FactoryTalk Historian Site Edition

What's new in version 7.00 | November 2020

PUBLIC

FactoryTalk® software

Most comprehensive and trusted industrial digital transformation software suite on the market

FactoryTalk
by ROCKWELL AUTOMATION

DesignSuite

Design automation and information systems to **reduce time to market and mitigate risk** through your equipment lifecycle.

OperationSuite

Everything you need to **confidently operate and optimize** production, quality, and uptime.

MaintenanceSuite

Maintain equipment health to **help prevent unplanned downtime** and quickly restore it when it occurs.

InnovationSuite
powered by **PTC**

Innovative solutions to **connect your digital enterprise** that harness information faster, to make confident decisions.

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FT Historian SE - data infrastructure

VISUALIZATION SUITE

ANALYTICS SUITE

HISTORIAN SYSTEM ACCESS

FactoryTalk® Historian Site Edition (SE) SERVER

| Notifications | Event Frames | Analytics | Asset Framework | Data Archive |

HISTORIAN INTERFACES – OPTIMIZES DATA STORAGE

What's new with FactoryTalk Historian SE version 7.00.00

OSIsoft PI technology

New features! FactoryTalk Historian SE version 7.00 adopts the latest available version of PI System from OSIsoft.

Operating systems support

FactoryTalk Historian SE version 7.00 supports the latest available server operating systems.

FactoryTalk Services Platform

FactoryTalk Historian SE version 7.00 incorporates the latest available FactoryTalk® Services Platform to better align with FactoryTalk® View SE version 12 and Studio 5000 Logix Designer® application.

Updated PI Server components

What's new in FactoryTalk Historian SE version 7.00

Incorporates the following components:

- **PI Data Archive 2018 SP3 Patch 1** *version 3.4.435.604*

- PI Asset Framework (AF) 2018 SP3 Patch 2 *version 2.10.8.440*

- PI Asset Framework (AF) Client 2018 SP3 Patch 2 *version 2.10.8.440*

- PI Asset Analysis 2018 SP3 *version 2.10.6.195*

- PI Notifications 2018 SP2 *version 2.10.5.9050*

The most stable and secure PI Server release available

Store and enhance

Notifications

Event Frames

Asset Analytics

Asset Framework

Data Archive
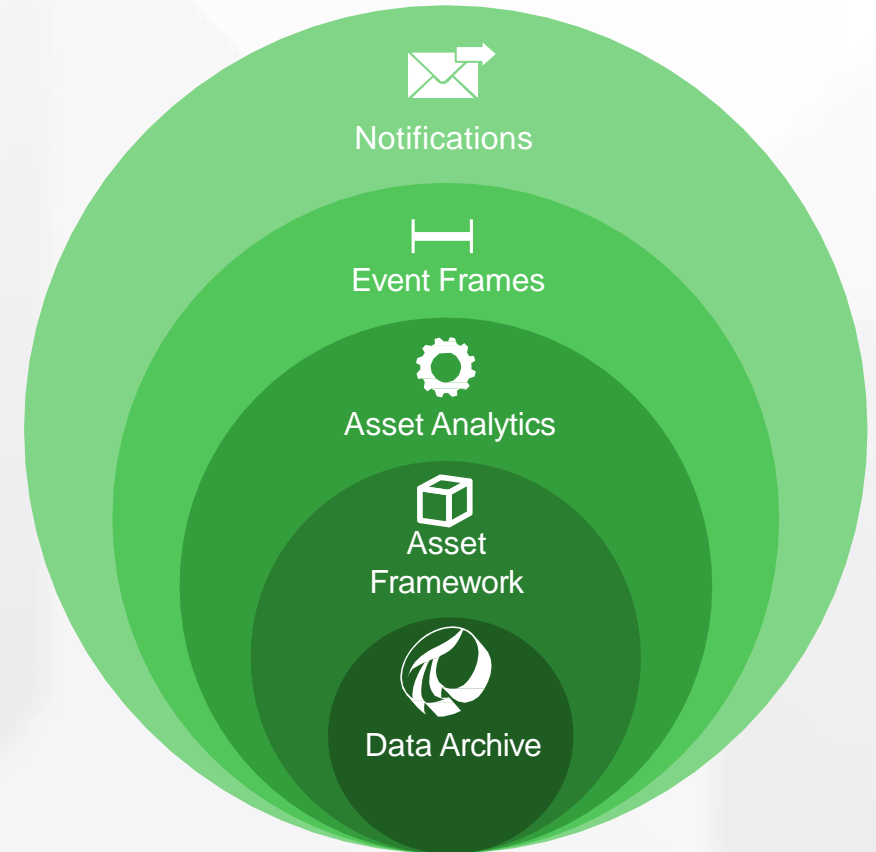
PI Server

Platform support

What's new in FactoryTalk Historian SE version 7.00

Server OS (Server and Interfaces)

