions configured to announce their existence as a message appear as Experion PKS messages. These messages, can be viewed in the Message Summary, and the instruction can be interacted with and confirmed/signed (if required).

Icons in the Unit Timeline and Procedure Explorer indicate the presence of these instructions.

The Interactive Instructions Improvements provide:

- Use of messages to annunciate presence of Instructions
- Monitor and confirm Instructions from message summary display
- Single and Double Signature Instruction Types
- Enable/disable of instruction per Step Output at runtime
- Programmatic and MES support to confirm Instructions
- Instruction support of live process values, visible within Instruction content

6.1.4 Master Recipe User Defined Template

Master Recipe User Defined Template extends the Control Builder Make Template functionality to Master Recipes, thereby reducing the engineering effort required to create different Master Recipe instances for similar batch applications.

For more information about Experion Batch Manager, see the following documents:

- *Sequential Control User's Guide*
- *Operator's Guide*
- *Server and Client Overview and Planning Guide*
- *Server and Client Configuration Guide*

6.1.5 SCM Step/ Transitions Details Visibility

SCM step/ Transitions Details Visibility provides an option in the Control Builder System Preferences to set the visibility of all Step/Transition Output/Condition expressions displayed in the Sequential Function Chart.

This feature removes the requirement to manually change the ON/OFF option for every step or transition block. Also, the SCM step/ Transitions Details Visibility functionality helps to generate compliance reports as well as enabling print versions of the Sequential Function Chart with Step/Transition blocks aligned with Output/Condition expression details as required for inspection or review by regulatory compliance agencies.

6.2 Unit Operations Controller

The Unit Operations Controller (UOC) is a high value, low cost, rack-based process controller that can be applied to any process control application in any industry. Its form factor, cost profile and licensing model make it especially well-suited to industries that prefer to limit the scope of a single controller to a single process unit, and to industries that require powerful batch enablers.

The UOC is paired with a virtualized controller called the virtual Unit Operations Controller (vUOC). The vUOC provides a set of functions parallel to those of the UOC except that they are deployed within a server hosted virtual machine.

UOC and vUOC are deployed within Experion systems by connecting their uplink Ethernet ports to an FTE network.

Key features of the UOC control system include the following.

- ControlEdge 900 Platform
- FTE Uplink Connectivity
- EtherNet/IP™ Connectivity
- ModbusTCP (PCDI)
- ControlEdge 900 I/O
- EtherNet/IP Connectivity to IO, Devices and Controllers
- Control Execution Environment (CEE) with Field Proven Control Algorithms
- Built for Batch
- Control Strategy Building through Experion Control Builder
- I/O Points and I/O References Blocks
- Strategy Checkout Simulation in physical and virtual UOC
- Secure Communication
- Peer to Peer Communication with native Experion Controllers
- Alarms and Events
- Time Synchronization
- Licensing Model optimized for scalability
- Virtual UOC for Simulation, Process-Connected Control and Supervisory Batch Control

For more information about UOC, see the *UOC User's Guide* and *Control Edge HW Planning and Installation Guide*.

6.3 IEC 61850 SCADA enhancements

There are four new features added to the existing IEC 61850 interface: Scan Period Configuration, File Services, Log Control Block and Settings Group Control Block.

6.3.1 Scan Period Configuration

The Scan Period (PollLogDev feature) is used to read the data for Dataset and Non Dataset points (IEC 61850 SCADA points) based on the configured scan period (in seconds). By default, the point will be set to Scan Period as 0. If Scan Period is set other than 0, then the read operation happens from the device at the specified scan period.

6.3.2 File Services

The user can perform the following file services:

- Read file - to read the file content from the IED to the client. This can also be used to retrieve fault records from the IED.
- Delete file - allows the user to delete a file from the IED.
- Transfer file - allows the user to transfer a file from the client to IED.

6.3.3 Log Control Block

This feature allows the user to retrieve the historical values of data objects for a specified time range or for a specific log id. It can also fetch sequence of events of the historical data. To retrieve the historical values, the IED must support Log Control Blocks.

6.3.4 IED Setting Control Block

The Settings Groups Control Block is used to modify and edit the settings groups. It also supports switching between the settings groups (Active setting group).

6.4 UIS enhancements

Enhancements for UIS for Experion R510.1 include:

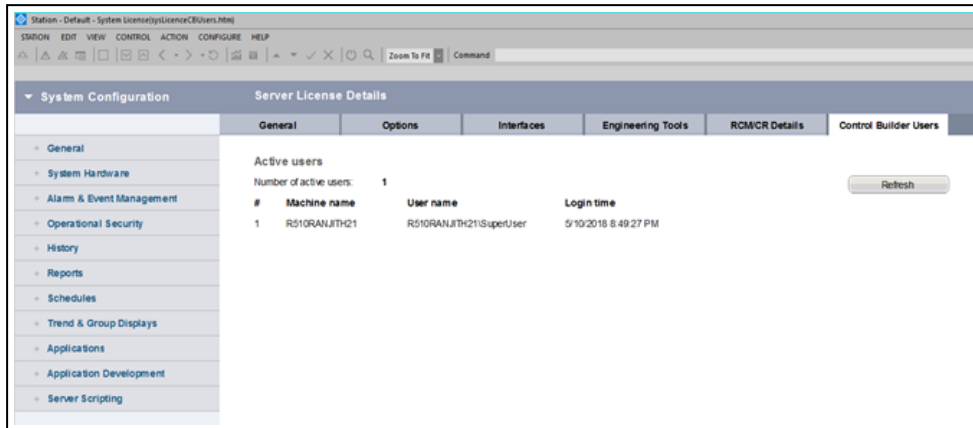
- Identify logged in users to Control Builder (UIS 2792)
- Display channel's hierarchical information in Functional Block Assignment Dialog and IO Reference Block Point Picker (UIS 4565)
- Modify override selector blocks to function like they do in HPM (UIS 2931)
- Library Blocks - Block Pins (UIS 4453)
- Provide an easy way to enable system alarms on Experion Nodes to be alarmable (UIS 4053)
- Temporarily suppress future system alarms related to a computer (UIS 2121)

6.4.1 Identify logged in users to Control Builder (UIS 2792)

This enhancement displays the list of users who have Control Builder clients open which are connected to an Experion system.

A new tab 'Control Builder Users' is added in the Server License Details page. The 'Control Builder Users' tab lists the following details of all the users who are currently logged into a Control Builder and connected to the same server cluster.

- Username
- Machine Name
- Login Time



6.4.2 Display channel's hierarchical information in Function Block Assignment Dialog and IO Reference Block Point Picker (UIS 4565)

This feature displays additional information related to a channel so that the channel's hierarchy can be easily identified before assigning to a specific function block or an IO reference block.

Before the introduction of this functionality, the Function Block Assignment Dialog displayed:

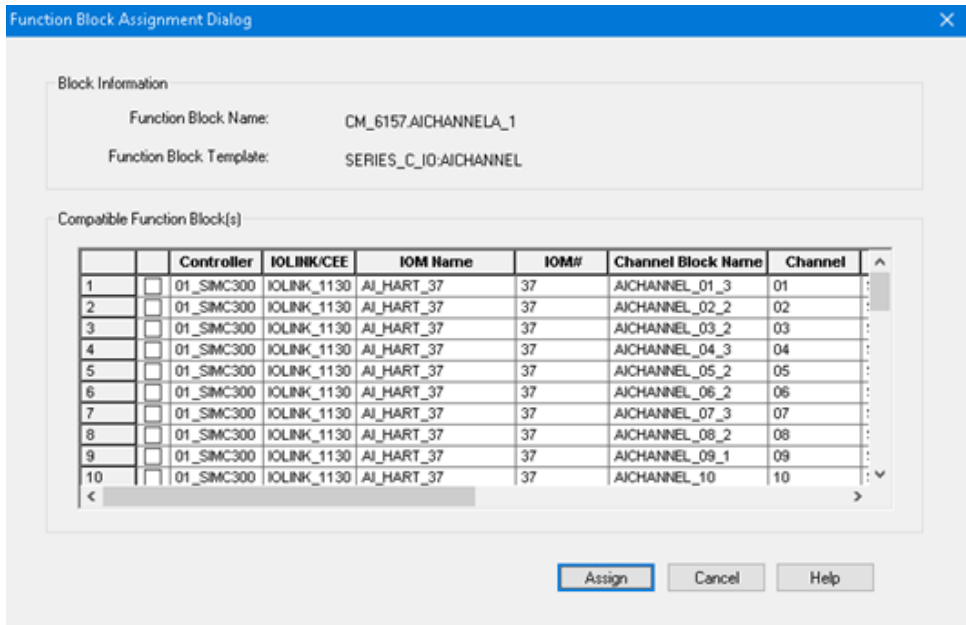
- IOM Name
- Channel Block Name
- Channel Number
- Block template Name

The IO Reference Point Picker displayed:

- Points
- Types

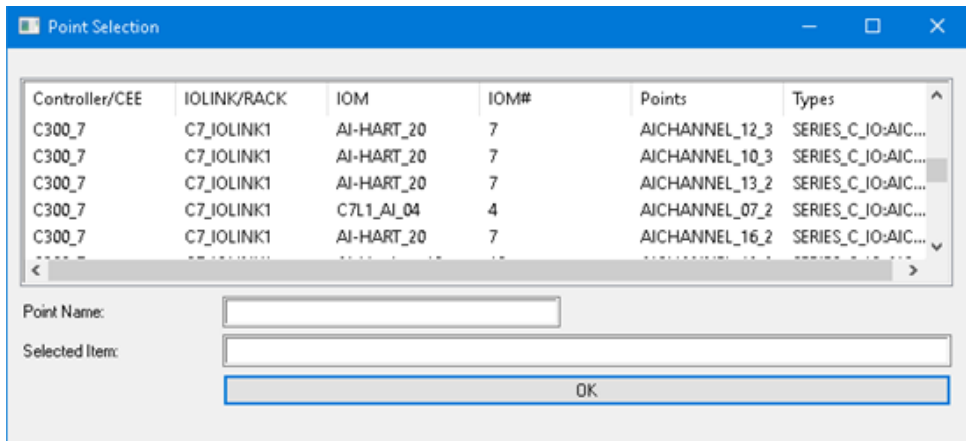
With this enhancement, the following additional data is displayed in Function Block Assignment Dialog:

- Controller Name
- IO Link Name
- IO Module Number



With this enhancement, the following additional data is displayed in IO Reference Block Point Picker:

- C300 Controller Name
- IO Link Name
- IO Module Name
- IO Module Number



6.4.3 Modify override selector blocks to function like they do in HPM (UIS 2931)

As part of this enhancement, the override selector block is modified so that it holds the last good value in its X1, X2, and so on input, on inactivation/reload of a primary. If this is the selected value, it will remain selected until another input moves to where it becomes selected. This would prevent plant shutdowns if a primary is reloaded without putting the override selector in MAN.

The Bad input option parameter can ignore, include and hold the last good input value by setting the parameter BADINPTOP[1..4]. This HoldOnBad parameter holds last good input value when an intializable input goes bad on inactivation or reload of a primary.

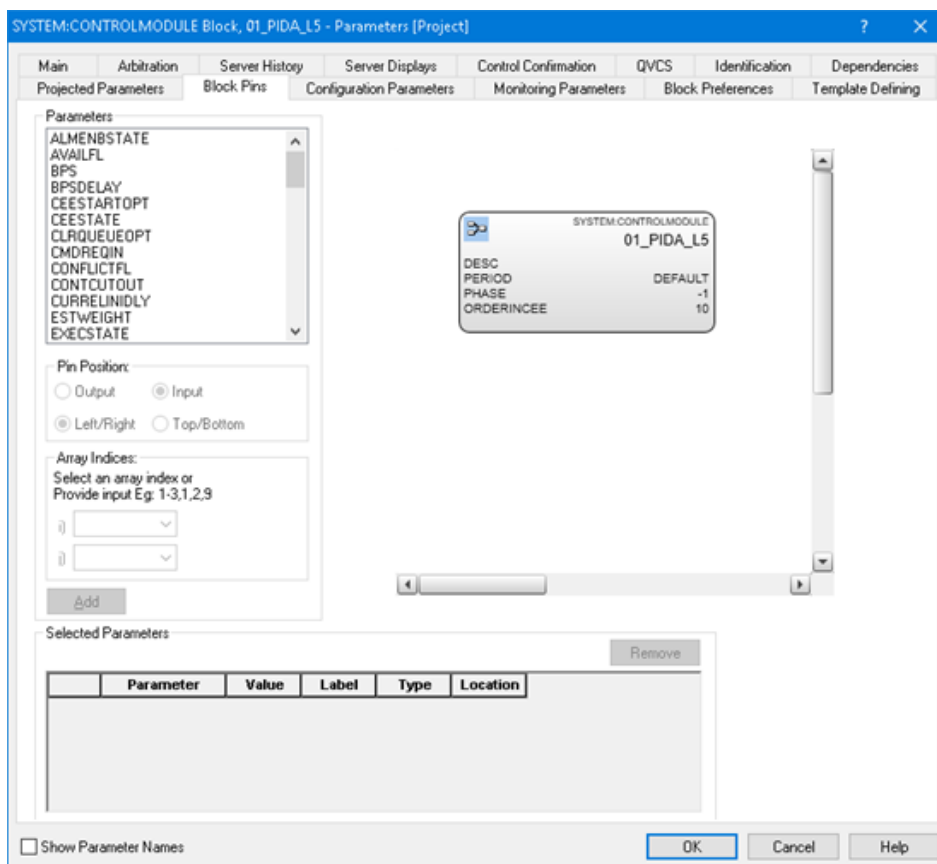
6.4.4 Library Blocks - Block Pins (UIS 4453)

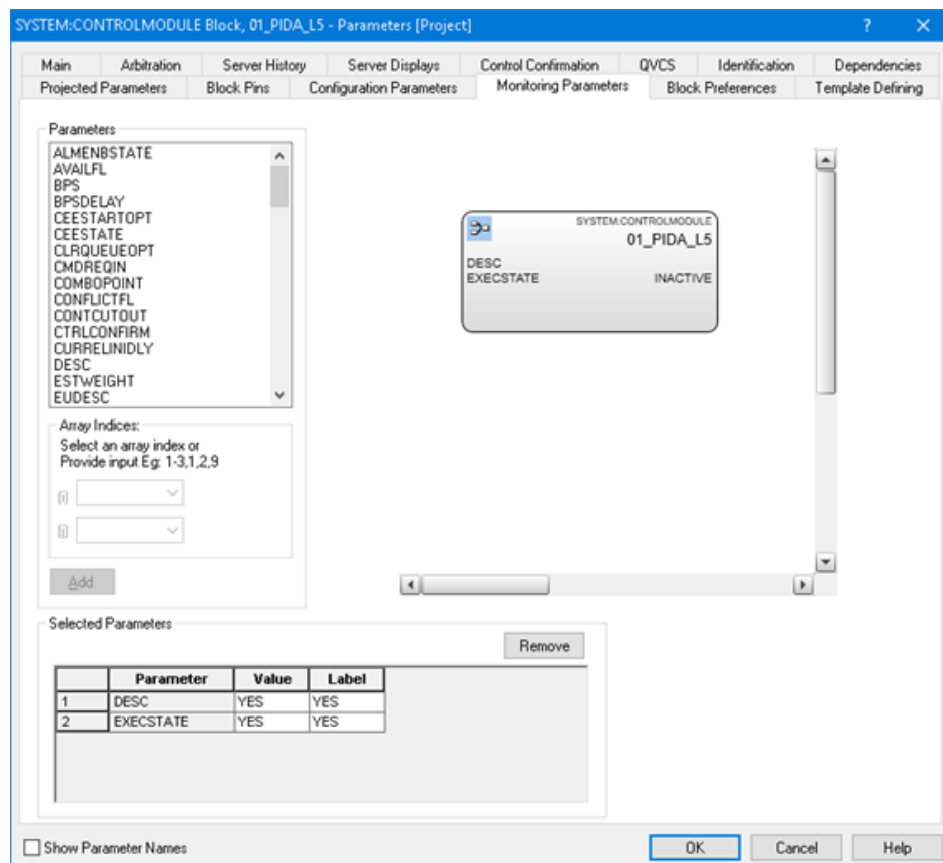
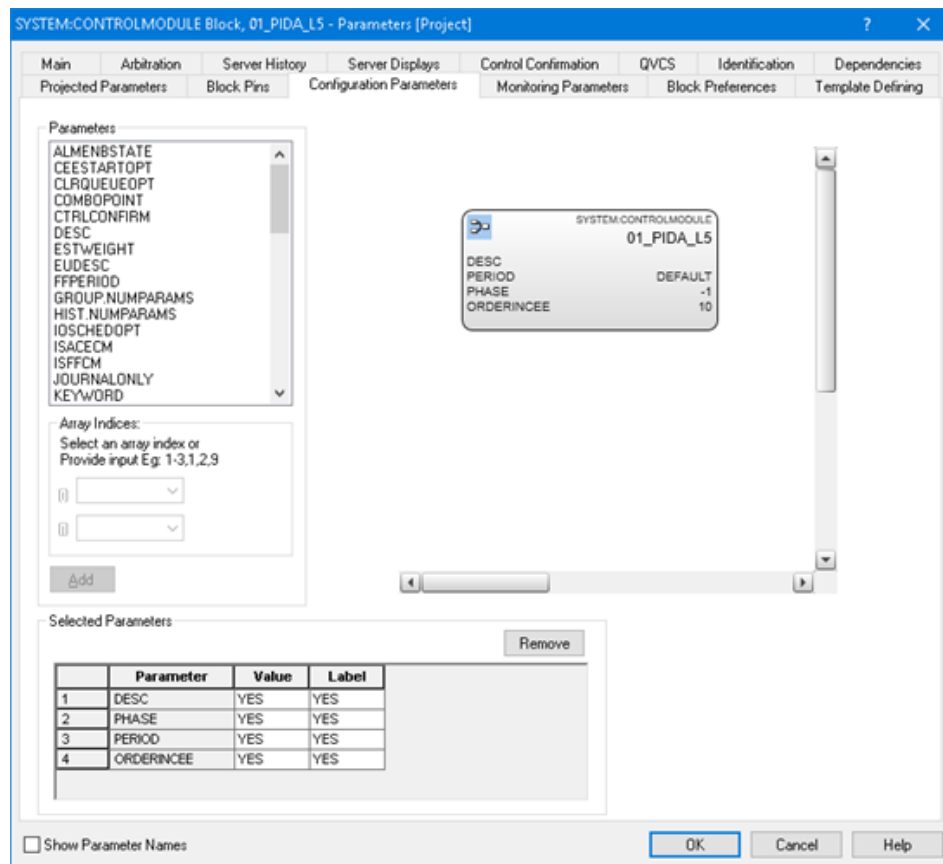
This enhancement applies to the Library Blocks - Block Pins. With this enhancement, you can perform the following operations:

- Add/remove multiple array indexes at a time using shift or control keys.
- For an arrayed parameter, you can either select a particular index or provide input similar to a printing page.

In Block Pins tab, configuration parameters and monitoring parameters are updated for the following scenarios:

- When more than one arrayed parameter is selected in the parameter list.
- When arrayed parameter and a non-arrayed/scalar parameter is selected.
- When multiple scalar parameters without common configurations are selected.





You can add only one arrayed parameter at a time, but for the same arrayed parameter you can add more than one array index.

When you select more than one non-arrayed/scalar parameter, common possible configurations will be applied similar to how it works now when we try to add one scalar parameter by double clicking on a parameter in the list.

6.4.5 Provide an easy way to enable system alarms on Experion Nodes to be alarmable (UIS 4053)

This enhancement applies to editing the pre-configured Dell computer critical hardware failure alarms in Experion Station as part of Experion Installation Media. You can perform the following operations on the pre-configured hardware (OMCI/OMSA1/OMSA2) alarms:

1. Disabling pre-configured Dell hardware alarms- You can disable the event by modifying the event filter files.
2. Enabling pre-configured hardware alarms- You can enable hardware failure alarms to get reported in Experion Station by modifying the event filter files.
3. Modifying pre-configured Dell hardware alarms- If you need to modify the pre-configured Dell hardware alarms, then Honeywell recommends you to modify the following categories:
 - Event Severity
 - Active/Inactive

6.4.6 Alarm and Data Improvements (UIS 2121)

To avoid excessive system alarms during maintenance activities on an Experion computer, you can now temporarily suppress future system alarms related to the computer across the Experion system, including across DSA-connected systems.

While system alarms are suppressed, they can be viewed using the predefined suppressed view on the System Status display.

When the suppression of system alarms related to a computer expires, any existing suppressed system alarms related to the computer will be unsuppressed and returned to the unfiltered view of the System Status display.

The minimum security level required to temporarily suppress system alarms related to a computer and the automatic expiry time for this suppression can be configured on the Alarm Processing tab of Server wide alarm and event options.

6.5 Engineering Tools for UOC

In Experion R510.1, the below functionalities have been introduced.

- New license for UOC system
- Enhancements on IO points (with IOPOINT_PARAM configuration) to support QVCS/Load/Import/Export

6.5.1 New license for UOC system

A new license called the Composite Device Point(s) has been introduced for Experion R510.1 which is an addition to the IO Analog/Digital Point(s) license that was introduced in Experion R505.1.

Both these licenses are applicable only for the points on UOC license enabled Experion servers.

The following table describes the applicability of the new licenses in the UOC system.

Device Category	Characteristics	Examples	Typical Data Provided	Licensing Model
Typical I/O	Follows the I/O Module and I/O Channel paradigm	Typical AI, DI, AO, DO, and PI modules	Device and Process..... <ul style="list-style-type: none"> • Data (PV / OP) with status • Loop Alarms • Diagnostics • Configuration 	IO Analog/Digital Point(s)
Complex Device	A single I/O entity that can have both input and output data of multiple (mixed) data types.	Motor starters, drive controllers, IEDs, indent systems, weigh scales, etc.	Device and Process..... <ul style="list-style-type: none"> • Data (input & output) • Diagnostics • Status & conditional • Status accumulators • Configuration 	Composite Device Point (s)
Single entity multiple I/O device types	A single I/O entity that provide aggregation from various devices.	PLCs	Device and Process..... <ul style="list-style-type: none"> • Aggregation Data (input & output) from various devices 	Composite Device Point (s)

For Experion R510.1, only the IO Analog/Digital Point(s) license will be enforced during Load by Control Builder and Server.

The Composite Device Point(s) license will not be enforced by Control Builder or Server. Both these licenses can be viewed in Server license details page.

6.5.2 Enhancements on IO Points

- IO points (with IOPOINT_PARAM configuration) can be created for representing parameters on ControlEdge 900 I/O and EtherNet/IP Devices. These IO points get assigned to the ControlEdge 900 I/O or EtherNet/IP device respectively as child elements after all the fixed channels (IO points with ControlEdge 900 I/O or EtherNet/IP configuration).
- IO points (with IOPOINT_PARAM configuration) can be Imported/Exported and versioned under QVCS as part of their parent IOM/Device.

For more information, refer to *Network and Security Planning Guide*.

6.6 Operating System Security

The following are the system security enhancements for R510.1:

- Transport Layer Security (TLS) support
- Windows services lockdown

6.6.1 Transport Layer Security (TLS) support

Due to various security concerns with SSL 3.0, TLS 1.0, TLS 1.1 protocols, starting from Experion PKS R510 release, these protocols are disabled on Experion nodes during installation process.

Only TLS 1.2 protocol is enabled on these machines.

6.6.2 Windows services lockdown

To improve the security of Experion machines, windows services that are not being used by Experion functions and core windows functions will be disabled during the installation.

For the list of services, refer to *Network and Security Planning Guide*.

6.7 Experion software installation enhancements

The following are the software installation enhancements for Experion R510.1.

- System Inventory Tool installation integration with Experion installation
- Data center operating system
- Experion Multi DVD Kit-2 delivered as dual layer DVD.

6.7.1 System Inventory Tool installation integration with Experion installation

This enhancement integrates the installation of System Inventory Tool along with Experion installation. This saves the additional effort required to install System Inventory Tool as a separate entity after the Experion software installation has been completed.

This functionality will be available on the following Experion nodes:

- System Inventory Dashboard:
 - Console Station TPN Connected (ES-T)
 - Console Station (ES-C)
 - Flex Station (ES-F)

User is expected to install this feature only on one node in a cluster.

- System Inventory Data collection is installed by default on Experion Server node.

6.7.2 Data center Operating System

This is a new feature introduced for Experion R510.1, where the user can use the windows server 2016 Data center OS for virtual machines.

User can still continue using Windows server 2016 standard OS for virtual machines.

6.7.3 Experion Multi DVD Kit-2 delivered as dual layer DVD

Beginning with Experion R510.1, the Experion Multi DVD Kit-2 will be delivered as a dual layer DVD.

6.8 System Inventory Tool

System Inventory Tool (SIT) captures a detailed overview of the hardware inventory and software inventory of the Honeywell Experion PKS and related assets installed on the site. This inventory information assists system users with making decisions around their system with a detailed level of granularity. Inventory details can be viewed on the System Inventory Portal

(<http://www.honeywellprocess.com/support>) and updated on an as needed basis.

SIT is now integrated into the Experion installation process. SIT is installed on all non-redundant process servers and on Server B of a redundant process server pair. The SIT dashboard must be installed on one Experion Flex Station or Experion Console Station to use the tool. SIT is installed on a new Experion R510 system and SIT is either migrated or installed when migrating to Experion R510 from a supported version of Experion. For more information, refer to the "System Inventory R230.1 SCN".

6.9 Experion OPC UA Client Interface

This new SCADA interface is included with the existing Experion OPC Client license, (model number EP-OPCCLI), and has the following features:

- Data Access (DA)
- OPC UA version 1.03, binary transport over TCP
- Direct connection from Experion server to device running an OPC UA server
- Secure connections using OPC UA security

For further details refer to the *OPC UA Client Interface Reference* documentation.

6.10 ControlEdge PLC Integration Interface Enhancements

The following new features are supported with the ControlEdge PLC Integration Interface:

- Diagnostics data for all I/O modules supported by ControlEdge PLC R151.
- Diagnostics data for the Serial Interface module.
- Address lengths up to 240 characters.
- Improved controller configuration workflow.

For further details refer to the *ControlEdge PLC Interface Reference* documentation.

6.11 ControlEdge RTU Integration Interface Enhancements

The following new features are supported with the ControlEdge RTU Integration Interface:

- Dedicated ControlEdge RTU Channel and Controller in Configuration Studio. DNP3 remains the underlying protocol. This new interface is enabled by the existing DNP3 SCADA interface license.
- Experion EFM meter support for liquids in addition to the existing gas meter runs.
- Improved controller configuration workflow.

For further details refer to the *ControlEdge RTU Interface Reference* documentation.

6.12 Experion Personal Gas and Safety

Experion Personal Gas Safety provides a solution to integrate Honeywell ProRAE Guardian with Experion.

ProRAE Guardian integration with Experion enables operators to perform the following actions on a Station:

- View the real-time ProRAE Guardian gas detector data
- Respond to the ProRAE Guardian man-down, safety, and environmental alarms
- Call up the map-based ProRAE Guardian web viewer to locate the gas detectors
- View trends of the historian gas detector data, including sensor values, detector location, and user identification.

The software requirements for ProRAE Guardian integration are as follows:

- Honeywell ProRAE Guardian Version 1.14.4 or later
- ProRAE Studio II Version 1.11.4 or later
- MicroRAE Firmware Version 1.10 or later
- MatrikonOPC Server for ProRAE Version 1.0.1 or later
- Safety Communicator Version 2.2 or later

6.13 Equipment Display Enhancements

To use the following equipment display enhancements, ensure that all equipment templates have been updated.

Manage large sets of equipment more easily with:

- Equipment searching.
- Equipment browsing based on asset, type, performance, list.
- Creation of personal equipment lists.

View and analyze equipment performance more effectively with:

- Equipment trend setting persistence.
- Trend a single equipment parameter.
- Copy trend data from a limits trend.
- Support for equipment in tabbed displays.
- Improved visibility of table content in equipment displays.

For further details refer to the *Operator's Guide*, *Quick Builder User's Guide*, and *Server and Client Configuration Guide*.

6.14 Electronic Flow Measurement (EFM) Enhancements

With the Experion R510 release, the following features have been introduced:

- For improved integration with third-party production tools, a ProdView option has been added for EFM exports.
- Support for ControlEdge RTU liquids meter runs in addition to the existing gas meter runs.

6.15 SmartLine Transmitter Point Detail Displays and Faceplates

The optional point detail displays and faceplates designed specifically for Honeywell SmartLine transmitters, first introduced in Experion R510, have been enhanced with device specific information. These new displays and faceplates were designed and implemented based on Honeywell User Experience (HUE) principles. The goal is to deliver the best user experience through modern visual design, simple navigation and intuitive arrangement of information, such that plant operators and maintenance technicians can access important process, configuration and diagnostic information of the SmartLine transmitters easily and perform any necessary actions promptly.

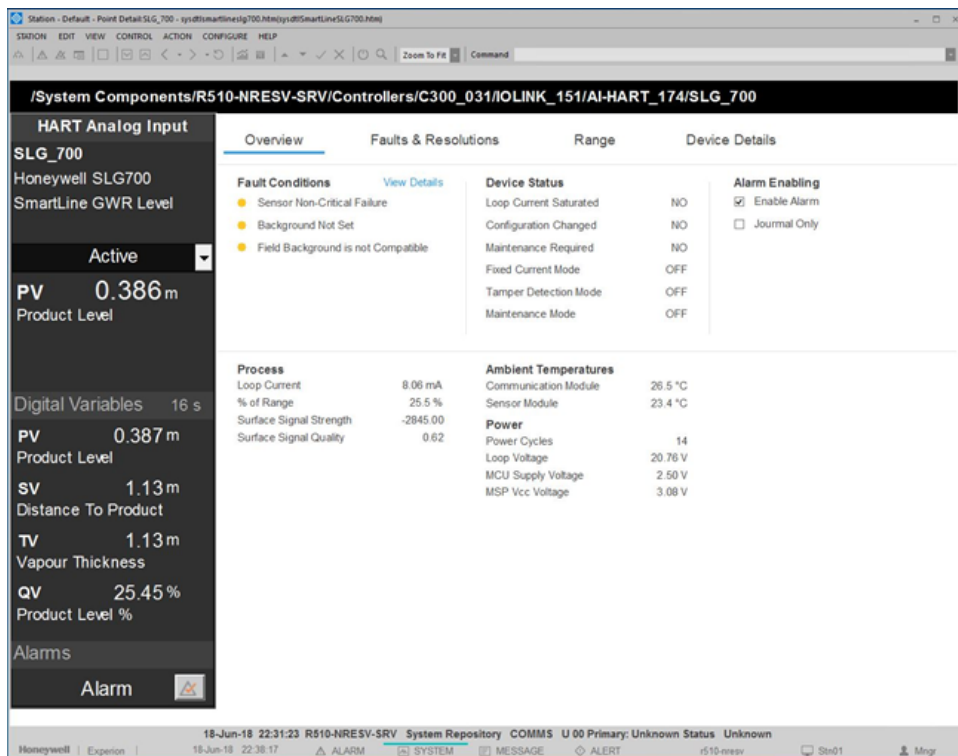
The new point detail displays and faceplates are available for the following SmartLine transmitters:

- Guided Wave Radar Level (SLG700)
- Multivariable (SMV800)
- Pressure (ST700 and ST800)
- Temperature (STT700, STT750 and STT850).

As shown in the figure below, the new SmartLine point detail display follows a similar layout as the existing generic point detail display for an analog channel:

- The top bar indicates how the analog point is connected to other components in the system hierarchy.
- The left section is reserved for the corresponding SmartLine faceplate.
- The rest of the point detail display houses one of five sub-displays or tabs:
 - Overview
 - Faults & Resolutions
 - Range
 - Device Details
 - Maintenance View (only available if FDM is installed)
- Sub-displays are accessed by clicking on the corresponding label located across the top of the display. (The selected display is indicated by a blue line under the title.)

Figure 6.1 SmartLine Point Detail Display with Overview sub-display



As shown above, the SmartLine faceplate on the left-hand side of the display provides information about the type of SmartLine transmitter the analog input channel is connected to. In addition to displaying the values of the analog PV calculated by the I/O module and the HART digital dynamic variables (PV, SV, TV and QV), the SmartLine faceplate has been enhanced to show the engineering units and descriptions of these variables. The faceplate continues to provide a means to acknowledge active alarms of the analog input point and a link to the control module's point detail display if the analog input point is associated with a control module.

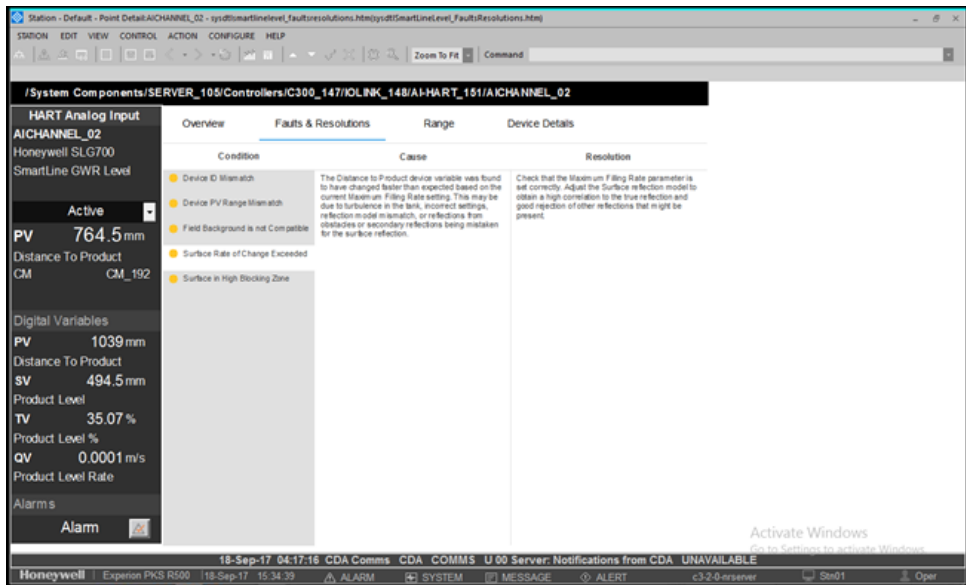
The Overview sub-display is the default sub-display on the initial load of the SmartLine point detail display. This sub-display is intended to provide a quick overview of the critical information about the SmartLine transmitter right at the first glance. The top portion of the Overview sub-display has three sections: Fault Conditions, Device Status and Alarm Enabling. The Fault Conditions section displays the active fault conditions reported by the SmartLine transmitter or the analog input module. An active fault condition is shown as a line item with a round priority indicator and a text string to describe the fault condition. The color of the round indicator shows the priority of the fault condition: red for critical condition and yellow for non-critical condition. A maximum of six active fault conditions can be shown in the descending order of priority. When there are more than six active fault conditions, only the six conditions of the highest priorities are shown. To view all the active fault conditions, the user can click the View Details hyperlink at the top right corner of the Fault Conditions section to navigate to the Faults & Resolutions sub-display. When there is no active fault condition, the Fault Conditions section shows one line item with a gray round status indicator and a text string of "No fault conditions", and hides the View Details hyperlink.

The Device Status section displays the states of various status conditions for the SmartLine transmitter. Some of these status conditions are transient such as Configuration Changed, while others are of a more permanent nature, such as Fixed Current Mode and Maintenance Required. These status indicators provide useful information about the current state but are not considered to be indicative of a fault that needs immediate attention. The Alarm Enabling section provides the means to enable or disable the alarm reporting and journal only options for the analog point.

The bottom section of the display contains several numeric values that provide information about the process and the ambient conditions which the transmitter is operating in. The properties that are shown will vary based on the specific model of SmartLine transmitter. While most of these parameters update on a periodic basis, some are only read once when the display is opened.

The following image shows the Faults & Resolutions sub-display of the SmartLine point detail display. As mentioned previously, in addition to clicking the Faults & Resolutions navigation button, the user can navigate to the Faults & Resolutions sub-display from the Overview sub-display by clicking the View Details hyperlink in the Fault Conditions section if there are active fault conditions.

Figure 6.2 SmartLine Point Detail Display with Faults & Resolutions sub-display



The Faults & Resolutions sub-display provides quick and easy access to potential cause and resolution information for the active fault conditions of the SmartLine transmitter, and facilitates the process of troubleshooting the fault conditions. The sub-display is divided into three vertical sections: Condition, Cause and Resolution. The Condition section displays up to 14 active fault conditions for the SmartLine transmitter and associated I/O module. An active fault condition is shown with a round priority indicator; red for critical conditions and yellow for non-critical conditions. The list is sorted so that all critical conditions are at the top. If more than 14 fault conditions are active, “Prev” and “Next” buttons will appear at the base of the section to allow the user to review all active fault conditions.

When the user clicks on an active fault condition in the Condition section, the Cause and Resolution sections will be populated with information for the selected fault condition. The selected fault condition is indicated with a white background that blends into the Cause and Resolution sections. The Cause section shows detailed information about the potential causes of the selected fault condition, while the Resolution section describes the steps in resolving that fault condition. When there is no active fault condition, the Condition section shows one line item with a gray round status indicator and a text string of “No fault conditions” and the Cause and Resolution sections are blank.

The following image shows the Range sub-display of the SmartLine point detail display. The Range sub-display is divided into three vertical sections: Transmitter, Analog Signal and AI Channel. The information in the three sections illustrates how the measurement signal originates from the transmitter, is converted into an electric current in the wire and is subsequently converted back to a measurement by the Experion analog input module.

Figure 6.3 SmartLine Point Detail Display with Range sub-display



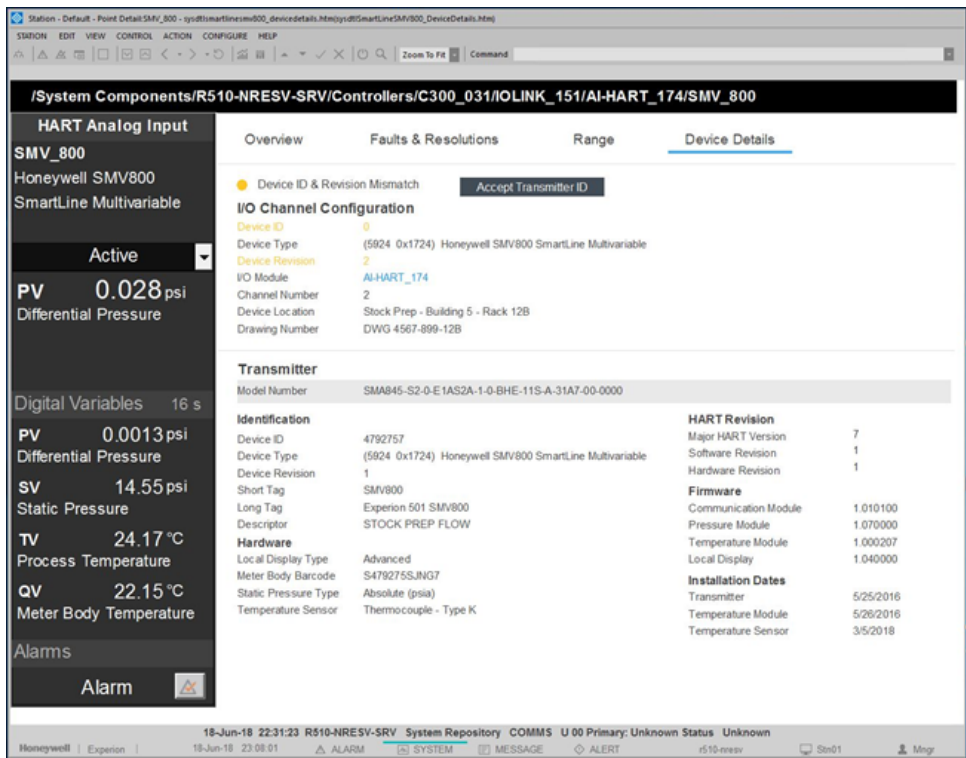
In the Transmitter section, the digital PV is shown on a scale marked with the measurement range limits: URV (upper range value) and LRV (lower range value), and the sensor limits: URL (upper range limit) and LRL (lower range limit). In the Analog Signal section, the loop current is shown on a scale marked with the current range limits (4–20 mA) and saturation limits. The scale also indicates whether the failure mode used is fail high or fail low by showing the red segment at either the high end or low end of the scale. In the AI Channel section, the analog PV is displayed on a scale marked with the PV range (Hi and Lo) and extended range limits (Ext Hi and Ext Lo) used by the I/O module. The status of the signal is shown above each scale as a round status indicator and a text string to describe the status in each section. The color of the round status indicator shows whether the status is normal (gray), for information only (white), a warning (yellow) or an error (red). The area below the scale in each section displays the parameters used in processing the signal.