- **Windows Server 2019** *New*
- Windows Server 2016
- Windows Server 2012 R2

Clients (Interfaces, Datalink, ProcessBook)

- Windows 10 / Windows 8.1
- **Windows Server 2019** *New*
- Windows Server 2016
- Windows Server 2012 R2

FactoryTalk Services Platform

- FTSP 6.20 (CPR 9 SR12) *New*

SQL Server - Standard and Express

- **SQL Server 2019 CU3** *New*
- **SQL Server 2017** *New*
- SQL 2016
- SQL 2014 SP3

Microsoft Excel

- **Office 365 (32-Bit and 64-bit*)** Desktop Installation *New*
- **Office 2019 (32-bit and 64-bit*)** *New*
- Office 2016 (32-bit **and 64-bit***) *New*
- Office 2013 (32-bit **and 64-bit***) *New*

*Not all functionality works on Excel (64 bit). Datalink (Legacy) and trend control are the most notable features that will not work.

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Common experience across the system

PlantPAx® Distributed Control System - system release 5.0

Performance guidelines are based on the use of the software versions listed below.

Recommended versions of software for new PlantPAx systems

- Studio 5000 Logix Designer application, version 33
- **FactoryTalk Historian software, version 7**
- FactoryTalk® View software, version 12
- FactoryTalk® VantagePoint® software, version 8
- FactoryTalk® Batch software, version 14
- FactoryTalk® AssetCentre software, version 10
- PlantPAx AppServ-Info (Historian) virtual template
  - FactoryTalk Historian SE version 7.00.00 is pre-installed but not activated
  - End user is responsible for acquiring the appropriate Microsoft OS license
  - Cat # 9528-APPHISENM

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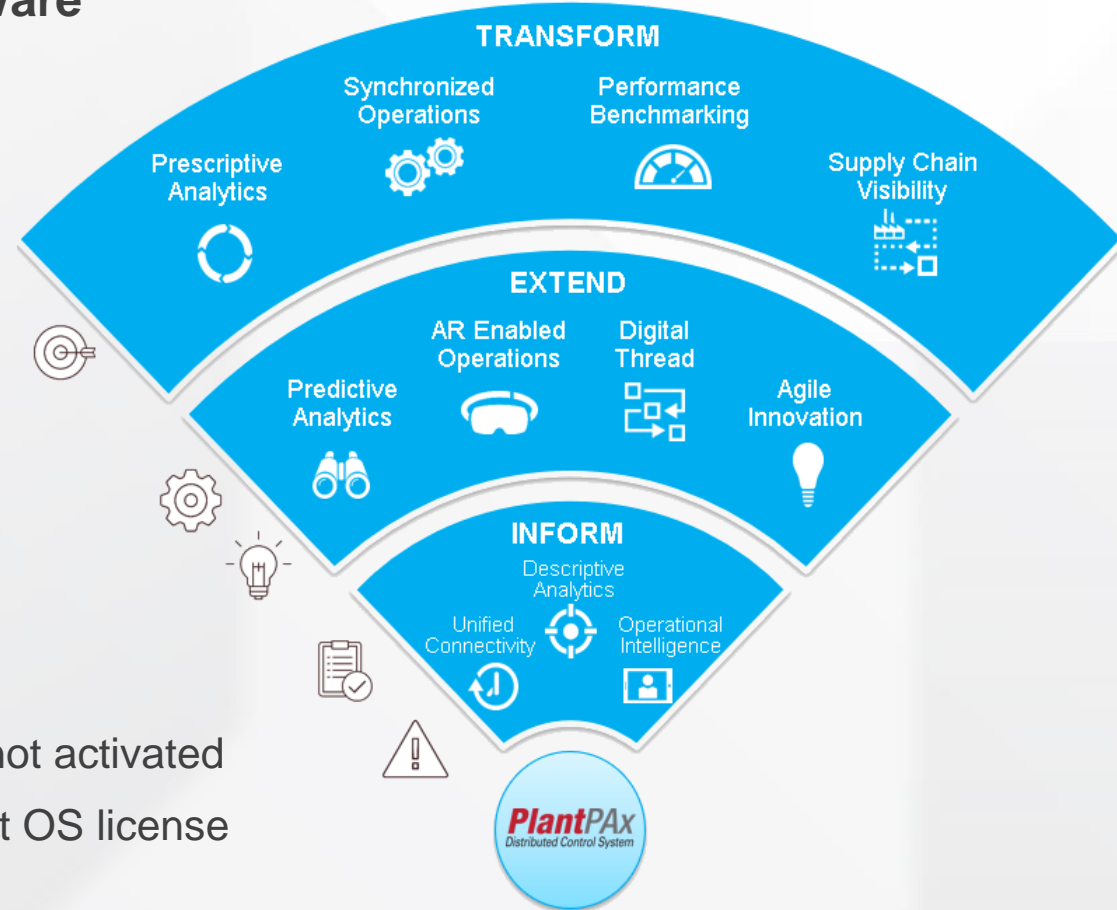
Value: common experience across the system