To accurately represent the signal from the transmitter, it is important that the transmitter's range values (URV and LRV) match the analog input channel's range limits (Hi and Lo) and that the transmitter's hard limits (URL and LRL) match the analog input channel's extended range limits (Ext Hi and Ext Lo). If any pair of values are set differently, the I/O module will set the Device PV Range Mismatch fault condition. In this case the horizontal line connecting the offending values will change color from gray to red. This condition can be corrected right from this display by turning the execution state of the channel to Inactive from the faceplate region. This will allow the 4 range values of the AI Channel section to be individually edited or to be copied directly from the Transmitter values.

The following image shows the Device Details sub-display of the SmartLine point detail display, which is divided into two top and bottom sections: I/O Channel and Transmitter. The I/O Channel section shows identification information about the transmitter taken from the configuration within the Experion I/O module. The Transmitter section shows identification information about the SmartLine transmitter read directly from the transmitter. This includes information that is common to all HART transmitters as well as hardware information that is specific to each type of SmartLine transmitter.

The 3 common parameters that appear in each section, Device Type, Device ID and Device Revision, are generally expected to have the same values. If either of these are different between the I/O channel configuration and the physical transmitter, the I/O module will report an appropriate fault condition. If present, these fault conditions are reported above the I/O Channel section. The display provides a convenient one-click means to resolve conflicts in the Device ID parameter. Conflicts in the Device Type or Device Revision parameters, however, must be resolved through the Control Builder application.

Figure 6.4 SmartLine Point Detail Display with Device Details sub-display



It is important to note that in Experion R510.1, any HART enabled analog input channels, including those for the SmartLine transmitters, are initially configured to use the existing generic analog point detail display and faceplate by default. To use the new SmartLine specific point detail displays and faceplates for SmartLine transmitters, additional configuration steps should be performed while using the Control Builder application to configure the corresponding analog input channel. First open the project configuration screen for the analog input channel. Then select the Server Displays tab as shown in the image below.

Figure 6.5 Control Builder block - Server Displays tab

SERIES_C_IO-AICHANNEL Block, AICHANNEL_06 - Parameters [Project]

Main Configuration HART Configuration HART Device Status HART Identification HART Variables
HART Notifications Server History Server Displays Identification Dependencies Block Pins Template Defining

Point Detail Display #: sysDtPmiolOC Associated Display #:

Group Detail Display #: sysDtPmiolOC_fp

Trends

Number of Trends #: 10

	Trend #	Trend Position #	Trend Parameter #	Description
1	0	None		
2	0	None		
3	0	None		
4	0	None		
5	0	None		

Groups

Number of Groups #: 5

	Group #	Pos #	Group Parameter #	Description
1	0	1		
2	0	1		
3	0	1		
4	0	1		
5	0	1		

☐ Show Parameter Names

OK Cancel Help

In the Point Detail Display field, delete the html file name of the default point detail display and type in the html file name of the new SmartLine point detail display. In the Group Detail Display field, delete the html file name of the default faceplate and type in the html file name of the new SmartLine faceplate. The following table shows the file names of the new point detail displays and faceplates for the four types of SmartLine transmitters.

Table 6.1 File names of new point detail and faceplate displays

SmartLine Transmitter Type	SmartLine Point Detail Display	SmartLine Faceplate
SLG700 Level	sysdtISmartLineSLG700	sysdtISmartLineSLG700_fp
SMV800 Multivariable	sysdtISmartLineSMV800	sysdtISmartLineSMV800_fp
ST700 Pressure	sysdtISmartLineST700	sysdtISmartLineST700_fp
ST800 Pressure	sysdtISmartLineST800	sysdtISmartLineST800_fp
STT700 Temperature	sysdtISmartLineSTT700	sysdtISmartLineSTT700_fp
STT750 Temperature	sysdtISmartLineSTT750	sysdtISmartLineSTT750_fp
STT850 Temperature	sysdtISmartLineSTT850	sysdtISmartLineSTT850_fp

The SmartLine point detail displays and faceplates are to be used for Honeywell SmartLine transmitters only. Do not use these displays and faceplates for other Honeywell transmitters that are not SmartLine or transmitters from other vendors. Once the correct SmartLine point detail display and faceplate file names are entered, click OK to exit the screen.

6.16 Experion Server Platform Memory Specifications

With the introduction of several Experion Platform and Technology updates including SQL 2017, the Experion Applications and Services, and the System Infrastructure Enhancements to increase CEE based controller capacity per Experion Server cluster, an additional memory is required to maintain the performance of the Experion PKS Server node types.

The following table shows the recommended amount of memory resources that are required by each Experion physical and virtual server platform type. This information can be used to understand the amount of memory needed for Standard or Performance Experion Server node based on the project specific configuration including cluster size, etc.,

Note that Experion platforms may require additional memory due to the installation of other supported Experion and 3rd party advanced applications, and a Experion platform memory should be increased as necessary to ensure that Experion applications performs at the optimal performance.

Experion Server Platform Memory Specification

Experion Platform Type	Flex Server Physical/Virtual Platform	Standard Physical/Virtual Platform	Performance Physical/Virtual Platform
System Sizing/ Configuration Description	Windows client based platform for small size configurations with up to 5 DSA Servers and 10 controllers	Windows Server based platform for small to medium size configurations with up to 10 DSA Servers and 15 controllers	Windows Server based performance platform for large configurations beyond standard platform specifications with up to 31 DSA servers and 60 controllers
Recommended Memory per platform, ^{1, 3}	8 GB	16 GB	20 GB
Minimum “available” Memory to be Maintained during Runtime (Standby(file cache)+ Free memory from Resource Monitor tool) ^{2, 4, 5}	20%	20%	20%
<p>¹ Recommended memory requirements are for guidelines only which may vary based on customer project specific configuration. Ensure to maintain “minimum” available memory specification.</p> <p>² For virtual performance platforms, users can add adequate memory above the Standard Platforms 16GB allocation as needed to achieve the minimum available memory requirement. For Example, if allocating 20GB to Performance platform results in 20% or greater available memory, this memory allocation is considered adequate.”</p> <p>³ Due to restrictions on physical hardware, Minimum 20 GB translate to 32 GB on performance hardware platforms.</p> <p>⁴ To measure the amount of physical memory, in megabytes, available for running processes, use “Memory\Available Mbytes” counter or use “Available” Memory statistics ((Standby (file cache) + Free memory) from Resource Monitor tool. If this value is less than 20 percent of the total physical RAM, user can add adequate memory above the recommended memory specification.</p> <p>⁵ Experion platforms may require additional memory due to the installation of other supported Experion and 3rd party advanced applications, and a Experion platform memory should be increased as necessary to ensure that Experion applications performs at the optimal performance.</p>			

Experion Station Platform Memory Specifications

Experion Platform Type	Standard, Performance Physical/Virtual Platform
System Sizing/ Configuration Description	Windows client/server based standard and performance based platform supports up to 4 screens involving low complexity graphics without heavy use of display scripting to complex graphics, displays that exceed 700 bound parameters, heavy use of display scripting
Recommended Memory per platform ^{1,2}	8 GB
¹ Recommended memory requirements are for guidelines only which may vary based on customer project specific configuration. ² Experion platforms may require additional memory due to the installation of other supported Experion and 3rd party advanced applications, and a Experion platform memory should be increased as necessary to ensure that Experion applications performs at the optimal performance.	

Experion Application (ACE/SCE) Platform Memory Specifications

Experion Platform Type	Standard, Performance Physical/Virtual Platform
System Sizing/ Configuration Description	Windows server based standard and performance based platform supports up to configure Experion Applications
Recommended Memory per platform ^{1,2,3}	8 GB
¹ Minimum of 2GB RAM required if Custom Algorithm Blocks (CAB) is used on the ACE node. If a large number of OPCGs, or CAB Blocks, or FMC722 Blocks are used on the ACE Node, a total of 3 or 4GB of RAM is recommended. ² Recommended memory requirements are for guidelines only which may vary based on customer project specific configuration. ³ Experion platforms may require additional memory due to the installation of other supported Experion and 3rd party advanced applications, and a Experion platform memory should be increased as necessary to ensure that Experion applications performs at the optimal performance.	

This chapter provides the details of resolved PARs.

NOTE

A documentation PAR is included in the SCN only if it is reported by customer and has a priority severity position 2.1 or higher.

7.1 Common components

7.1.1 Honeywell File Transfer

PAR	Function	Description
1-904JHYD	Honeywell File Transfer	On an ES-T node, performing file transfer causes a delay in file timestamp by one hour for certain files.

7.1.2 OPC Gateway

PAR	Function	Description
1-2GZIVP6	OPC Gateway	Improve the OPCG to unsubscribe/re-subscribe a parameter.

7.1.3 SafeView

PAR	Function	Description
1-7J85UT3	Safeview	Displays appear to iconize-restore upon invocation, made obvious by Microsoft animation.

7.1.4 Software Configuration Management

PAR	Function	Description
1-5HLSYOB	Software Configuration Management	[PKG-QT] STAC-FDM package missing from Install DVD-2. Found during C5 TP2 PKG QT.

7.2 Controllers and Tools

7.2.1 PGM

PAR	Function	Description
1-G04A9M	PGM	[PGMCPCT] After switchover BADPV Alarms reported against CMs using Siemens ET200 Modules.

7.2.2 PM I/O

PAR	Function	Description
1-6BKDENJ	PM I/O	[PMIO] Assistance with RTD measurement.

7.2.3 EBM-Controller

PAR	Function	Description
1-6CDPENZ	EBM-Controller	Redundant C300 both crash with 00D2 error code due to invalid configuration.
1-PK1QJ5	EBM-Controller	[SFT]CR stays in “Acquiring Resource” after issuing START to it after Circular OPM of C300.
1-7JXC6Z9	EBM-Controller	Need to be able to recover after Phase block communication errors.

7.2.4 EtherNet/IP-Tools

PAR	Function	Description
1-6WUEV3D	EtherNet/IP-Tools	[EIMEIP_SFT]C300 is allowing to load EtherNet/IP protocol without valid license.
1-6WOK7XT	EtherNet/IP-Tools	[EIMEIP_SFT]EtherNet/IP devices are communicating through EIM without valid license.
1-8QJNVJ5	EtherNet/IP-Tools	Description of the Scaling parameter is not consistent with the corresponding input/output parameter.

7.2.5 EtherNet/IP-Communication

PAR	Function	Description
1-8X60QDF	EtherNet/IP-Communication	Experion R500 cannot read more than 32 bits with the EtherNet/IP module.
1-6WUEVOX	EtherNet/IP-Communication	[EIMEIP_SFT] 'spanning-tree portfast' setting needs to be removed for uplink ports only.
1-8EGALT9	EtherNet/IP-Communication	[UOC-NFR]EtherNet/IP Device FAIL to connect after performing Checkpoint Restore on UOC.

7.2.6 EtherNet/IP-CEE-Embedded

PAR	Function	Description
1-8C9M091	EtherNet/IP-CEE-Embedded	[UOCEIP_SFT]EtherNet/IP IO module not generating config alarm for custom template.

7.2.7 PROFIBUS Interface Modules

PAR	Function	Description
1-8DVCN3B	PROFIBUS Interface Modules	[SFT PGM] Data loss observed as Set param & get config telegrams are sent by PGM during switchover.

7.2.8 Modbus TCP Blocks

PAR	Function	Description
1-3KTUV09	Modbus TCP Blocks	[SFT_BL] PCDI array blocks error flag is ON after 5 mins on Modbus device network disconnect.

7.2.9 Control Builder

PAR	Function	Description
1-LH4MXJ	Control Builder	[M&I] Phase Block with empty library name is getting created & posing IXP errs on migration to R410.

7.2.10 Control Builder-System Repository

PAR	Function	Description
1-PV3SMT	Control Builder-System Repository	[PCT]Non-CEE points (SCADA) data corrupted when Primary & backup SR are not in SYNC & primary failed.

7.2.11 IEC870 Interface

PAR	Function	Description
1-85YZ8I2	IEC870 Interface	IEC870 SQL database not migrated.

7.2.12 I/O-Series C

PAR	Function	Description
1-5S2EVP	I/O-Series C	[SCIO] Series C AI module state change from Run to Idle on its own.

7.2.13 System Repository

PAR	Function	Description
1-1RTR2H5	System Repository	[PCT]: CDA communications are lost while new strategies are being downloaded.

7.2.14 Enterprise Model Builder

PAR	Function	Description
1-U2328V	Enterprise Model Builder	[M&I]Config studio opened from SRVB during dual primary it lists the SRVA in the DSA.

7.3 Installation and Migration

7.3.1 Server - Installation and Migration

PAR	Function	Description
1-3HS18HR	Server - Installation and Migration	EMSEvents database cannot be reinitialised/upgraded due to insufficient file permissions.

7.3.2 INS - Installation

PAR	Function	Description
1-8X2HBD7	INS - Installation	During migration from an earlier release to R510.1, the Installer will report above error during restore profit loop data step.

7.3.3 SIUG-Software Install and Upgrade Guide

PAR	Function	Description
1-8Q4II19	SIUG-Software Install and Upgrade Guide	[M&I]Standard documentation did not seem to include workflow for classic ESVT node to ELCN migration.

7.4 Servers and Stations

7.4.1 Server - other or unknown

PAR	Function	Description
1-8MDOQSJ	Server - other or unknown	Requesting the detail display of an LCN or UCN node shows an incorrect display.
1-8KLFJ1H	Server - other or unknown	ControlEdge PLC and RTU diagnostic alarms are seen as soon as the channel and controller downloaded.
1-8MDBDWR	Server - other or unknown	Off Network status for UCN nodes on the dashboard does not show in red color.
1-8MI5ABH	Server - other or unknown	Appliance nodes are missing FTE status in their composite shape on the dashboard.
1-8MLFCX5	Server - other or unknown	UCN nodes showing as Off Network do not blink and are unable to be acknowledged.
1-8OAXXPX	Server - other or unknown	Classic theme LCN and UCN system faceplates may show overlapped text.
1-97HA2CJ	Server - other or unknown	Node box for HG is showing as UCN instead of HWY in the dashboard.
1-8MI5AB7	Server - other or unknown	Clicking "S" or "C" on the status bar on Operator Touch Panel brings up Native Window regardless of the selection.
1-8MNNIF7	Server - other or unknown	Failover would cause ES-T to lose composite on dashboard if the ES-T is off.

PAR	Function	Description
1-8NK13H9	Server - other or unknown	If scripts are pasted into the Script Editor window and no other updates are made.
1-97I45FN	Server - other or unknown	UCN nodes on the dashboard are not displaying the FTE node in the composite menu.

7.4.2 Server - Alarm/event

PAR	Function	Description
1-7Q18HVF	Server - Alarm/event	Analogue Tags go to BAD PV at the same time.

7.4.3 FDS - Field Device Service

PAR	Function	Description
1-8PZ4G8T	FDS - Field Device Service	[SFT]Console and Flex Node display as different parameter value in OPC Client.
1-8NL1NVJ	FDS - Field Device Service	[ENFR] Dynamic parameters did not update in Console station while it updated in flex.

7.5 PDF Documentation

7.5.1 PDF Collection

PAR	Function	Description
1-3NDHL6P	PDF Collection	Attention required for low cost Series C IO modules introduced in Experion R410. Refer notes.

This chapter provides the details of special considerations.

8.1 Equipment Display Enhancements

To use the equipment display enhancements, ensure that equipment templates have been updated.

8.2 RSLinx Classic software and Experion R510 (1-8H5CPBD)

Error Indication:

If the TC-CEN021 is being used to interface with the PLC, the communication to PLC breaks down from the configuration node through TC-CEN021.

Description:

If the PLC is interfaced with an Experion system through Honeywell's TC-CEN021 module, the PLC cannot be contacted through RSLinx Classic v3.90 or later.

Recovery:

Replacing the TC-CEN021 with Rockwell's latest Ethernet Interface Module "1756-EN2T" will resolve the communication issue with the PLC from the configuration node.

Workaround:

None.

KNOWN ISSUES

This chapter provides information about known issues and workarounds.

9.1 Common components

9.1.1 Experion - TPS Infrastructure

PAR	Function	Description
1-4K5UHS7	Experion - TPS Infrastructure	<p>Description: [CR1275]-Mode is not changing from group display in station for TPS faceplates in EST for Microsoft Windows 10.</p> <p>Recovery: None.</p> <p>Workaround: Deselecting Classic Faceplate selection for group display configuration, this is a common Configuration for all displays.</p>

9.1.2 Signon Manager

PAR	Function	Description
1-4T1DB5N	Signon Manager	<p>Error Indication: Signon Manager does not provide correct access.</p> <p>Description: Signon Manager does not provide correct access when the PC Universal Station is used both locally and remotely.</p> <p>Recovery: Use the PC Universal Station either locally or remotely, but not in both modes.</p> <p>Workaround: If the PC Universal Station is to be used locally, then it is to only be used locally; if the PCUS is to be used remotely, then it is to only be used remotely. Setting up a PCUS to be used both locally and remotely is not currently supported.</p>
1-5X96F9U	Signon Manager	<p>Error Indication: New ACS card readers' functionality.</p> <p>Description: New ACS card readers do not function with MFA or Signon Manager.</p> <p>Recovery: Users will have to continue with existing card readers or use the Lumidigm fingerprint reader.</p> <p>Workaround: None. Users will have to continue with existing card readers or use the Lumidigm fingerprint reader.</p>
1-6O9TJ05	Signon Manager	<p>Error Indication: FPR icon getting disabled in the MFA UI.</p> <p>Description: If Windows logon is disabled through a domain policy update, the Fingerprint reader is disabled after it has been used to unlock a workstation.</p> <p>Recovery: Reboot required.</p>

PAR	Function	Description
		Workaround: Reboot the workstation to re-enable the fingerprint reader.
1-6VXTJ53	Signon Manager	Error Indication: FPR icon disabled after connecting to the FPR database in non-Experion node. Description: FPR icon disabled after connecting to the FPR database in non-Experion node and restarting the Flex node. Recovery: None. Workaround: None.

9.1.3 System Management

PAR	Function	Description
1-69ZB9N8	System Management	Error Indication: Failed to restart SES and SPS after stopping from local and remote node. Description: Unable to start SES and SPS Components from System Management Display on local and remote node. Recovery: There are two options,1.Restart the node where the SES and SPS are failed to start2.From windows task manager kill the processes “spsdss.exe” and “sysevtvr.exe”. Try starting the SES and SPS components from System Management Display. Workaround: None.
1-MNAFT7	System Management	Error Indication: Server data connection is lost. Description: Server lost data connection to System management by launching the L2.5 switch display from the station. Issue is caused by slow response from the switch. Recovery: Switch to another display to continue working, and retry the switch display later. Workaround: None.

9.1.4 Tableview

PAR	Function	Description
1-A1NNRN9	Tableview	Error Indication: Single Step & safe button is disabled while using Table view. Description: Single Step & safe button is disabled while using Table view. Recovery: None. Workaround: None.

9.2 Controllers and Tools

9.2.1 C300 Controller

PAR	Function	Description
1-SJ4W66	C300 Controller	Error Indication: C300 synchronization fails.

PAR	Function	Description
		<p>Description: After loading a CM containing DO channels connected to DEVCTL blocks, synchronization breaks between C300s when the IOM containing the loaded DO channels does not exist.</p> <p>Recovery: The C300 Synchronization will restart automatically and complete successfully.</p> <p>Workaround: To prevent this situation, do not load a CM containing DO channels connected to DEVCTL blocks unless the IOM is present.</p>

9.2.2 Control Firewall

PAR	Function	Description
1-6HGGLK5	Control Firewall	<p>Error Indication: This is an enhancement. If approved, the modification will only be made to the new CF9 (HW Rev D).</p> <p>Description: Add PTP rate limit to CF9.</p> <p>Recovery: Reduce PTP traffic.</p> <p>Workaround: None.</p>

9.2.3 CDA-Embedded

PAR	Function	Description
1-AOS6VC9	CDA-Embedded	<p>Error Indication: Uncommanded Shutdown of ACE, Windows application event log shows RCOA WDT for ACE process at time of shutdown, and CDASP process is still running.</p> <p>Description: When there are not enough resources on the host computer for CDASP to process communication deterministically the ACE intentionally terminates to force peer strategies to shed instead of working with stale or uncertain values.</p> <p>Recovery: Restore checkpoint and activate strategies. Determine reason for computer resource issue. Typical are CPU over utilization because of under allocation or consumption by non-critical processes Also can be caused by virus scanner configuration or missing exclusions.</p> <p>Workaround: None.</p>

9.2.4 ControlEdge UOC-Platform- Virtual

PAR	Function	Description
1-9W77Y19	ControlEdge UOC-Platform-Virtual	<p>Error Indication: VirtualUOC-50ms with remote ControlEdge I/O may report loss of control on first-time VMWare FT switchover.</p> <p>Description: A VirtualUOC-50ms configured with VMWare Fault Tolerance (FT) protection and connected to one or more ControlEdge Expansion Processor Module (EPM) may raise an alarm indicating loss of control over I/O under the EPM on the first switch-over induced by a VMWare FT fault condition.</p> <p>Recovery: The VirtualUOC-50ms will recover automatically within 200ms.</p> <p>Workaround: Perform a "Fault Tolerance->Test Switchover" of the VirtualUOC-50ms Virtual Machine (VM) in VMWare vCenter after it has been configured for VMWare FT protection and before it is running on control.</p>

9.2.5 Control Functions- Continuous

PAR	Function	Description
1-7HX0PMR	Control Functions-Continuous	<p>Error Indication: User cannot browse EPC block pins.</p> <p>Description: User can type the EPC block pin names, but the cannot browse them.</p> <p>Recovery: None.</p> <p>Workaround: None.</p>
1-8RG95W9	Control Functions-Continuous	<p>Error Indication: [SFT]in PSOS process and non process parameter values are not getting updated.</p> <p>Recovery: Uninstall PSOS from "Control Panel\All Control Panel Items\Programs and Features" and then manually install PSOS.</p> <p>Workaround: None.</p>

9.2.6 Control Functions- Batch

PAR	Function	Description
1-3IJE1AV	Control Functions-Batch	<p>Error Indication: C200E platform may experience a CEE cycle overrun and cancel of Control Recipe (CR) execution in a base cycle.</p> <p>Description: The problem occurs on C200E platform when a base cycle is loaded with Master Recipes (MRs), Recipe Control Modules (RCM), Sequence and Control Module (SCM) and Control Modules (CMs). Then during execution of control application which may create many instances of CRs from an MR. CRs execute in the same base cycle as the MR. Processing load from SCMs, RCMs, CMs and CRs could overload a CEE base cycle resulting in cancel of CR executions and may even lead to a CEE Cycle OverrunCancelled CR execution resumes in subsequent base cycle based on Period and Phase configuration of MR.</p> <p>Recovery: Following steps may be required:- Better load balancing of MRs-Dedicate base cycles only for MR.</p> <p>Workaround: None.</p>
1-5P545LL	Control Functions - Batch	<p>Error Indication: Class based recipes over multiple C300's with indirect addressing fails the execution of the steps and transition.</p> <p>Description: Expressions using Indirect Referencing over peer C300s does not work and hence results in failure of Step/Transition execution.</p> <p>Recovery: None.</p> <p>Workaround: Reconfigure the strategies to be within the same controller.</p>
1-9XID3Q9	Control Functions - Batch	<p>Error Indication: Activity creation fails with error "CEE Unable to store new Activity".</p> <p>Description: When a user or Application attempts to create an Activity, Activity creation fails with error "CEE Unable to store new Activity".</p> <p>Recovery: Ensure no server wide event regeneration and CDA disconnects during Activity creation.</p> <p>Workaround: For MES applications, implement retry mechanism to create activities after a timeout with Experion Batch API. For user created activity operations, ensure no event regenerations on the server while creating activities on a controller; Retry Activity creation.</p>

9.2.7 Control Builder

PAR	Function	Description
1-3S1VMJ7	Control Builder	<p>Description: Control builder fails while trying to create MAP block.</p> <p>Recovery: Reopen control builder. Clear the lock on the created MAP block if there is any.</p> <p>Workaround: None.</p>
1-8R3YZTF	Control Builder	<p>Error Indication: After Automated Device Commissioning Rename, there will be an error message on the channel indicating that the device rename was not successful, and to use a handheld device for renaming the device.</p> <p>Description: This issue is seen for few devices and occasionally. All the layers in Automated Device Commissioning rename flow are successful, and the device acknowledges that it could write the new name given to it. But the read api, still returns the old device name.</p> <p>Recovery: Use a handheld device in such cases.</p> <p>Workaround: Use a handheld device or replace the device in that position.</p>
1-9PMMA5N	Control Builder	<p>Error Indication: QVCS Revert Operation of a Block reverts/modifies dependent block but the version number of the dependent block doesn't get changed.</p> <p>Description: 1. Assign a Channel/IOPPOINT to an IOModule say IOM1 and check in the IOM1 (Version 1) and create one more IOModule IOM2 and check in the IOM2 (Version 1).</p> <p>2. Now checkout both IOMs IOM1 and IOM2 and move the Channel/IOPPOINT from IOM1 to IOM2 and check in both the IOM1 (Version 2) and IOM2 (Version 2).</p> <p>3. Now perform Revert operation on IOM1; Now IOPPOINT/Channel moved from IOM2 to IOM1 and the version of IOM1 changed to Version 1. So IOM2 also reverted to Version 1 state but the version number of IOM2 doesn't get changed. It is still in Version 2 which is not correct.</p> <p>Recovery: None.</p> <p>Workaround: None.</p>
1-A4C83G3	Control Builder	<p>Error Indication: Control Builder becomes non-responsive when selecting a container on Monitoring Containment TreeView.</p> <p>Description: While selecting the container, the logic iterates through all the child blocks from container CM to enable/disable operations applicable for the selected item in monitoring side. When the selected CM contains more CMs, it iterates for all level of children to fetch children states for validation, that leads to Control Builder not responding.</p> <p>Recovery: None.</p> <p>Workaround: As a workaround, select Root in Containment View and click only plus (+) sign to expand the container.</p>

9.2.8 Control Builder-Configuration Form

PAR	Function	Description
1-4SZ9242	Control Builder-Configuration Form	<p>Error Indication: This error is seen upon executing the below mentioned steps.</p> <ol style="list-style-type: none"> 1. Configure C300 controller along with UIO1 or UIO-2 or DO

PAR	Function	Description
		<p>module.</p> <ol style="list-style-type: none"> 2. Configure few channels as DO channel from spare channel 3. Configure CM and drag DOREF blocks to it. Refer DO channels to REF block. 4. Expose onpulse or offpulse or PWM block pin to DOREF block and keep DO type as a "Status". 5. Click OK. <p>Description: No validation error prompted for onpulse, offpulse and PWM when DOTYPE=Status and DOREF blocks used. Also Reproducible with UIO-1 and Series C DO module.</p> <p>Recovery: Change the parameter value and try again.</p> <p>Workaround: None.</p>
1-6ASKHK5	Control Builder- Configuration Form	<p>Error Indication: The user will not be able to navigate to other tabs from the DO Status Tab of a DO module in Monitoring side of Control Builder or Station.</p> <p>Description: The issue occurs only with the below configuration. 1. A NOT block output pin is connected the Input pin of the same NOT block. 2. The NOT block output pin is connected to the SO pin of 16 or more DO channels (belonging to the same DO module) using parameter connector. This configuration has to be loaded and when the user is navigating to the DO Status tab of the DO module in Monitoring side, he/she will not be able to navigate to other tabs.</p> <p>Recovery: The Control Builder or Station has to be manually terminated and launched again.</p> <p>Workaround: None.</p>
1-4V5Q9HJ	Control Builder- Configuration Form	<p>Error Indication: 1. Loaded C300 and loaded the strategies belongs to C300. 2. Activated all the strategies in monitoring side. To test RRR set the CEE STATE option in C300 CEE as WARMSTART. Then for all the CMs started setting the CEERESTART option as "followCEE". It was observed that we are able to set it for few CMs(6-8 CMs) but when we set for 9/10th CM CB fails. This is seen every time when we run this test.</p> <p>Description: Control Builder fails when CEERESTART is set in the CMs.</p> <p>Recovery: Close CB and reopen again.</p> <p>Workaround: None.</p>
1-50QTM84	Control Builder- Configuration Form	<p>Error Indication: There is no specific steps to arrive at this issue.</p> <p>Description: Database query execution error dialog box is shown in few scenarios occasionally.</p> <p>Recovery: Retry the operation. If the problem still exists, please close control builder and try again.</p> <p>Workaround: None.</p>

9.2.9 Control Builder- Chart

PAR	Function	Description
1-84A6M3P	Control Builder- Chart	<p>Error indication: Following error is presented when clicking on Step Output expression hyperlink: Entry does not exist [EXPKS_E_CL_ENTNOEXIST (6L.101.10020).</p>

PAR	Function Description	
		<p>Description: Depending on the length and position of the parameter references in Step Output expressions, it is possible for the corresponding hyperlinks to be shown with ellipses (...) and stop working as expected. The Transition Condition expressions were fixed but not the Step Output expressions.</p> <p>Recovery: No recovery necessary as issue is only in presentation layer.</p> <p>Workaround: Resizing the cell containing the expression may fix the issue under certain conditions not not 100% of the time.</p>

9.2.10 Control Builder-Load

PAR	Function Description	
1-8BX52X9	Control Builder-Load	<p>Error Indication: There is no error prompted to user on loading the UOC Controller if there are more number of activities configured in it on a heavily loaded system. But the TOTAL NUMBER OF ACTIIVITIES parameter on Configuration form of CEE shows mismatch in number from project to monitoring.</p> <p>Description: This issue is not reproducible on demand and can be seen on a heavily loaded system with only UOC Controller. When this issue occurs this can be verified In the Control Builder error log by seeing some join nested transaction error.</p> <p>Recovery: Perform a Load While active operation on the CEE to load the activities completely and rectify the mismatch in Total Number of activities number.</p> <p>Workaround: None.</p>
1-8HFAR5J	Control Builder-Load	<p>Error Indication: No error is displayed but broken connections can occur in the CM either receiving incorrect signals or not receiving signals from the corresponding function block.</p> <p>Description: Broken connection issues can occur in 2 scenarios: Scenario1: Export of CM followed by Block deletion, import back and reload only the source CM. Scenario2: Block deletion followed by adding new block and reloading only source CM.</p> <p>Recovery: User can recover from the issue by downloading all the referenced control modules (SCMs and RCMs) which have connections to the modified control module.</p> <p>Workaround: Whenever you perform any of the specified operations in 2 scenarios listed in description, you have to load the modified CM along with all the referenced CM/SCMs along with it to avoid any broken connection issue. FINDTAGSTOLOAD.exe tool can be used after performing engineering operations like import, export, change parent, deletion of blocks, and so on to know the list of CMs that needs to be loaded to avoid broken connection issue.</p>

9.2.11 Control Builder-Load/Upload/Update

PAR	Function	Description
1-4KSJ8TD	Control Builder-Load/Upload/Update	<p>Error Indication: Control builder tree view shows incorrect CM Name against the channel in Monitoring side even though CM is not loaded.</p>

PAR	Function	Description
		<p>Description: When CM and channels are loaded together, if CM load fails due to some reason, then IO channels which got loaded successfully to monitoring side show the CM name in the tree view and in the form which they were associated to. But since CM's are not loaded successfully it should not display the CMname against the Channels.</p> <p>Recovery: Reload the CM which had failed earlier.</p> <p>Workaround: None.</p>
1-68IJJAB	Control Builder-Load/Upload/Update	<p>Error Indication: Upload and update to project fails with an error "Overwriting loaded blocks is not allowed in systems using Fieldbus" for reference blocks configured with channels.</p> <p>Description: Upload and update to project fails with an error "Overwriting loaded blocks is not allowed in systems using Fieldbus" for reference blocks configured with channels. This behavior is seen in AI, AO, DI, DO reference blocks configured with corresponding channels.</p> <p>Recovery: Perform UploadUpdate operation on the IO module itself such that monitoring side changes gets updated to Project side.</p> <p>Workaround: To prevent from this situation, use Upload/Update on IOM.</p>
1-69Q1RV1	Control Builder-Load/Upload/Update	<p>Error Indication: System allows to change the duty cycle for DO channel when REDTAG is enabled.</p> <p>Description: In monitoring view, when REDTAG is enabled, on reload of such channel and error/warning should be thrown to the user that REDTAG is enabled and should allow the user to continue with channel load.</p> <p>Recovery: None.</p> <p>Workaround: User to confirm that channels are not in REDTAG before performing Load.</p>
1-6L3M1PS	Control Builder-Load/Upload/Update	<p>Error Indication: When Upload Update operation is performed on SCM's which has JUMPZone Configured then error is thrown to user saying "Illegal Parameter Index JumpZone (1,11) and upload and update operation fails for that SCM.</p> <p>Description: Upload and Update operations fails for SCM configured with JumpZone when done in Interoperable scenarios, that is, when server is in R500 and Controller is in Previous releases.</p> <p>Recovery: None.</p> <p>Workaround: Avoid doing Upload Update for such SCM's which has JumpZone configured.</p>
1-72WCYRR	Control Builder-Load/Upload/Update	<p>Error Indication: There will not be any error thrown to user but Primary PID block will continue its execution even though Secondary output reference block is deleted.</p> <p>Description: When Primary PID block is in one CM and is writing to Output reference block in another CM, Deletion of the CM with output reference block from monitoring side should stop PID block execution and PID should show BADCTL and InitMAN should be ON. But PID in primary CM continues to execute.</p> <p>Recovery: Either delete the AO channel from monitoring side</p>

PAR	Function	Description
		and reload again. Workaround: None.
1-8QNT3MZ	Control Builder-Load/Upload/Update	<p>Error Indication: Load While Active symbol does not appear on IO module but appears only on the modified channel or Delta symbol appears on the IO module rather than LWA symbol.</p> <p>Description: When any Load while active parameter of a channel is modified on UIO modules, LWA symbol should appear on channel and also on its parent IO module. But LWA symbol is appearing only on the channel but not on the IO module. Due to this, Users will not be able to perform LWA operation on the IO module without inactivating the channels.</p> <p>Recovery: Perform Load operation on either the modified channel or on the IOM to get the modified changes reflected from project to monitoring. Note that this will inactivate the channels and activate them again.</p> <p>Workaround: None.</p>

9.2.12 CEE-Database

PAR	Function	Description
1-SMAA33	CEE-Database	<p>Error Indication: CHECKBOOL.IN[1] parameter does not take input when written through OPC gateway.</p> <p>Description: This error occurs when flag block's input in ACE is connected to a source like flag in C300 controller using OPC gateway.</p> <p>Recovery: None.</p> <p>Workaround: None.</p>
1-VPKU61	CEE-Database	<p>Error Indication: DP_NUMBER parameter is not visible on monitoring side of ISO_5167_DUAL block.</p> <p>Description: DP_NUMBER parameter is not visible on monitoring side of ISO_5167_DUAL block. There is no harm to control. Internally DP_NUMBER parameter takes intended value.</p> <p>Recovery: None.</p> <p>Workaround: None.</p>

9.2.13 Control Builder - Automated Device Commissioning

PAR	Function	Description
1-6CQRXN9	Control Builder - Automated Device Commissioning	<p>Error Indication: Open Project Engineering Tool and perform bulk reassignment in Automated Device Commissioning flow.</p> <p>Description: When bulk reassignment is done through Project Engineering Tool Automated Device Commissioning tool, occasionally an extra channel has been seen in the project tree.</p> <p>Recovery: Unselect the extra channel from Automated Device Commissioning UI and continue with the operations.</p> <p>Workaround: None.</p>
1-	Control Builder	Error Indication: During Automated Device Commissioning workflow,

PAR	Function	Description
8R3OZRR	- Automated Device Commissioning	<p>the Configure Device step fails with the <Error>.</p> <p>Description: The above error might be observed when there is simultaneous execution of HART Point Parameter Access functionality on the same Experion cluster where Automated Device Commissioning was executed.</p> <p>Recovery: The recovery mechanism will be to close all the internal clients(Displays/Trend/History/OPC Clients) which performs HART Point Parameter Access functionality. Then after considerable wait time of 10 minutes, perform the Automated Device Commissioning workflow.</p> <p>Workaround: The Automated Device Commissioning workflow needs to be done when there is no HART Point Parameter Access functionality is in usage in an Experion cluster.</p>
1-9T3EBSR	Control Builder - Automated Device Commissioning	<p>Error indication: [SFT]Device Rename failed for E+H_Cerabar S.</p> <p>Recovery: None.</p> <p>Workaround: Use handheld device or FDM application to rename the device.</p>

9.2.14 Control Library

PAR	Function	Description
1-6SDDS6R	Control Library	<p>Error Indication: Database query execution error on saving EIP template/phase block/map block.</p> <p>Description: The issue is a Database query execution is reported when user try to modify existing parameter and save the template. The occurs due to update query which send the duplicate ParamID for updating the parameter.</p> <p>Recovery: None.</p> <p>Workaround: None.</p>

9.2.15 Configuration Studio

PAR	Function	Description
1-8NC55WO	Configuration Studio	<p>Error Indication: Quick Builder project migration wizard indicates project migration failure.</p> <p>Description: As part of post installation tasks, migration of Quick Builder database fails with an error message. If a QBDB database is locked for maintenance and the system is updated, the QBDB cannot be migrated.</p> <p>Recovery:</p> <ul style="list-style-type: none"> • Open SQL Server Management Studio. • Right click on QBDB database and open properties. • Select "Extended Properties" from the left pane in the property window. • Change the "MaintenanceLocked" property to 0 . <p>Recommendation /</p>

PAR	Function	Description
		Workaround: Quick Builder migration / restoring of data base should be done by a Product Administrator.
1-97S8B35	Configuration Studio	Error Indication: Localized characters will appear as question marks. Description: Operations like Duplicate point, Paste from Excel in Quick builder will not support localized characters. Recovery: None. Workaround: None.

9.2.16 Experion Batch- Controller

PAR	Function	Description
1-3QM82LT	EBM-Controller	Error Indication: A step block displays an error of 2447 when trying to set a unit. Description: You are unable to select a unit. Recovery: Abort the strategy. Workaround: None.
1-9BWUDZ1	EBM-Controller	Error Indication: C300 controller fails when SCMs are commanded to run, with specific configurations. Description: Controller fail is caused by the self-referencing GateOutputs in a Transition, or referencing the other Gate output in parallel transitions. Recovery: None. Workaround: None It is advisable to run the ECC to ensure that there are no strategies with this configuration. If the ECC flags such configurations, the user is expected to reconfigure the expression to not use the Gate output from the same Transition, or another parallel Transition and vice versa.
1-9RADCV9	EBM-Controller	Error Indication: Procedural elements in abnormal states (for example, "Holding") may not show lower level procedures in the Procedure Explorer tree. Description: The Procedure Explorer tree shows the procedural elements/equipment associated with active phase blocks in the batch's topology. Experion abnormal handlers cannot contain phase blocks and so lower level procedural elements will never be shown in the tree below procedural elements in abnormal states. Equipment will still be acquired by those procedural elements, but that equipment will not be visible in the Procedure Explorer tree. Recovery: 1. In the Procedure Explorer, switch to the main handler and navigate to the lower level procedural elements from the phase blocks. 2. Use the detail display chart tab to navigate to lower level procedural elements. 3. Use the detail display table view tab to navigate to lower level procedural elements. Workaround: There is currently no way to prevent this problem. This will happen whenever a procedure enters an abnormal state. You can use equipname to manual navigate to procedural element via detail display.
1-A29JSOI	EBM-Controller	Error Indication: An activity point that is associated with a lower layer recipe (Unit Procedure, Unit Operation or Phase) is not accessible via displays (Unit Timeline, Procedure Explorer, Detail Display, and Table View).