FactoryTalk® Services

ACTIVATION

Common software license management for all FactoryTalk® products

DIRECTORY

Common address lookup of resources that are shared among FactoryTalk enabled products

SECURITY

Common security authority for all FactoryTalk components in the system

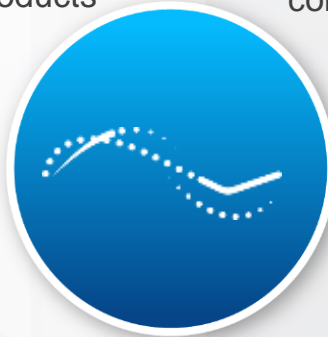**DIAGNOSTICS**

Common diagnostic messaging subsystem across all FactoryTalk products
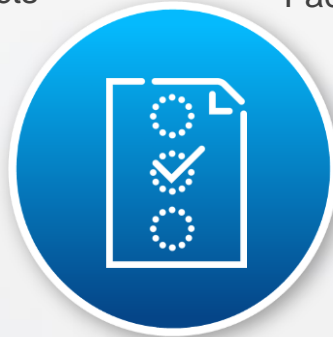
AUDIT

Comprehensive record of any changes made to the manufacturing system

LIVE DATA

Enterprise-wide access to real-time manufacturing data

ALARMS & EVENTS

Enterprise-wide notification to real-time FactoryTalk® Alarms and Events that require action

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Premier integration with TrendPro

What's new in FactoryTalk Historian SE version 7.00

Easy to own and quick to deploy

- In addition to the native integration to FactoryTalk® View SE TrendPro control, starting with View SE version 11, TrendPro allows FactoryTalk Historian SE to be a data source even when deployed in a separate FactoryTalk® Directory

- Fast retrieval of data in trending

- FactoryTalk Historian SE 7.00 and FactoryTalk View SE 12.00 ship with FactoryTalk® Services Platform 6.20 (CPR 9 SR12)

For more information

- See KB article ID QA45941 "Show OSI PI Historical Data on TrendPro Application"

- See KB article ID QA47854 "The FactoryTalk Historian Site Edition Alternative Architecture"
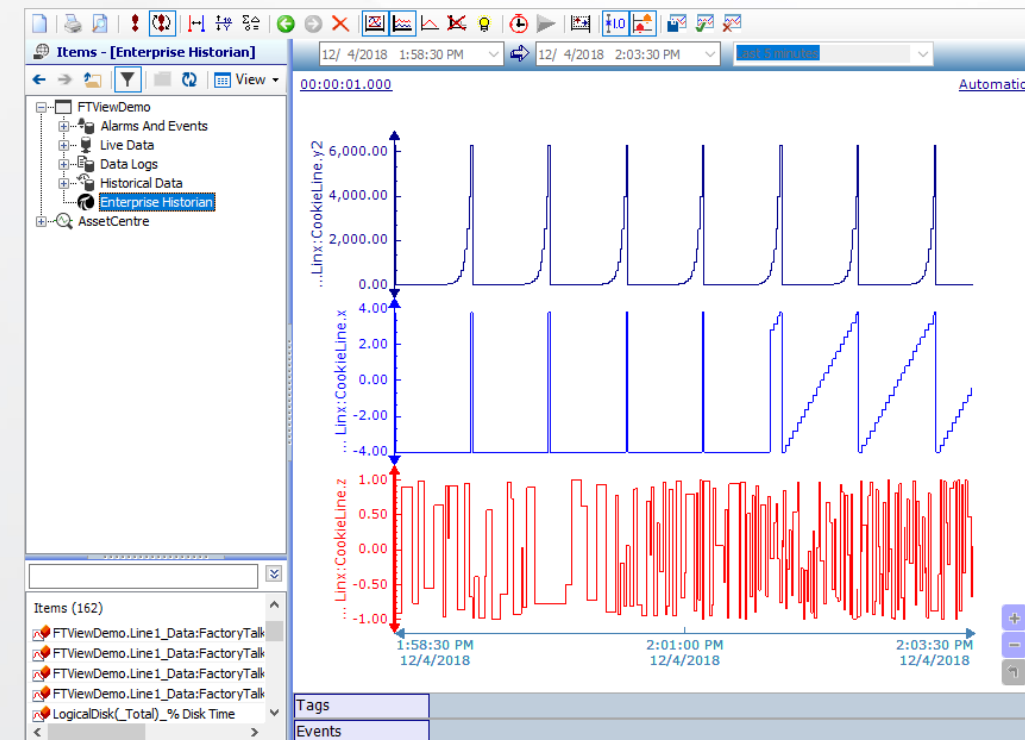
Updated client tools, interfaces and data access