PAR	Function	Description
		<p>Description: When a batch is not currently progressing (example: due to pending interactive instructions, transition waiting to be satisfied, etc), the following operation could trigger the problem on different node type. •After a redundant server fail over or switch over, the new primary server node will observe the problem. •After a non-redundant server reboot, the non-redundant server node will observe the problem •After a console station reboot, the same console node will observe the problem. •After a console station newly added to the system, the same console node will observe the problem.</p> <p>Recovery: Go to “Configure”->”Alarm & Event Management”->”Alarms”->”Alarm Processing” to uncheck “Enable alarms server-wide” then check “Enable alarms server-wide”.</p> <p>Workaround: Use a console station to continue access the displays if the server is down. Use server to continue access the displays if the console stations is down.</p>

9.2.17 Experion Batch-Tools

PAR	Function	Description
1-VIAD8V	EBM-Tools	<p>Error Indication: The number of activities shown in CEE statistics Tab is different from the number of activities shown in Batch tab of CEE.</p> <p>Description: The NUMACT value as seen in the Batch Tab of the CEE shows a mismatch with the CEE-Activity Statistics -TOTALACTCAP.</p> <p>Recovery: Reload the ACE node in server.</p> <p>Workaround: Same as Recovery.</p>
1-9XLD7Z3	EBM-Tools	<p>Error Indication: [Error is displayed is "Error parsing the XML file.The XML file is not valid or not as per schema".</p> <p>Recovery: None.</p> <p>Workaround: 1. Export the phase block. 2. Rename the Exported .def.xml file with the phase block name(blockname.def.xml file) 3. Import with overwrite.</p>

9.2.18 EtherNet/IP-COMMUNICATION

PAR	Function	Description
1-6CROGAL	EtherNet/IP-COMMUNICATION	<p>Issue: C300v3 configured with EtherNet/IP IO's and/or EtherNet/IP Tag requests, through EIM. Sometimes, a simultaneous switchover of both C300v3 and EIM can cause disconnect and reconnect of all EtherNet/IP IO's and tags.</p> <p>Recovery: Issue recovers automatically.</p> <p>Workaround: None.</p>
1-81VFC5T	EtherNet/IP-COMMUNICATION	<p>Error Indication: EtherNet/IP armor point IO devices disconnects momentarily on UOC switchover.</p> <p>Description: On a UOC Switchover, the Armor Point IOs loaded to the UOC may get disconnected momentarily. The error is observed</p>

PAR	Function	Description
		<p>in the Station in form of a transient Communication Error Diagnostic Alarm.</p> <p>Recovery: The IO modules connect back automatically after a brief period.</p> <p>Workaround: Enable Consolidate Connections option when working with Armor Point IOs.</p>
1-9V8OCW5	EtherNet/IP-COMMUNICATION	<p>Error Indication: [UOC] Reloading CMs after reaching CLX spec is returning error and failing load.</p> <p>Description: On a Controller loaded with maximum capacity of ControlLogix UDT/Scalar types, reloading a CM containing UDT/Scalar blocks may report error 2474</p> <p>Recovery: None.</p> <p>Workaround: For the control module that needs to be reloaded, delete it from the Monitoring side and load from project.</p>
1-6FECFGO	EtherNet/IP-COMMUNICATION	<p>Error Indication: EIM fails to establish the communication with EIP devices after automatic sync and switchover with the degraded primary.</p> <p>Description: EIM fails to establish the communication with EIP devices after automatic sync and switchover with the degraded primary (i.e. One that does not have connection established with any loaded EIP device). It is applicable for a scenario where all the IO's under an EIM are already in a disconnected state and the secondary is in being rebooted. When the secondary comes up and synchronizes with the primary, it takes up the primary role but is not able to establish communication with the EIP devices.</p> <p>Recovery: Reload the EIP devices.</p> <p>Workaround: None.</p>
1-6XQEZHR	EtherNet/IP-COMMUNICATION	<p>Error Indication: PDT connection may get disconnected between C300 and EIM.</p> <p>Description: After reloading of EIP devices connected through EIM the PDT connection between C300 and EIM may get disconnected.</p> <p>Recovery: Perform C300 switchover when PDT connection gets disconnected. Connection will be reestablished after switchover of C300 is complete.</p> <p>Workaround: None.</p>
1-7KMG36R	EtherNet/IP-COMMUNICATION	<p>Error Indication: ControlLogix Tag read fails in C300 EIM topology on reloading CM containing the tag if the Control Module is the only one that contains ControlLogix tag.</p> <p>Description: ControlLogix Tag read fails in C300 EIM topology on reloading CM containing the tag if the Control Module is the only one that contains ControlLogix tag.</p> <p>Recovery: None.</p> <p>Workaround: None.</p>
1-A2419U5	EtherNet/IP-COMMUNICATION	<p>Error Indication: BL20 input modules get disconnected and generate Communication Failure Alarm momentarily on EIM switchover (when used with EIM topology) or C300 switchover (when used with C300 direct topology).</p> <p>Description: BL20 input modules get disconnected and generate</p>

PAR	Function	Description
		<p>Communication Failure Alarm momentarily on IM switchover (when used with EIM topology) or C300 switchover (when used with C300 direct topology). The parameter “Refresh Connections on Switchover” (REFRESHCONNONSWO) has not been implemented on EIM and C300 and does not have any effect when connection to the BL20 Input IO modules is made with C300 (either directly or through EIM).</p> <p>Recovery: The BL20 input modules reconnects automatically after Target to Originator connection timeout and Communication Failure Alarm is returned to normal..</p> <p>Workaround: None.</p>

9.2.19 EtherNet/IP-CEE-EMBEDDED

PAR	Function	Description
1-96E4ICX	EtherNet/IP-CEE-EMBEDDED	<p>Description: EPKS R500.2 C300 OPM Failure when using (EIP Driver)) PF755 Channel in CM.</p> <p>Recovery: None.</p> <p>Workaround: The fix for this issue would require a change in controller firmware. OPM of controller to the controller firmware with the fix would be possible now, to facilitate Controller OPM in current release, then one of the following workarounds can be used:</p> <p>Option1- For the EIP drive output channel, replace the direct pin connections to the custom parameters with a PUSH block writing to those parameters. This workaround will resolve the issue during checkpoint restore. hence Controller OPM will succeed.</p> <p>Option2-</p> <ol style="list-style-type: none"> 1. Delete the connections to/from the custom parameters of EIP(PF755) drive output and input channels in the affected CMs and reload the CMs without the connections. 2. Perform OPM. If the connections are deleted there would not be any error returned during checkpoint restore and the OPM would succeed. 3. After the OPM is complete the connections in the CMs can be reformed and the CM can be reloaded.

9.2.20 ELCN System Management

PAR	Function	Description
RELCNTN-623	ELCN System Management	<p>Description: On the Experion System Management Dashboard, the NIM faceplate shows the Device Checkpoint parameter’s value incorrectly and also changing the value from the faceplate may not have any impact on the parameter.</p> <p>Workaround: The Device Checkpoint parameter information can be found and manipulated from the UCN faceplate.</p>
RELCNTN-626	ELCN System Management	<p>Description: On the Experion System Management Dashboard, the NIM faceplate shows FTE Status as FAIL.</p> <p>Workaround: Use the Native Window’s UCN Status display (FTE Cable</p>

PAR	Function	Description
RELCNTN-638	ELCN System Management	<p>Description: On the Experion System Management Dashboard, when selecting the composite menu and navigating to the UCN dashboard, every second attempt causes the ELCN Server to crash. The ELCN Server will restart automatically, in the meantime, the dashboard shapes may show UNKNOWN for few seconds.</p> <p>Workaround: Navigate to the UCN dashboard via the drop-down menu located at the top left corner of dashboard pane.</p>

9.2.21 EtherNet/IP Tools

PAR	Function	Description
1-818YTYU	EtherNet/IP Tools	<p>Error Indication: During the import of any EDS file, errors may get reported for the enumeration definitions that contain negative ordinals. In some scenarios the import may succeed. In such cases, the other engineering operations like configuration of instance or load of instance might fail.</p> <p>Description: The negative ordinals in an enumeration set are not handled properly in Control Builder. The user may see some inconsistent behavior while working with such enumeration parameters.</p> <p>Recovery: None.</p> <p>Workaround: If possible update the enumeration definition and specify ordinals that are greater than 0.</p>

9.2.22 IO-PMIO

PAR	Function	Description
1-3GA9600	IO/-PMIO	<p>Error Indication: All channels that should be POWERED and are UNPOWERED report OUTPUTFL soft failures and none of them report DOVRCRNT soft failure.</p> <p>Description: Upon return of lost field power, outputs will be POWERED immediately if they were POWERED when field power was lost.</p> <p>Recovery: After field power is lost and before it is returned set all channels to MAN mode and the SO to UNPOWERED.</p> <p>Workaround: 1. If implementation includes intentional removal of field power, choose an alternative one.</p> <p>2. If field power will be removed intentionally, set all channels to UNPOWERED prior to doing so.</p>

9.2.23 IEC870 Interface

PAR	Function	Description
1-A29OLAP	IEC870 Interface	<p>Error Indication: After Experion server restart or failover, user will experience below issues:</p> <ol style="list-style-type: none"> 1. IEC870 data will not be seen 2. The IEC870 system interface status tab shows "Disconnected" <p>Description: "IEC60870 Point Server" Service does not start automatically</p>

PAR	Function	Description
		<p>after Experion server restart or failover.</p> <p>Recovery: In Experion Server, start the service manually.</p> <p>Workaround: Follow the steps below to set automatic delayed start of the service:</p> <ol style="list-style-type: none"> 1. Open Windows Service Control Manager. 2. Select Properties of “Experion PKS IEC60870 Point Server” service. 3. Change the Start Type to “Automatic (Delay Start)”. 4. From an elevated command prompt invoke “regedit”. 5. Browse to “HKLM\SYSTEM\CurrentControlSet\services\IEC60870PS”. 6. Right click the registry key and add new key AutoStartDelay of type DWORD (32-bit). 7. Set the value to decimal 180. <div style="border: 1px solid blue; padding: 5px; margin-top: 10px;"> <p>NOTE During failover there will be loss of data for 180 seconds.</p> </div>

9.2.24 IXP – Import Export

PAR	Function	Description
1-28C3M4F	IXP – Import Export	<p>Error Indication: After DD import (FF\wireless) QVCS checked in strategies are Editable.</p> <p>Description: Checked in Control modules (having reference to FF blocks) become editable after performing dd import of the same ff device.</p> <p>Recovery: Close and reopen Control Builder, which will make the strategies non-editable.</p> <p>Workaround: Close and reopen Control Builder, which will make the strategies non-editable.</p>

9.2.25 I/O-Series C

PAR	Function	Description
1-3I90BL7	I/O-Series C	<p>Error Indication: HART communication errors continuously accumulate.</p> <p>Description: AI-HART Analog Input module cannot communicate properly with a WIKA T32 transmitter.</p> <p>Recovery: None.</p> <p>Workaround: None.</p>

9.2.26 Modbus TCP infrastructure

PAR	Function	Description
1-9MCOB71	Modbus TCP Infrastructure	<p>Error Indication: Modbus error or loss of device connection/communication</p>

PAR	Function	Description
		<p>Description: Although extremely rare for most Modbus devices, it is possible for a device to send Modbus responses across multiple TCP packets. If a “split-packet” response is received by PCDI, PCDI will not process the response correctly.</p> <p>Recovery: Normal operation should resume once the split packet response is processed.</p> <p>Workaround: A redundant device should mitigate communication interruptions and loss of communication, although, at a minimum, one response will be lost.</p>

9.2.27 Modbus TCP Blocks

PAR	Function	Description
1-9L7N7TP	Modbus TCP Blocks	<p>Error Indication: Slave disconnect alarm reported from PCDI master sporadically even though slave is healthy.</p> <p>Description: Slave disconnected alarm is reported sporadically on stable run of PCDI master blocks even if slave is healthy or there is no physical disconnection. This happens when a request gets timed out even though slave has responded to request.</p> <p>Recovery: System recovers automatically from the error without any intervention. PCDI master reconnects to slave after connection fail and continues communication.</p> <p>Workaround: 1. Have maximum of 250 messages/sec for Modbus tcp. 2. Configure REQRTY parameter in “Slave Configuration” tab for PCDI master block to value. 3. REQRTY parameter specifies number of retries master block will do before dropping the connection if a request gets timed out. Default value is 1 and max value is 10. The recommended value of 3 is based on testing done with a configured message rate of 250 messages / sec. However, a greater value could also be tried if application demands or to work around the issue, if it persists.</p>

9.2.28 PGM Hilscher Sycon .NET

PAR	Function	Description
1-9IVERK7	PGM Hilscher Sycon .NET	<p>Error Indication: In the Slave DTM which is viewed from sycon, “ProcessImageMonitor” tab appears.</p> <p>Description: This page doesn't harm the user except it doesn't have any useful information in it.</p> <p>Recovery: Ignore this tab and its content.</p> <p>Workaround: None.</p>

9.2.29 Procedure Explorer

PAR	Function	Description
1-9AYK3OB	Procedure Explorer	<p>Error Indication: In the Procedure Explorer Chart the pinch and zoom touch gesture does not work.</p> <p>Description: This error can occur on certain types of touch panel hardware.</p> <p>Recovery: The operator can use the "+" or "-" buttons at the top right of the Chart to zoom in or out. Also the operator can hold the Ctrl-key and use the mouse wheel to zoom in or out of the Chart area.</p> <p>Workaround: The operator can use the "+" or "-" buttons at the top right of the Chart to zoom in or out. Also the operator can hold the Ctrl-key and use the mouse wheel to zoom in or out of the Chart area.</p>

9.2.30 Reference Block- Tools

PAR	Function	Description
1-9VJGDZX	Reference Block-Tools	<p>Error Indication: After importing CM containing RefBlock with option Import (with overwrite) and Rename. All the IO point block existing in IOM will become SPARE and all the io point block configurations moved to newly imported IOM.</p> <p>Description: The Import with rename functionality is not working.</p> <p>Recovery: None.</p> <p>Workaround: None.</p>

9.2.31 Standard Series C- I/O Module

PAR	Function	Description
1-8ZCFE19	Standard Series C- I/O Module	<p>Error Indication: [SFT] LLAI module channels value goes to NaN during stable run when it connected over FOE.</p> <p>Description: [SFT] LLAI module channels value goes to NaN during stable run when it connected over FOE.</p> <p>Recovery: Limit fiber optical cable length to less than 7.5 KM when LLAI module used as remote IOM via FOE.</p> <p>Workaround: None.</p>

9.2.32 SCM-Sequential Control Module

PAR	Function	Description
1-9CGRENF	SCM-Sequential Control Module	<p>Error Indication: Sequence Control Module (SCM) / Recipe Control Module (RCM) / Control Recipe (CR) gets the following error details:- Execution Status of Info - Execution Code of DynPeerMemError- Execution Description of Out of Peer Resource Memory - Connection Status Error code of 2795 - "Out of peer resources".</p> <p>Description: The issue may occur when dynamic fetch is configured and there is failure in read of a peer reference with an error status code of 2795. This issue has been reported by one customer whose configuration includes an SCM in a C200e and fetching from peer controller. With this</p>

PAR	Function	Description
		<p>error, the SCM / RCM / CR is stuck and there are no alarms reported. Unless configuration enables alarming.u.</p> <p>Recovery: Single Step away from problem Transition or Step and then issue a Resume command.</p> <p>Workaround: There is no workaround from Transitions but Steps with peer references can be configured with Step Timeout alarms.</p>

9.2.33 System Repository

PAR	Function	Description
1-5TLOATN	System Repository	<p>Error Indication: Machine IP and Port number are displayed in the error log.</p> <p>Description: Machine IP and Port number are displayed in the error log.</p> <p>Recovery: None.</p> <p>Workaround: None.</p>

9.3 Installation and Migration

9.3.1 Fieldbus Interface Module

PAR	Function	Description
1-4668IVX	Fieldbus Interface Module	<p>Error Indication: FF device/block load may return "Invalid NMA CRL" error.</p> <p>Description: "Invalid NMA CRL", VCR load fail error when attempting to load FF devices or CMs.</p> <p>Recovery: FIM switchover or link inactive and active.</p> <p>Workaround: None.</p>
1-9X4QTK5	Fieldbus Interface Module	<p>Error Indication: FF block may show Err3300 and blocks may appear in red.</p> <p>Description: Due to contineus ADM DTM request on fully loaded FIM FFLINK memory buffer get full.n.</p> <p>Recovery: FIM reboot.</p> <p>Workaround: Avoid or minimize MTL ADM, F809Plus device DTM scanning from FDM.</p>

9.3.2 INS- Experion Installer

PAR	Function	Description
1-A3CN6J3	INS- Experion Installer	<p>Error Indication: During migration in without OS-reinstall scenario, after completing the Experion uninstall step, following error may occur Failed to find the help file - EPKS_Product_install.chm.</p> <p>Recovery: Refer to workaround.</p> <p>Workaround: 1. Acknowledge the error. 2. Open Registry editor (Start menu-> Run-> Regedit.exe).</p>

PAR	Function	Description
		<p>3. Browse to the following registry path – HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\Honeywell\TPS50\InstallInfo.</p> <p>4. Create a new string [SEQSTATE] and update the value as Rebooting.</p> <p>5. Resume the migration by running setup.exe.</p>

9.3.3 Profibus Interface Module

PAR	Function	Description
1-1275R3B	Profibus Interface Module	<p>Error Indication: Upon removal and re-insertion of Profibus cable from both primary and the secondary PGM, output channels become bad in TURCK and SiemensET200M DSB.</p> <p>Description: When profibus cable is removed from primary PGM, switchover is initiated and when the profibus cable is again removed from the new primary also all the outputs will go bad and is expected. But when the cable is reconnected on both the PGM's, output channels will remain bad and will not recover.</p> <p>Recovery: Perform PGM Switchover, all the output channels will become good.</p> <p>Workaround: None.</p>
1-9S11K4B	Profibus Interface Module	<p>Description: [SFT PGM] DPV1 data disconnect (freeze) observed during stable running condition.</p> <p>Recovery: None.</p> <p>Workaround: Delete the HART channel block and PBHIOMB block and reload it.</p>
1-479NUAX	Profibus Interface Module	<p>Error Indication: ET200M DSB slave state changes to configured state after PGM RRR.</p> <p>Description: After PGM RRR Siemens ET200M DSB does not communicate.</p> <p>Recovery: Reload the ET200M DSB from project.</p> <p>Workaround: None.</p>
1-9V9Y7CT	Profibus Interface Module	<p>Error Indication: PBLINK and associated blocks like PBHIOMB, PBHCHANNEL and DSBs will be greyed out. Loss of communication with the PROFIBUS devices.</p> <p>Description: This error occurs only if we perform Sync drop and enable more than 10 times continuously with fully loaded link. In case of customer scenarios this is likely to occur after 20 sync drops and resync. Provided GENPADSB, GENDRIVEDSB, ASILINKDSB and GENDSB are used. The occurrence also depends on number of instances of these DSBs configured..</p> <p>Recovery: None.</p> <p>Workaround: None.</p>
1-9C7BJBH	Profibus Interface Module	<p>Error Indication: PGM link will appear in red and profibus communication will stop.</p> <p>Description: PGM modules lost the communication with link1 & Link2 during runtime cause LOC/LOV.</p> <p>Recovery: Reboot the PGM.</p> <p>Workaround: None.</p>
1-	Profibus	<p>Error Indication: When DPV1SLOTNUM is configured beyond 64, Limit or</p>

PAR	Function	Description
A59ZM2D	Interface Module	<p>Range Exceeded error will be thrown.</p> <p>Description: Though the valid range is up to 255, this limitation is a hinderance to access records beyond 64..</p> <p>Recovery: None. User will not be able to access DPV1 records beyond slotnumber 64.</p> <p>Workaround: None.</p>

9.3.4 Rockwell Network

PAR	Function	Description
1-11H1RD1	Rockwell Network	<p>Error Indication: RsLinx does not show the Series A IO/SIM Card with Module Icon.</p> <p>Description: RsLinx application does not show the Series A IO/SIM Card with Module Icon.</p> <p>Recovery: None.</p> <p>Workaround: None.</p>

9.3.5 Scenario- Based EMUG

PAR	Function	Description
1-9990QN5	Scenario-Based EMUG	<p>Error Indication:[M&I] CTools fails to open from base release server A when server B is in migrated state.</p> <p>Description: [M&I] CTools fails to open from base release server A when server B is in migrated state.</p> <p>Recovery: None.</p> <p>Workaround: Open CTools from Server B (latest release).</p>

9.3.6 Third Party Components

PAR	Function	Description
1-11KCT39	Third Party Components	<p>Error Indication: Profibus IO module appears RED on Monitoring with the PFB Communication Status shown as ""PfbOffline and DEVSTATUS parameter of these blocks shows 'PfbNotInRun'.</p> <p>Description: PBI_DEVICE blocks go offline and appear in red in monitoring side after load of many remote-chassis I/O including SST block at the same time. This was also seen when chassis IO modules are loaded in a particular order like Pulse input module, then Analog Output Modules and then SST module along with its I/O modules.</p> <p>Recovery: Delete all the modules and load the Profibus modules first and then load the other chassis I/O modules.</p> <p>Workaround: None.</p>
1-17FPCH	Third Party Components	<p>Error Indication: Internal error occurs when you try to open the documents related to SST_PFB_CLX in SST Profibus installation CD part nr.705-0004, Rev. 03-02.</p> <p>Description: Internal error occurs when you try to open the documents</p>

PAR	Function	Description
		<p>related to SST_PFB_CLX in SST Profibus installation CD part nr.705-0004, Rev. 03-02. Because of this the user documentation cannot be used which will assist in installation or up-gradation of firmware.</p> <p>Recovery: None.</p> <p>Workaround: Use next version of SST_PFB_CLX in SST Profibus installation CD part nr.705-0004, Rev. 07.10.0.0 where issue is resolved.</p>
1-OIW24V	Third Party Components	<p>Description: Trying Disable-Enable of FTE Yellow-Green causing the BSOD fail of Server Grade.</p> <p>Recovery: Reboot the machine for each disable or enable of the adapter.</p> <p>Workaround: Invalid test case, if the machine is ON PROCESS. Do not disable all adapters and enable all adapters without a reboot.</p> <p>Reboot the machine for each disable or enable of the adapter.</p>
1-PPG7GR	Third Party Components	<p>Error Indication: C200 5ms controller is losing Connection with Server Intermittently resulting in loss of View at Control Builder (everything turns RED at Monitoring side) and Loss of View at Station for C200 Detail Display.</p> <p>Description: Loss of View / Server Connection fail on Control Builder & Station for C200 5ms (Non-Redundant), when there is Peer-to-peer (P2P) Connection between C200 5ms & ACE on CNET and cable is disconnected as per below: Remove Control Net Cable A of Non-Redundant C200 5ms & Remove Control Net Cable B of ACE. Remove Control Net Cable B of Non-Redundant C200 5ms & Remove Control Net Cable A of ACE. In the above two Scenarios, Loss of Peer-to-peer data communication between C200 & ACE is observed which is expected. But in this scenario, the C200 5ms is losing Connection with Server Intermittently (disconnects and connects back) and hence resulting in Loss of View at Control Builder (everything turns RED at Monitoring side) and Loss of View at Station for C200 Detail Display.</p> <p>Recovery: Reconnect the cables back.</p> <p>Workaround: None.</p>
1-TVWXHJ	Third Party Components	<p>Error Indication: After checkpoint restore, output modules configured through SST module remain in red color in monitoring side with DEVSTATUS set to PfbNotInRun.</p> <p>Description: It is observed that after checkpoint restore, analog and digital output modules remain in red color in monitoring side with DEVSTATUS set to PfbNotInRun.</p> <p>Recovery: Take the C200E to NODB, reload the Master SST Profibus Interface and IO modules.</p> <p>Workaround: None.</p>

9.4 Servers and Stations

9.4.1 Detail Displays

PAR	Function	Description
1-9SB90E7	Detail Displays	<p>Error Indication: Script Error "Stack Overflow" May popup up while navigating to BB function block detail display Main page.</p>

PAR	Function	Description
		<p>Description: When standard detail display is used for BB function block. Script error may popup up sometime when navigated to the Main page.</p> <p>Recovery: Acknowledge the script error and continue the operation. It has no other impact on functionality.</p> <p>Workaround: Acknowledge the script error.</p>
1-9SBA43B	Detail Displays	<p>Error Indication: Station throws an error message and loads a blank page.</p> <p>Description: NORSOK CA & SBE block detail displays may fail to load chart view in Station.</p> <p>Recovery: None.</p> <p>Workaround: View Chart from Control Builder.</p>

9.4.2 Field Device Service

PAR	Function	Description
1-8NPLXTR	Field Device Service	<p>Error Indication: The client request for HART data will fail and the status will be shown corresponding to the application. For example, when HART data Status is BAD, on displays, it will show reverse video, on trends, it will display "?????". History will show some gaps for that period. OPC clients will show status as BAD with an empty value.</p> <p>Description: HART Point Parameter Access is subjected to slower performance when compared to Point parameter access using CDA mechanism. Experion OPC Server has connection timeout defined as 1 minute for its clients for any demand read request. If a read request is not completed within one minute, read request will time-out and fail. OPC Clients would not get data in such cases. This limitation of Experion Server has an impact on clients accessing HART data (using DD parameters) using Demand Reads.</p> <p>Recovery: None.</p> <p>Workaround: To avoid any application connection timeout issues, it is strongly recommended for demand read clients to access only 10 hart devices data at a time. For each device users can configure up to 10 parameters for access. Simultaneous access of more number of HART devices using demand read can cause an Application Connection time-out.</p>
1-8W8XR8T	Field Device Service	<p>Error Indication: Configure Device step in Auto Device Commission workflow in Project Engineering Plugin in Control Builder will fail.</p> <p>Description: "Device Configuration did not complete for <TagName> because Error occurred during device communication" message is show in PET plugin during configure device step. Issue is seen only for CERABAR S device.</p> <p>Recovery: None.</p> <p>Workaround: None.</p>

9.4.3 HMIWeb Station

PAR	Function	Description
1-810JKSL	HMIWeb Station	<p>Error Indication: 2 decimal places always shown on custom graphics.</p>

PAR	Function	Description
		<p>Description: Alphanumerics bound to numeric CEE block parameters, such as "DACA.PV", show 2 decimal places even after 'Enable parameter format' option is selected.</p> <p>Recovery: None.</p> <p>Workaround: Configure the number of decimal places on each alphanumeric and do not select the 'Enable parameter format' option for CEE block parameters.</p>

9.4.4 HMIWeb Station –Collaboration Station

PAR	Function	Description
1- A1LNDJT	HMIWeb Station- Collaboration Station	<p>Error Indication: The Collaboration Station window opens with the default settings rather than the position or size configured in the previous session.</p> <p>Description: Collaboration Station window settings have been configured but are not retained in subsequent sessions.</p> <p>Recovery: None, reset the window position / size manually.</p> <p>Workaround : None.</p>

9.4.5 HMIWeb TPN Details

PAR	Function	Description
1- 9R4EQLZ	HMIWeb TPN Details	<p>Error Indication: Station Detail display of PMP point is giving error as "Errors have occurred on this page".</p> <p>Description: "Errors have occurred on this page" dialogue may be displayed on Detail Display of PMP points.</p> <p>Recovery: Invoke any other Display.</p> <p>Workaround: Use Native Window to detail PMP points that display this error.</p>

9.4.6 HMIWeb Station – Displays

PAR	Function	Description
1- 5UEU04N	HMIWeb Station - Displays	<p>Description: It has been observed that, after migration from an older release to R510.1, any .html file (ECC Generated report) is getting opened in HMI Web builder instead of Internet Explorer.</p> <p>Workaround 1: If .html file (ECC report) opens up in HMI Web Builder then go to Control panel > Programs > Default Programs > Set Associations and set association of .html to Internet explorer from HDB.exe.</p> <p>Workaround 2: Open internet explorer and just drag and drop ECC report (html file) in it.</p>

9.4.7 Server – Alarm/Event

PAR	Function	Description
1-	Server -	Error Indication: Source and Description columns show truncated text

PAR	Function	Description
9ESSDPK	Alarm/Event	<p>for Hardware Alarms in System Alarms.</p> <p>Description: There is a limitation in displaying number of characters in the system alarms summary page Experion station. Due to this limitation some of the Dell hardware system alarms details might get truncated.</p> <p>Recovery: None.</p> <p>Workaround: None.</p>
1-4CINRJ3	Server - Alarm/Event	<p>Description: An alarm that has been cleared and then unshelved appears on a Console Station connected to a DSA subscriber.</p> <p>Recovery: None.</p> <p>Workaround: Shelf and unshelf the alarm on the DSA subscriber server.</p>
1-7BBVZXX	Server - Alarm/Event	<p>Description: Silence settings do not support console scope ack/silence and external alarm notification.</p> <p>Recovery: None.</p> <p>Workaround: None.</p>
1-8MEME1P	Server - Alarm/Event	<p>Description: Resource usage of the DSA Events on the server raises during simultaneous call-ups of the Event Summary on multiple Console Stations, and does not reduce when the Console Stations remain on this display.</p> <div style="border: 1px solid blue; padding: 5px; margin: 10px 0;"> <p>NOTE This error can only be viewed when monitoring the resource usage of the DSA Events application on the Server.</p> </div> <p>Recovery: Refresh all Event Summaries, or close the Event Summary.</p> <p>Workaround: None.</p>
1-7XG5D27	Server - Alarm/Event	<p>Description: Messages confirmed through Control Builder are not also showing as confirmed in Experion Station.</p> <p>Recovery: None.</p> <p>Workaround: Use Experion Station to confirm messages.</p>

9.4.8 Server - Batch Unit Timeline

PAR	Function	Description
1-9ZLMSZL	Server - Batch Unit Timeline	<p>Error Indication: Unit Timeline Now Card is empty.</p> <p>Description: The Unit Timeline Now Card is empty and timeline bars are not appearing. This can occur when inter-cluster peer-to-peer is used to invoke batch Phases (SCMs) from higher level recipes.</p> <p>Recovery: None.</p> <p>Workaround: Move the recipe that invokes the Phase (SCM) onto a controller in the same cluster as the Phase and then download it. The next time a batch is run the Now card will display phases when they are active.</p>
1-A1LRR37	Server - Batch Unit Timeline	<p>Error Indication: Procedures or Unit Procedures don't appear on the Unit Timeline for some Units.</p> <p>Description: Procedures and Unit Procedures will not appear in the Unit</p>

PAR	Function	Description
		<p>Timeline for a Unit if another operation invokes a Phase in a sub-asset of that Unit. Also, they must have the Procedure icon configured in Control Builder.</p> <p>Recovery: None.</p> <p>Workaround:</p> <ol style="list-style-type: none"> 1. Check in Control Builder that the Procedure icon has been configured for the Unit and Unit Procedure. 2. If the Phase (SCM) is in a sub-asset of the Unit (for example, \Assets\Process_Cell_1\Unit_1\SCM_tag_1), change the asset of the SCM to the asset used by the Unit (for example, \Assets\Process_Cell_1\SCM_tag_1) and reload the SCM to the server. The next time a batch is run the Procedures or Unit Procedures will show on the Unit Timeline in the expected unit.
1- A1KQ8UV	Server - Batch Unit Timeline	<p>Error Indication: Incorrect minute values for past and future actions appear on the Unit Timeline for Operator-based Stations.</p> <p>Description: The Unit Timeline past and future minute values for Operators appear in reverse to what is actually required.</p> <p>Recovery: Manually pan and zoom the Unit Timeline left or right to show the correct amount of past and future time.</p> <p>Workaround: From the Advanced tab of the Operator's Configuration display in Station, reverse the number of minutes in each field to what is currently configured.</p> <p>In the 'Minutes of future' field, enter the number of minutes in the past that you wish to view, and in the 'Minutes of past' field, enter the number of minutes in the future that you wish to view.</p> <div style="border: 1px solid blue; padding: 5px; margin-top: 10px;"> <p>NOTE The same workaround applies to Windows group configurations.di</p> </div>
1- A28D4P9	Server - Batch Unit Timeline	<p>Error Indication: Delay exceedance indication is not seen on the completed procedures after DSA reconnect and not updated after reference batch selection change.</p> <p>Description: Delay exceedance indication is not updated on completed timeline bars after reference batch selection change or recovery.</p> <p>Recovery: None.</p> <p>Workaround: None. The avoidance is to make the correct reference batch selection early in the batch and address underlying causes of DSA disconnection.</p>
1- A27XV7L	Server - Batch Unit Timeline	<p>Error Indication: Reference Batch is not shown in the Create Batch form when the related recipe is selected. To confirm this is the issue, open the problem CSV file in Excel and identify that at least one procedural element has a blank value in Tag_Name column name and that this tag name is longer than 30 characters length in Control Builder.</p> <p>Description: Reference Batch reports are not available for selection in Unit Timeline if a procedural element in it has a tag name longer than 30 characters.</p> <p>Recovery: Manually add the correct tag name into the Tag_Name column of the problem procedural element(s) and save the CSV file back to the ReferenceBatches folder on the primary Experion server.</p> <p>Workaround: Change the tag name of the problem procedural element in Control Build to have a name less than 30 characters.</p>

9.4.9 Server - Electronic Flow Measurement

PAR	Function	Description
1-9ZFGMVD	Server - Electronic Flow Measurement	<p>Error Indication: Alarm and event log collection for all Gas meters connected to a ControlEdge RTU via DNP3 fail.</p> <p>Description: Configuring a liquid meter run via DNP3 on a ControlEdge RTU that also has gas meter runs will result in failure of collection for the gas alarm and event logs.</p> <p>Recovery: Do not mix liquid meter runs with gas meter runs using DNP3 on ControlEdge RTUs.</p> <p>Workaround: Ensure the Control Edge RTU remain on firmware version R150, if the system requires ControlEdge firmware version R151 then ensure that liquid meters are not configured on the same RTU as gas meters for EFM in Experion using the DNP3 protocol.</p>

9.4.10 Server - OPC clients and servers

PAR	Function	Description
1-1BLJCBV	Server - OPC clients and servers	<p>Description: PHD through Redirection Manager (RDM) is unable to reconnect to the Experion OPC server after a failover.</p> <p>Recovery: Have PHD reconnect once the TPS connection has been established.</p> <p>Workaround: Configure the PHD RDM to monitor the TPS Status item. For more information, see the Solution Document for PAR 1-1G2L3MX which is available from the Honeywell Technical Assistance Center.</p>
1-9217LHT	Server - OPC clients and servers	<p>Error Indication: Cannot connect to HCI-based OPC servers on Experion R510.</p> <p>Description: Using a local OPC Validator client, unable to connect to any HCI based OPC Servers including SPS, SES, Experion OPC Server. Get E_ACCESSDENIED error.</p> <p>Recovery: Issue is caused by Microsoft patch KB4056890 and applies to all releases, not just R510. Later it is confirmed that Jan 2018 MS update (KB4057142) fixed this issue.</p> <p>Workaround: None.</p>

9.4.11 Server - System Status

PAR	Function	Description
1-A282BWV	Server - System Status	<p>Description: Station failure alarm for the flex station is not suppressed when system alarms suppressed mode is enabled.</p> <p>Recovery: None.</p> <p>Workaround: Acknowledge the Station failure alarm and ignore it while the machine is in System Alarms Suppressed Mode.</p>

9.4.12 Server - SCADA Interfaces

PAR	Function	Description
1-	Server -	Error Indication: Bristol Babcock BSAP serial or terminal server channel

PAR	Function	Description
9X13M17	SCADA Interfaces	remains in Failed state. Description: The Bristol Babcock BSAP serial or terminal server channel can't be started successfully. Recovery: None. Workaround: Investigate using the Bristol OpenBSI interface instead if possible.
1-A2CEOCH	Server - SCADA Interfaces	Error Indication: [Red-RTU]DNP3 communication fails for 15 mins and re-establish on Server failover. Recovery: Communication resumes automatically after 15 minutes. Workaround: None.

9.4.13 Server - TPS Integration

PAR	Function	Description
1-9H1JBWH	Server – TPS Integration	Description: The LCN Status dashboard does not load correctly when many TPS nodes are configured. Recovery: None. Workaround: Create a custom dashboard that contains fewer nodes on the first page.

9.4.14 Server - IEC850

PAR	Function	Description
1-9NP10FN	Server - IEC850	Error Indication: IEDs will appear disabled in Station. Description: IEDs of an IEC61850 system interface in Station may appear disabled after download of Data Points. Recovery: Restart Experion PKS Watchdog service. Workaround: Restart Experion PKS Watchdog service.
1-9FC2KB7	Server - IEC850	Error Indication: 'HSR MUX Driver' name is not updated in Network properties after installation. The name appears as "Ethernet" for the HSR MUX Driver. Description: 'HSR MUX Driver' name is not updated in Network properties after installation. The name appears as "Ethernet" for the HSR MUX Driver. Recovery: None. Workaround: Rename network manually to "HSR MUX Driver".

9.5 PDF Documentation

9.5.1 PDF Collection

PAR	Function	Description
1-A6BLJG3	PDF Collection	Description: Migration guides in XPS format delivered with R510.1 UTC media have formatting issues. Workaround: The updated R510.1 UTC media that includes the updated XPS files are available on the Honeywell Online Support website (OLS).

HONEYWELL SOFTWARE COMPONENTS AND VERSIONS

This chapter lists the versions of Honeywell software components.

- [Common component versions](#)
- [Controllers and tools version](#)
- [Server and client versions](#)
- [TPS Software Component Versions](#)
- [Compatibility with TPN releases](#)

10.1 Common component versions

Component	Version	Version verification (Only one option is listed)
App_TPS_Base	051.001.02100	Perform the following steps to verify the version. <ol style="list-style-type: none"> 1. Launch the Maintenance Tool. The Maintenance Tool window appears. 2. In the Maintenance Tool window, click View Experion Feature Packages/Uninstall Experion Product.
AppTPSCL	051.001.02100	Perform the following steps to verify the version. <ol style="list-style-type: none"> 1. Launch the Maintenance Tool. The Maintenance Tool window appears. 2. In the Maintenance Tool window, click View Experion Feature Packages/Uninstall Experion Product.
AppTPSClient	051.001.02100	Perform the following steps to verify the version. <ol style="list-style-type: none"> 1. Launch the Maintenance Tool. The Maintenance Tool window appears. 2. In the Maintenance Tool window, click View Experion Feature Packages/Uninstall Experion Product.

Component	Version	Version verification (Only one option is listed)
App_TPS_Solution	051.001.02100	Perform the following steps to verify the version. <ol style="list-style-type: none"> 1. Launch the Maintenance Tool. The Maintenance Tool window appears. 2. In the Maintenance Tool window, click View Experion Feature Packages/Uninstall Experion Product.
Experion CAB	051.001.02400	Perform the following steps to verify the version. <ol style="list-style-type: none"> 1. Launch the Maintenance Tool. The Maintenance Tool window appears. 2. In the Maintenance Tool window, click View Experion Feature Packages/Uninstall Experion Product.
Honeywell_CAB_Support	051.001.00800	Perform the following steps to verify the version. <ol style="list-style-type: none"> 1. Launch the Maintenance Tool. The Maintenance Tool window appears. 2. In the Maintenance Tool window, click View Experion Feature Packages/Uninstall Experion Product.
Honeywell Computers and Network Equipment Provider	051.001.02400	Perform the following steps to verify the version. <ol style="list-style-type: none"> 1. Launch the Maintenance Tool. The Maintenance Tool window appears. 2. In the Maintenance Tool window, click View Experion Feature Packages/Uninstall Experion Product.
Honeywell CANE Detail Displays	051.001.02400	Perform the following steps to verify the version. <ol style="list-style-type: none"> 1. Launch the Maintenance Tool. The Maintenance Tool window appears. 2. In the Maintenance Tool window, click View Experion Feature Packages/Uninstall Experion Product.
Experion_Station_Console_TPS	051.001.02100	Perform the following steps to verify the version. <ol style="list-style-type: none"> 1. Launch the Maintenance Tool. The Maintenance Tool window appears. 2. In the Maintenance Tool window, click View Experion Feature Packages/Uninstall Experion Product.
Honeywell Security Model - Domain Controller	051.001.02100	Perform the following steps to verify the version. <ol style="list-style-type: none"> 1. Launch the Maintenance Tool. The Maintenance Tool window appears. 2. In the Maintenance Tool window, click View Experion Feature Packages/Uninstall Experion Product.

Component	Version	Version verification (Only one option is listed)
HSE_Creator_Tool	051.001.00800	Perform the following steps to verify the version. <ol style="list-style-type: none"> 1. Launch the Maintenance Tool. The Maintenance Tool window appears. 2. In the Maintenance Tool window, click View Experion Feature Packages/Uninstall Experion Product.
Honeywell FTE MUX Driver	051.001.02400	Perform the following steps to verify the version. <ol style="list-style-type: none"> 1. Launch the Maintenance Tool. The Maintenance Tool window appears. 2. In the Maintenance Tool window, click View Experion Feature Packages/Uninstall Experion Product.
Honeywell_FTE_Driver	040.007.00800	Perform the following steps to verify the version. <ol style="list-style-type: none"> 1. Launch the Maintenance Tool. The Maintenance Tool window appears. 2. In the Maintenance Tool window, click View Experion Feature Packages/Uninstall Experion Product.
Honeywell_GUSDISP_Support	051.001.00800	Perform the following steps to verify the version. <ol style="list-style-type: none"> 1. Launch the Maintenance Tool. The Maintenance Tool window appears. 2. In the Maintenance Tool window, click View Experion Feature Packages/Uninstall Experion Product.
Experion_GUS_Display_Builder	051.001.02100	Perform the following steps to verify the version. <ol style="list-style-type: none"> 1. Launch the Maintenance Tool. The Maintenance Tool window appears. 2. In the Maintenance Tool window, click View Experion Feature Packages/Uninstall Experion Product.
Experion_GUS_Display_Runtime	051.001.02100	Perform the following steps to verify the version. <ol style="list-style-type: none"> 1. Launch the Maintenance Tool. The Maintenance Tool window appears. 2. In the Maintenance Tool window, click View Experion Feature Packages/Uninstall Experion Product.
Experion_GUS_Multiple_Displays	051.001.02100	Perform the following steps to verify the version. <ol style="list-style-type: none"> 1. Launch the Maintenance Tool. The Maintenance Tool window appears. 2. In the Maintenance Tool window, click View Experion Feature Packages/Uninstall Experion Product.

Component	Version	Version verification (Only one option is listed)
Experion_GUS_Remote_Displays	051.001.02100	Perform the following steps to verify the version. <ol style="list-style-type: none"> 1. Launch the Maintenance Tool. The Maintenance Tool window appears. 2. In the Maintenance Tool window, click View Experion Feature Packages/Uninstall Experion Product.
Honeywell_HCL_Runtime	051.001.01800	Perform the following steps to verify the version. <ol style="list-style-type: none"> 1. Launch the Maintenance Tool. The Maintenance Tool window appears. 2. In the Maintenance Tool window, click View Experion Feature Packages/Uninstall Experion Product.
Honeywell_IKB_Service	051.001.02100	Perform the following steps to verify the version. <ol style="list-style-type: none"> 1. Launch the Maintenance Tool. The Maintenance Tool window appears. 2. In the Maintenance Tool window, click View Experion Feature Packages/Uninstall Experion Product.
Honeywell_INF_Support	051.001.00800	Perform the following steps to verify the version. <ol style="list-style-type: none"> 1. Launch the Maintenance Tool. The Maintenance Tool window appears. 2. In the Maintenance Tool window, click View Experion Feature Packages/Uninstall Experion Product.
Icnp4drv	051.001.00800	Perform the following steps to verify the version. <ol style="list-style-type: none"> 1. Launch the Maintenance Tool. The Maintenance Tool window appears. 2. In the Maintenance Tool window, click View Experion Feature Packages/Uninstall Experion Product.
Honeywell_Redirection_Manager	051.001.02100	Perform the following steps to verify the version. <ol style="list-style-type: none"> 1. Launch the Maintenance Tool. The Maintenance Tool window appears. 2. In the Maintenance Tool window, click View Experion Feature Packages/Uninstall Experion Product.
Experion_Remote_Native_Window	051.001.02100	Perform the following steps to verify the version. <ol style="list-style-type: none"> 1. Launch the Maintenance Tool. The Maintenance Tool window appears. 2. In the Maintenance Tool window, click View Experion Feature Packages/Uninstall Experion Product.

Component	Version	Version verification (Only one option is listed)
Honeywell_Safeview	051.001.00800	Perform the following steps to verify the version. <ol style="list-style-type: none"> 1. Launch the Maintenance Tool. The Maintenance Tool window appears. 2. In the Maintenance Tool window, click View Experion Feature Packages/Uninstall Experion Product.
Experion_Server_TPS	051.001.02100	Perform the following steps to verify the version. <ol style="list-style-type: none"> 1. Launch the Maintenance Tool. The Maintenance Tool window appears. 2. In the Maintenance Tool window, click View Experion Feature Packages/Uninstall Experion Product.
Honeywell Signon Manager	051.001.02100	Perform the following steps to verify the version. <ol style="list-style-type: none"> 1. Launch the Maintenance Tool. The Maintenance Tool window appears. 2. In the Maintenance Tool window, click View Experion Feature Packages/Uninstall Experion Product.
Honeywell Signon Manager ACR120USB plugin	051.001.02100	Perform the following steps to verify the version. <ol style="list-style-type: none"> 1. Launch the Maintenance Tool. The Maintenance Tool window appears. 2. In the Maintenance Tool window, click View Experion Feature Packages/Uninstall Experion Product.
Honeywell FTE Switch Configuration Tool	051.001.00800	Launch the Launch switchtool.exe . Help > About
Honeywell System Management Runtime	051.001.02100	Perform the following steps to verify the version. <ol style="list-style-type: none"> 1. Launch the Maintenance Tool. The Maintenance Tool window appears. 2. In the Maintenance Tool window, click View Experion Feature Packages/Uninstall Experion Product.
TPN_Backup_Restore	051.001.00800	Perform the following steps to verify the version. <ol style="list-style-type: none"> 1. Launch the Maintenance Tool. The Maintenance Tool window appears. 2. In the Maintenance Tool window, click View Experion Feature Packages/Uninstall Experion Product.

Component	Version	Version verification (Only one option is listed)
HoneywellTPNFT_Support	051.001.00800	Perform the following steps to verify the version. <ol style="list-style-type: none"> 1. Launch the Maintenance Tool. The Maintenance Tool window appears. 2. In the Maintenance Tool window, click View Experion Feature Packages/Uninstall Experion Product.
Experion_TPS_System_Displays	051.001.02100	Perform the following steps to verify the version. <ol style="list-style-type: none"> 1. Launch the Maintenance Tool. The Maintenance Tool window appears. 2. In the Maintenance Tool window, click View Experion Feature Packages/Uninstall Experion Product.
Honeywell TPS Domain Console Configuration	051.001.02100	Perform the following steps to verify the version. <ol style="list-style-type: none"> 1. Launch the Maintenance Tool. The Maintenance Tool window appears. 2. In the Maintenance Tool window, click View Experion Feature Packages/Uninstall Experion Product.
Honeywell File Transfer - Server and Client	051.001.00800	Perform the following steps to verify the version. <ol style="list-style-type: none"> 1. Launch the Maintenance Tool. The Maintenance Tool window appears. 2. In the Maintenance Tool window, click View Experion Feature Packages/Uninstall Experion Product.
Honeywell File Transfer - Client	051.001.02100	Perform the following steps to verify the version. <ol style="list-style-type: none"> 1. Launch the Maintenance Tool. The Maintenance Tool window appears. 2. In the Maintenance Tool window, click View Experion Feature Packages/Uninstall Experion Product.
HoneywellTPSINT_Support	051.001.00800	Perform the following steps to verify the version. <ol style="list-style-type: none"> 1. Launch the Maintenance Tool. The Maintenance Tool window appears. 2. In the Maintenance Tool window, click View Experion Feature Packages/Uninstall Experion Product.
Honeywell USB Storage Disable	051.001.02100	Perform the following steps to verify the version. <ol style="list-style-type: none"> 1. Launch the Maintenance Tool. The Maintenance Tool window appears. 2. In the Maintenance Tool window, click View Experion Feature Packages/Uninstall Experion Product.

Component	Version	Version verification (Only one option is listed)
Honeywell PC Universal Station	051.001.02100	Perform the following steps to verify the version. <ol style="list-style-type: none"> 1. Launch the Maintenance Tool. The Maintenance Tool window appears. 2. In the Maintenance Tool window, click View Experion Feature Packages/Uninstall Experion Product.
Honeywell Security Model - Workstation	051.001.02100	Perform the following steps to verify the version. <ol style="list-style-type: none"> 1. Launch the Maintenance Tool. The Maintenance Tool window appears. 2. In the Maintenance Tool window, click View Experion Feature Packages/Uninstall Experion Product.
Honeywell FTE MUX Win10 Driver	051.001.02400	Perform the following steps to verify the version. <ol style="list-style-type: none"> 1. Launch the Maintenance Tool. The Maintenance Tool window appears. 2. In the Maintenance Tool window, click View Experion Feature Packages/Uninstall Experion Product.
Honeywell Multifactor Authentication	051.001.02100	Perform the following steps to verify the version. <ol style="list-style-type: none"> 1. Launch the Maintenance Tool. The Maintenance Tool window appears. 2. In the Maintenance Tool window, click View Experion Feature Packages/Uninstall Experion Product.
Honeywell Multifactor Authentication32	051.001.02100	Perform the following steps to verify the version. <ol style="list-style-type: none"> 1. Launch the Maintenance Tool. The Maintenance Tool window appears. 2. In the Maintenance Tool window, click View Experion Feature Packages/Uninstall Experion Product.
Honeywell Multifactor Domain Policy Templates	051.001.02100	Perform the following steps to verify the version. <ol style="list-style-type: none"> 1. Launch the Maintenance Tool. The Maintenance Tool window appears. 2. In the Maintenance Tool window, click View Experion Feature Packages/Uninstall Experion Product.
Honeywell Signon Manager Database Server	051.001.02100	Perform the following steps to verify the version. <ol style="list-style-type: none"> 1. Launch the Maintenance Tool. The Maintenance Tool window appears. 2. In the Maintenance Tool window, click View Experion Feature Packages/Uninstall Experion Product.

Component	Version	Version verification (Only one option is listed)
Honeywell Signon Manager Fingerprint Enrollment	051.001.02100	Perform the following steps to verify the version. <ol style="list-style-type: none"> 1. Launch the Maintenance Tool. The Maintenance Tool window appears. 2. In the Maintenance Tool window, click View Experion Feature Packages/Uninstall Experion Product.
Honeywell Signon Manager Fingerprint Plugin	051.001.02100	Perform the following steps to verify the version. <ol style="list-style-type: none"> 1. Launch the Maintenance Tool. The Maintenance Tool window appears. 2. In the Maintenance Tool window, click View Experion Feature Packages/Uninstall Experion Product.
Honeywell Signon Manager Handler Lumidigm	051.001.02100	Perform the following steps to verify the version. <ol style="list-style-type: none"> 1. Launch the Maintenance Tool. The Maintenance Tool window appears. 2. In the Maintenance Tool window, click View Experion Feature Packages/Uninstall Experion Product.
Honeywell HSR MUX Driver	051.001.00800	Perform the following steps to verify the version. <ol style="list-style-type: none"> 1. Launch the Maintenance Tool. The Maintenance Tool window appears. 2. In the Maintenance Tool window, click View Experion Feature Packages/Uninstall Experion Product.
Honeywell PRP MUX Driver	051.001.00800	Perform the following steps to verify the version. <ol style="list-style-type: none"> 1. Launch the Maintenance Tool. The Maintenance Tool window appears. 2. In the Maintenance Tool window, click View Experion Feature Packages/Uninstall Experion Product.
ELCN_node	051.001.02100	Perform the following steps to verify the version. <ol style="list-style-type: none"> 1. Launch the Maintenance Tool. The Maintenance Tool window appears. 2. In the Maintenance Tool window, click View Experion Feature Packages/Uninstall Experion Product.
HM_base	051.001.02100	Perform the following steps to verify the version. <ol style="list-style-type: none"> 1. Launch the Maintenance Tool. The Maintenance Tool window appears. 2. In the Maintenance Tool window, click View Experion Feature Packages/Uninstall Experion Product.

10.2 Controllers and tools version

Component	Version	Version verification (Only one option is listed)
Control Builder	R510.1	Perform the following steps to verify the version. <ol style="list-style-type: none"> 1. Launch the Configuration Studio. 2. Choose Configuration Studio > Control Strategy > Configure Process Control Strategies. 3. Choose Help > About...
DBADMIN	510.1.37.0	Perform the following steps to verify the version. <ol style="list-style-type: none"> 1. Open Windows Explorer and browse to C:\Program Files (X86)\Honeywell Experion PKS\Engineering Tools\system\bin\pserdbadmin.dll. 2. Click Properties > Details tab.
Import/Export Tool	EXP510.1-37.0	Perform the following steps to verify the version. <ol style="list-style-type: none"> 1. Launch the Import-Export Tool. 2. Choose Help>About...
IOTOOL	EXP510.1-37.0	Perform the following steps to verify the version. <ol style="list-style-type: none"> 1. Launch the Configuration Studio. 2. Choose Control Strategy > Maintain IO Modules. 3. Choose Help > About...
Network Tools	EXP510.1-37.0	Perform the following steps to verify the version. <ol style="list-style-type: none"> 1. Launch the Configuration Studio. 2. Choose Control Strategy > Maintain Control System Firmware. 3. Click Help > About...
Engineering Tools database	EXP510.1-37.0	Perform the following steps to verify the version. <ol style="list-style-type: none"> 1. Launch the Import-Export Tool. 2. Choose Help > About... ERDB version is displayed after Import-Export tool version.
Application Control Environment (ACE)	510.1.37.0	Perform the following steps to verify the version. <ol style="list-style-type: none"> 1. Open Windows Explorer and browse to C:\Program Files\Honeywell Experion PKS\Engineering Tools\system\bin\ace.exe. 2. Right-click Properties > Details tab.
Simulation Control Environment (SIM-C200E)	510.1.37.0	Perform the following steps to verify the version. <ol style="list-style-type: none"> 1. Open Windows Explorer and browse to C:\Program Files\Honeywell Experion PKS\Engineering Tools\system\bin\sce.exe. 2. Right-click Properties > Details tab.

Component	Version	Version verification (Only one option is listed)
Simulation Control Environment (SIM-C300)	510.1.37.0	Perform the following steps to verify the version. <ol style="list-style-type: none"> 1. Open Windows Explorer and browse to C:\Program Files\Honeywell Experion PKS\Engineering Tools\system\bin\simc300.exe. 2. Right-click Properties > Details tab..
IOLIM Simulation (SIM-IOLIM)	510.1.37.0	Perform the following steps to verify the version. <ol style="list-style-type: none"> 1. Open Windows Explorer and browse to C:\Program Files\Honeywell Experion PKS\Engineering Tools\system\bin\simiolim.exe. 2. Right-click Properties > Details tab.
Upgrade Tool	510.1.37.0	Open Configuration Studio. <ol style="list-style-type: none"> 1. Choose Configuration Studio > Experion PKS Cluster Upgrade> Prepare the Cluster for an Upgrade. This opens the Upgrade Tool. 2. In Upgrade Tool, choose Help > About...
FTE Driver	510.1.37.0	Perform the following steps to verify the version. <ol style="list-style-type: none"> 1. Launch the Maintenance Tool. The Maintenance Tool window appears. 2. Select View Experion Feature Packages/Uninstall Honeywell Product Honeywell FTE MUX Driver.

10.3 Server and client versions

Component	Version	Version verification (Only one option is listed)
Experion Server	510.1.39.1	Perform the following steps to verify the version. <ol style="list-style-type: none"> 1. Launch the Start-Stop Experion PKS Server. 2. In the Experion PKS Server dialog box, choose File > About...
Experion Console Station	510.1.39.1	Perform the following steps to verify the version. <ol style="list-style-type: none"> 1. Launch the Start-Stop Experion PKS Console Station. 2. In the Experion PKS Server dialog box, choose File > About..
HMIWeb Station	6.10.100.339	Perform the following steps to verify the version. <ol style="list-style-type: none"> 1. Choose Honeywell Experion PKS > Server > Station. 2. Choose Help > About...

Component	Version	Version verification (Only one option is listed)
HMIWeb Display Builder	R320.4	Perform the following steps to verify the version. <ol style="list-style-type: none"> 1. Choose Honeywell Experion PKS > Server > HMIWeb Display Builder. 2. Choose Help > About...
Quick Builder	5.5.1.41	Perform the following steps to verify the version. <ol style="list-style-type: none"> 1. In the Experion PKS Server dialog box, choose File > About.. 2. Under Provider, look for Honeywell.QB.QBProvider.Provider.
Configuration Studio	4.3.0.136	Perform the following steps to verify the version. <ol style="list-style-type: none"> 1. Launch the Configuration Studio. 2. Under Application, look for Honeywell CDF. ConfigStudio.

10.4 TPS Software Component Versions

Component	Version	Version verification (Only one option is listed)
GUS Display Builder	510.1.37.0.0	<ol style="list-style-type: none"> 1. Choose Honeywell Experion PKS > TPS Applications > GUS Display Builder. 2. Choose Help > About Honeywell GPB.
Native Window	510.1.37.0.0	<ol style="list-style-type: none"> 1. Choose Honeywell Experion PKS > TPS Applications > Native Window. 2. Click Help > About Native Window.
TPN Backup Restore	510.1.8.0.0	<ol style="list-style-type: none"> 1. Choose Honeywell Experion PKS > TPS Applications > TPN Backup-Restore. 2. Choose Help > About...
Component Library Editor	510.1.37.0.0	<ol style="list-style-type: none"> 1. Choose Honeywell Experion PKS > TPS Applications > GUS Display Builder Tools > Component Library Editor. 2. Choose Help > About Library Editor.
HOPC Server	510.1.37.0	<ol style="list-style-type: none"> 1. Open Windows Explorer and browse to C:\Program Files\Honeywell\TPS\GUS\ hopcsrvr.exe. 2. Right-click Properties > Details tab and verify File Version.
NWDDDB Server	510.1.18.0	<ol style="list-style-type: none"> 1. Open Windows Explorer and browse to C:\Program Files\Honeywell\TPS\GUS\ nwddb_server.exe. 2. Right-click Properties > Details tab and verify File Version.
LCNP Status Applet	510.1.37.0	<ol style="list-style-type: none"> 1. Open Windows Explorer and browse to C:\Program Files\Honeywell\TPS\Emulators\ emstatus.exe. 2. Right-click Properties > Details tab and verify File Version.

Component	Version	Version verification (Only one option is listed)
File Transfer	510.1.8.0	<ol style="list-style-type: none"> 1. Open Windows Explorer and browse to C:\Program Files\Honeywell\TPS\TPSxfer\ FTService.exe. 2. Right-click Properties > Details tab and verify File Version.
CL Server	510.1.18.0	<ol style="list-style-type: none"> 1. Open Windows Explorer and browse to C:\Program Files\Honeywell\TPS\CLAPPServer\clsrvdss.exe. 2. Right-click Properties > Details tab and verify File Version.
TPN Server	510.1.37.0	<ol style="list-style-type: none"> 1. Open Windows Explorer and browse to C:\Program Files\Honeywell\TPS\TPNServer\ tpdss.exe. 2. Right-click Properties > Details tab and verify File Version.

10.5 Compatibility with TPN releases

The following table presents the compatibility between the Experion (ESVT, ES-T, ACE-T) and TPN releases.

Experion release	Minimum TPN system software
R201, R21x , R301.x	TPN R641.2
R31x.x , R400.x, R410.x,	TPN R535.1 or later R5xx releases in this series.
R430.x, R431.x, R432.x, R500.x, R501.x	TPN R652.1 or later R6xx releases in this series.

NOTE

- For customers with no existing US or GUS nodes: GUS-TPN Software CD R652.1 (or later) is required.
- For customers with no existing Experion APP or AM nodes: TPN Application Module Software CD R652.1 (or later) is required.

To use some Experion features, newer versions of TPN are required for proper integration with Experion. They are enumerated as follows:

TPN software release version	Required for this functionality	Notes
TPN R687.1	<ul style="list-style-type: none"> • Experion Local Control Network (ELCN) • Triconex Communication Module Interface (TCMI) 	<p>For TCMI capability, ULM R301.17 is also required.</p> <p>A minimum of Experion R510.1 is required for ELCN functionality.</p>
TPN R686.2	<ul style="list-style-type: none"> • Enhanced Network Bridge (ENB) 	<p>ULM R301.16 is also required.</p> <p>For Experion Direct Connection capability (optional license), a minimum of Experion R432.2/R500.2 is required.</p>
TPN R685.1	EUCN Part 2 (that is, peer-to-peer from C300 Controllers to EHPM Controllers).	ULM R301.12 is required.

TPN software release version	Required for this functionality	Notes
TPN R685.3	EUCN Part 2b (i.e. automatic NIM point import to Experion database)	ULM R301.14 is also required.
TPN R685.3	Experion Highway Bridge (EHB)	EHB is supported for On-Process Migrations starting R431.
TPN R685.1	The ability to load Sequence Programs from the Experion Detail Display.	Functionality gives a warning message if attempted to be used from an earlier TPN version.
TPN R683.2 (or later)	Fully functioning integration for HMI Web TPS Detail Displays.	Experion R410.x (or later) is also required.
TPN R684.2 (or later)	EUCN Part 1 (ENIM/EHPM) functionality.	Need ULM R301.11 (or later).
TPN R681.x (or later)	Proper integration of Selective Contact Cutout functionality.	In addition, Experion R311.x (or later) is required.
TPN R680.1 (or later)	Not displaying disabled alarms on Flex Stations.	In addition, Experion R310.x (or later) is required.
TPN R680.1 (or later)	To allow the "Option to display Uncertain Quality for TPS points" functionality.	Option found in TPN Server component configuration.

The Utilities & Load Module Media (ULM) contains (among other things) the EST and ESVT load modules, which are necessary for proper Experion integration. It is crucial to have the version of the ULM that matches with your version of Experion software to ensure proper integration. Following are specific features and their versions:

Utilities & Load Module Media (ULM) requirements

- The Utilities and Load Module Media (ULM) version for Experion R410.x is R301.9.
- The Utilities and Load Module Media (ULM) version for Experion R430.x/Experion R431.x is R301.12.
- The Utilities and Load Module Media (ULM) version for Experion R432.x/Experion R500.x would be R301.16.
- The Utilities and Load Module Media (ULM) version for Experion R510.x would be R301.17.

EST Load Module version	Required for this functionality	Notes
EST.LO load module version 68.9 (or later)	Required for Experion Console Enable/Disable Functionality.	Functionality introduced in Experion R500 and later.
EST.LO load module version 68.5 (or later)	Required for the TPS System Status Indicator (S) and TPS Console status indicator (C) on the Experion Station status bar.	Currently not supported in TPN R53x.x.
EST.LO load module version 68.1 (or later)	Required for “Message clear required” functionality.	Additionally, supported on TPN R53x.x with EST.LO load module version 53.2 (or later).

For full EUCN vs. Experion vs. TPN release compatibility, always refer to the “EUCN” tab in the latest “Experion Update Matrix” spreadsheet, which is available on honeywellprocess.com.

HONEYWELL-QUALIFIED THIRD-PARTY SOFTWARE COMPONENT VERSION

Waiting on inputs for R510.1.

- [Honeywell-qualified third-party embedded software component versions](#)
- [Honeywell-qualified third-party software component versions](#)

11.1 Honeywell-qualified third-party software component versions

This section identifies third-party, Windows-based software applications that are supported on an Experion client system.

ATTENTION

Honeywell is not responsible for issues resulting from the installation or use of any software that have not been tested for Experion compatibility by Honeywell. In case, you must use any of the third-party software, ensure sufficient system resources such as memory, CPU performance, disk space, display space, and so on are available.

Software application and version	Verification Mechanism (Only one option is listed)
National Instruments NI-FBUS Communications Manager	<ol style="list-style-type: none"> 1. Choose Start > Programs > NI FBUS > Interface Config. 2. Click the System menu and select About fbConfig_NT. <p>Limitations/Compatibility</p> <p>Model Number TC-NIFB01 must be used with Model Number 1757-CN2FF Fieldbus Linking device. Only this model number must be purchased and not the general release of the Configurator from NI.</p>
Microsoft Office	<p>Qualified Microsoft Office products include the following:</p> <ul style="list-style-type: none"> • Microsoft Excel • Microsoft Word • Microsoft PowerPoint • Microsoft Access <p>Note: Any other MS components not mentioned in the list (Outlook, Communicator, and so on.) are not supported.</p> <p>For latest information about the qualified Microsoft Office packages for the Experion products, refer to the following link.</p> <p>https://www.honeywellprocess.com/library/support/Documents/Trusted/Experion/certified-microsoft-officepackages.pdf</p>
McAfee NT Scan	Qualified McAfee Antivirus package is available on the Honeywell Process Solutions website.
Symantec	Qualified Symantec package is available on the Honeywell Process Solutions website.
Honeywell TotalPlant Batch	Contact Honeywell TAC for more information.
Procedure Analyst	Contact Honeywell TAC for more information.

11.2 Honeywell-qualified third-party embedded software component versions

Component	Version	Verification mechanism (Only one option is listed)
Adobe Acrobat Reader (DC)	17.011.30078	<ol style="list-style-type: none"> 1. Open Adobe Reader. 2. Choose Help > About Adobe Reader
Dell Open Manage Server Administrator	8.5	<ol style="list-style-type: none"> 1. Click Start > Windows System > Control Panel > Programs > Programs and Features. 2. Check Dell OpenManage System Management Software (64-Bit). version in the Version column of the page.
Dell Open Manage Client Instrumentation	9.1.0.98	<ol style="list-style-type: none"> 1. Click Start > Windows System > Control Panel > Programs > Programs and Features. 2. Check Dell OpenManage System Management Software (64-Bit). version in

		the Version column of the page.
HP System Management Homepage	7.6.0.11	<ol style="list-style-type: none"> 1. Click Start > Windows System > Control Panel > Programs > Programs and Features. 2. Check HP System Management Homepage.version in the Version column of the page.
Internet Explorer	11.0	<ol style="list-style-type: none"> 1. Open Internet Explorer directly. 2. Choose Help > About Internet Explorer.
Microsoft .NET Framework	4.6.2	Ensure the following directory is available: C:\WINDOWS\Microsoft.NET\Framework\v1.1.4322.
MS Visual Basic Run-Time DLLs (Used with Model No. MZ-NTDE04 Application Development Toolkit.)	6.0.98.15	<ol style="list-style-type: none"> 1. Open Windows Explorer and browse to C:\windows\syswow64\msvbvm60.dll 2. Right-click msvbvm60.dll 3. Right-click Properties. Click Details tab.
MS Visual C++ Run-Time DLLs	7.0.14393.0	<ol style="list-style-type: none"> 1. Open Windows Explorer and browse to C:\windows\syswow64\MSVCRT.dll (Microsoft Run Time Library). 2. Right-click MSVCRT.dll 3. Right-click Properties. > Click Details tab
Crystal Reports 8.5	8.5.0.461	<ol style="list-style-type: none"> 1. Open Windows Explorer and browse to C:\windows\syswow64\crpe32.dll 2. Right-click Properties. Click Details tab.
SQL Server 2017 Standard	14.0.1000.169	<ol style="list-style-type: none"> 1. Open SQL Server Management Studio. 2. Type select @@version and press F5 key.
Objective Grid	13.0.0.0	<ol style="list-style-type: none"> 1. Open Windows Explorer and browse to C:\Program Files (x86)\Honeywell\ExperionPKS\Engineering Tools\System\Bin\og1300asu.dll 2. Right-click og1300asu.dll 3. Click Properties > Details tab.
Embedded Microsoft Windows 10 Enterprise 2016 LTSB (x64)	1607 (OS build 14393.187)	<ol style="list-style-type: none"> 1. Right-click Start > Run. 2. On Command prompt, type Winver and press ENTER.
Embedded Microsoft Windows Server 2016 Standard	1607 (OS build 14393.187)	<ol style="list-style-type: none"> 1. Right-click Start > Run. 2. On Command prompt, type Winver and press ENTER.
Embedded Microsoft Windows Server 2016 Datacenter OS	1607 (OS build 14393.187)	<ol style="list-style-type: none"> 1. Right-click Start > Run. 2. On Command prompt, type Winver and press ENTER.

SUPPORT FOR OPTIONAL SCADA INTERFACES

12.1 Purpose

This section covers the testing and support status of SCADA interfaces.

12.2 Interface support level

Honeywell provides varying levels of support for each SCADA interface dependent on availability of hardware and the level of support third-party vendors support their software. The following table provides the levels of support.

SCADA Interface Support Level	Description
Supported	SCADA interfaces that are fully supported by Honeywell and third party vendors. If interface relies on third party drivers then these are officially supported and qualified on the platforms required by Experion.
Validated	SCADA interfaces that have been validated by Honeywell or independently by a customer on Experion. However, these SCADA interfaces rely on third-party vendors who have either withdrawn the interface or do not officially support the platforms required by Experion. Honeywell support may be dependent on third-party vendors.
Not Validated	SCADA interfaces that have not been fully validated by Honeywell on Experion. These SCADA interfaces either rely on third-party vendor software that were not supported on the platforms required by Experion during development, or there is limited hardware availability or the hardware is obsolete. Honeywell support may be dependent on third-party vendors.

12.3 SCADA Interface Support

The following tables describe the levels of support for each SCADA interface.

12.3.1 Honeywell Devices

SCADA Interface	Support Level	Considerations
TDC 3000	Supported	Not applicable
S9000 Integration	Supported	Not applicable

SCADA Interface	Support Level	Considerations
620 LCS Serial and Ethernet Interface	Supported	Not applicable
UDC 3000/5000/6300 Integration	Supported	Not applicable
DPR Recorders	Supported	Not applicable
RM7800 Flame Safeguard	Not Validated	Not applicable
Universal Modbus Interface	Supported	Allows communication with UMC800, HC900 and other compatible devices and controllers. Please refer to the Honeywell Universal Modbus Interface Reference for more details.
MasterLogic	Supported	Contact TAC or your Sales Account Manager if you require this interface.
FSC and Safety Manager	Supported	Not applicable
ControlEdge RTU (including RTU2020)	Supported	Enhanced integration introduced in R500
ControlEdge PLC using OPC UA protocol	Supported	Enhanced integration introduced in R500.2 & R501

12.4 Industry Standard Interfaces

SCADA Interface	Support Level	Considerations
Modbus (RTU, Plus, ASCII & TCP) Interface	Supported	Enron Modbus interface also supports standard Modbus, and may be preferred in cases such as high latency Modbus TCP, or when a single Experion controller is preferred for access to multiple Modbus tables in the same device.
DNP3 Protocol Interface	Supported	Not applicable
OPC Interface (OPC SCADA Client)	Supported	It is recommended that MatrikonOPC servers are used for third party integration.
OPC UA Client Interface	Supported	
IEC-61850 Protocol Interface	Supported	IEC-61850 Protocol Interface is currently not supported by R510 BCC.
IEC-60870 Protocol Interface	Supported	IEC-60870 Protocol Interface is currently not supported by R510 BCC.

12.5 Third Party Devices

The remaining interfaces support third-party controllers. Note that some of the interfaces require communication software manufactured by the third-party.

For third-party devices not listed here, contact Honeywell TAC to discuss options including the use of MatrikonOPC drivers.

Legacy Experion interfaces not listed here may still be supported for upgrades only. For more information, refer to the latest release specific *Experion Software Change Notice*.

SCADA Interface	Support Level	Considerations
ABB Totalflow	Supported	Supported, validated with TCI Toolkit version 3.07, an XRC6990 RTU, and also with the ABB Totalflow emulator.
Allen-Bradley Interface	Supported	<p>It is recommended that RSLinx 4.00.01 is used for Experion R50x and later releases.</p> <p>R510: PAR 1-A3IXP93 (SQL dump files created every 1 hour on the R510 servers causing the C: drive to eventually fill up). Port conflict identified between RSLinx and SQL Server 2017. Issue is being worked with Rockwell.</p> <p>Per KSM2016-009: The use of the RSLinx Classic OPC Server running on an Experion server is not supported. RSLinx Classic is only qualified to run on the Experion server when servicing Allen Bradley SCADA channels or C200s ENET/CNET connected, not running as an OPC server.</p>
Allen-Bradley ControlLogix Interface	Supported	Matrikon OPC Server for Allen-Bradley PLC's is recommended for communications with Allen-Bradley ControlLogix PLC's.
Applicom	Not Validated	Honeywell has not validated this interface. The Applicom Interface has been withdrawn from public general sale in Experion. Consider using DSA to a previous Experion Server release to interface to Applicom devices.
Asea Interface	Not Validated	<p>Honeywell has not fully validated this interface.</p> <p>Very low risk as this is a serial interface.</p> <p>Honeywell plans to work with customers to validate. In the event of any issues found during validation, Honeywell support may be dependent on third party vendors.</p>
Bailey	Not Validated	<p>Honeywell has not fully validated this interface.</p> <p>The Bailey Interface has been withdrawn from public general sale in Experion.</p> <p>Note that the Bailey software (semAPI Release 1.2) does not support the Windows Server 2008 R2 and later 64-bit platform required by Experion Server.</p> <p>Consider using Honeywell's migration solution for Bailey systems: https://www.honeywellprocess.com/en-US/explore/products/control-monitoring-and-safety-systems/integrated-control-and-safety-systems/third-party-system-migration/Pages/migration-solution-for-bailey-systems.aspx </p>
Bristol Babcock OpenBSI Interface	Validated*	<p>Expected to work but not yet validated on a BCC topology. Contact TAC if this interface is required.</p> <p>Reference: http://www.documentation.emersonprocess.com/groups/public/documents/instruction_manuals/d301414x012.pdf </p>

SCADA Interface	Support Level	Considerations
Bristol Babcock RTU Serial Interface	Not Validated	Honeywell has not fully validated this interface.
Enron Modbus	Supported	Supported, validated with “NuFlo Cameron Scanner 2000” device.
Fisher ROC	Supported	Supports both Fisher ROC and Fisher ROC Plus protocols. Expected to work but not yet validated on a BCC topology.
GE Fanuc Series 90 PLC via Ethernet	Not Validated	<p>GE Fanuc Series 90 Interface has been qualified with GE Fanuc Host Communication Toolkit version 1.02 distributed as part of IC641SWP058B Toolkit for Windows NT C/C++ Applications.</p> <p>GE 9030 and GE Rx7i have been validated.</p> <p>Note that the GE Host Communications Toolkit has been discontinued by GE. Honeywell is not in a position to provide support for the toolkit. However, Honeywell has validated this interface to work with Experion server.</p> <p>The GE 9030 PLC reached end of life in October 2017.</p> <p>Also refer to the Be-Aware for more details on supported models: https://www.honeywellprocess.com/library/support/notifications/Customer/BW2005-14RevA_Experion-PSc%20GE%20Fanuc.pdf </p>
GE Series 6	Not Validated	<p>Honeywell has not validated this interface. The GE Series 6 Interface has been withdrawn from public general sale in Experion.</p> <p>Consider using DSA to a previous Experion Server release to interface to GE Series 6 devices</p>
GEC GEM80 PLC Interface	Not Validated	Honeywell has not fully validated this interface. Honeywell plans to work with customers to validate. In the event of any issues found during validation, Honeywell support may be dependent on third party vendors.
Hitachi Interface	Not Validated	Honeywell has not fully validated this interface. Honeywell plans to work with customers to validate. In the event of any issues found during validation, Honeywell support may be dependent on third party vendors.
Micromax LPU & Video Paperless	Not Validated	<p>Honeywell has not fully validated this interface. The L&N Micromax Interface has been withdrawn from public general sale in Experion.</p> <p>Consider using DSA to a previous Experion Server release to interface to Micromax devices.</p>
Moore 351, 352, 353, 383 Interface	Not Validated	<p>Honeywell has not validated this interface. This interface has been validated independently by a customer on Experion R43x. Requires Experion R430.4 or later.</p> <p>Very low risk as this is a serial interface.</p> <p>Honeywell plans to work with customers to validate. In the event of any issues found during validation, Honeywell support may be dependent on third party vendors.</p>

SCADA Interface	Support Level	Considerations
Moore APACS	Not Validated	<p>Honeywell has not fully validated this interface.</p> <p>As of the date of this publication, the latest release of the Siemens software is APACS Runtime API v4.51 distributed as part of SIMATIC PCS 7/APACS+ OS Option Software V8.0 SP1.</p> <p>Honeywell plans to work with customers to validate. In the event of any issues found during validation, Honeywell support may be dependent on third party vendors.</p> <p>Consider using a MatrikonOPC server to interface to Moore APACS DCS.</p> <p>Reference: http://cache.automation.siemens.com/dnI/Dg/DgxMTIzNQAA_79061961_DL/PCS7_APACS_OS_V80_SP1_ReadMe.pdf</p>
Omni Flow Computer	Not Validated	<p>Honeywell has not fully validated this interface.</p> <p>An Omni Enhanced interface was added in Experion R500 for customers requiring EFM data from Omni Flow Computers. This has been tested with emulators, but has not been validated against Omni hardware.</p> <p>Consider using a MatrikonOPC server to interface to Omni Flow Computers. This will not be useful for reading EFM data.</p> <p>Honeywell plans to work with customers to validate. In the event of any issues found during validation, Honeywell support may be dependent on third party vendors.</p>
Siemens S5	Not Validated	<p>Honeywell has not validated this interface.</p> <p>As of the date of this publication, the latest release of the Siemens software is SIMATIC NET PC Software V8.2. This release of the Siemens software does not support the TF communications protocol anymore.</p> <p>Consider using DSA to a previous Experion Server release to interface to Siemens S5 devices.</p> <p>Reference: https://cache.automation.siemens.com/dnI/jU/jUyNzcONQAA_61630923_HB/INH_SIM-NET_76.pdf</p>
Siemens S7	Not Validated	<p>As of the date of this publication, the latest release of the Siemens software is distributed as part of SIMATIC NET PC Software V14.</p> <p>Honeywell plans to work with customers to validate this release. In the event of any issues found during validation, Honeywell support may be dependent on third party vendors</p> <p>Honeywell has validated the previous software version S7-1613 V8.1 distributed as part of SIMATIC NET PC Software V8.2.</p> <p>Reference: https://support.industry.siemens.com/cs/document/63098071/simatic-net-dvd-v8-2-released-for-delivery?dti=0&lc=en-WW https://support.industry.siemens.com/cs/document/109346876/simatic-net-dvd-v13-released-for-delivery?dti=0&lc=en-WW</p>
Spirit IT Flow-X Interface	Supported	Expected to work but not yet validated on a BCC topology.

SCADA Interface	Support Level	Considerations
Texas Instruments	Not Validated	Honeywell has not fully validated this interface. The Texas Instruments Interface has been withdrawn from public general sale in Experion. Consider using DSA to a previous Experion Server release to interface to Texas Instrument devices.
Yamatake MA500 Interface	Not Validated	Not applicable

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-
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