What's New in FactoryTalk Historian SE version 7.00

Updated client tools

- Datalink 2019 SP1 Patch 1 version 5.50.02
- ProcessBook 2015 R3 Patch 1 version 3.70.01
- ActiveView 2015 R2 SP1 version 3.60.01

Interfaces

- FactoryTalk Historian SE Interface for ODBC (RDBMS) version 3.24.05
- FactoryTalk Historian SE Interface for Universal File Loader (UFL) version 3.60.07
- FactoryTalk Historian SE Interface for OPC HDA version 1.60.01
- FactoryTalk Historian Event Frames Generator (EFGen) version 4.00.40

Advance Server Options (Data Access)

- OLEDB Enterprise/Provider   2019 Patch 1
- OPC-DA Server   2018 Patch 1
- OPC HDA Server   2016
- ODBC   2016 R2
- JDBC   2019
- Web API   2019 SP1

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FactoryTalk Historian SE version comparison

	Version	5.01	6.00	7.00
	PI System Version Name	2015 R2 SP1	2017 R2	2018 SP3 Patch 1
	PI System Version Number	3.4.395.80	3.4.415.1188	3.4.435.604

Capabilities

	5.01	6.00	7.00
Future Data	√	√	√
Batch To Event Frames Migration	√	√	√
Support For Bulk Archive Queries	√	√	√
Automatic Corrupt Archive Detection	X	√	√
Online Archive Reprocessing	X	√	√
Event Queue Failure Detection And Recovery	X	√	√
Event Queue Reset	X	√	√
Connection History	X	√	√
Collective Member Communication with Transport Layer Security (TLS)	X	√	√
Network Manager Runs Under Least Required Privilege	X	√	√
Message Subsystem Runs Under Least Required Privilege	X	X	√
Scheduled Archive Shifts	X	X	√
Connection Balancing and Failback with AF SDK Clients	X	X	√

Subsystem components run under Least Required Privilege

What's new in FactoryTalk Historian SE version 7.00

All subsystems will be configured to run under Least Required Privileges

- Least Required Privileges restricts the privileges of someone who may have penetrated your system thereby minimizing the damage that they can do.

- This new version of Historian SE installs all subsystems with least required privileges, which greatly improves the security of the system.

- These subsystems are installed to run as Virtual Service Accounts except for PI AFLink subsystem, which runs as Network Service Account.

- When upgrading an existing system, if a subsystem is already configured to run as an account other than Local System account, then the upgrade will not change the account under which the subsystem is running.

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Scheduled Archive Shifts

What's new in FactoryTalk Historian SE version 7.00

This release introduces a feature for easier maintenance of archives.

- Users can now configure the FactoryTalk Historian SE Server to automatically shift historical archives deterministically at a specific time duration (rather than having the server shift at a non-deterministic time or manually forcing a shift).

- The result of this would be fixed to a configurable daily / weekly / monthly time duration.

- With daily duration, shifts happen at midnight every day. With weekly duration, shifts happen at the midnight of the first day of every week (This is based on the region. For USA, it is midnight on Sunday). With monthly duration, shifts happen at the midnight of the first day of every month.

- In collective environments, scheduled shift can be configured on the primary and applies to all members. Secondary members will shift based on the primary's time zone.

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Client-side Connection Balancing and Failback

What's new in FactoryTalk Historian SE version 7.00

This release introduces client-side connection balancing and failback.
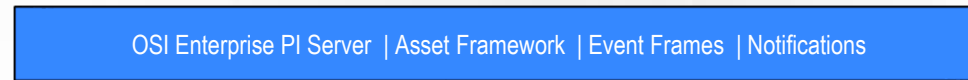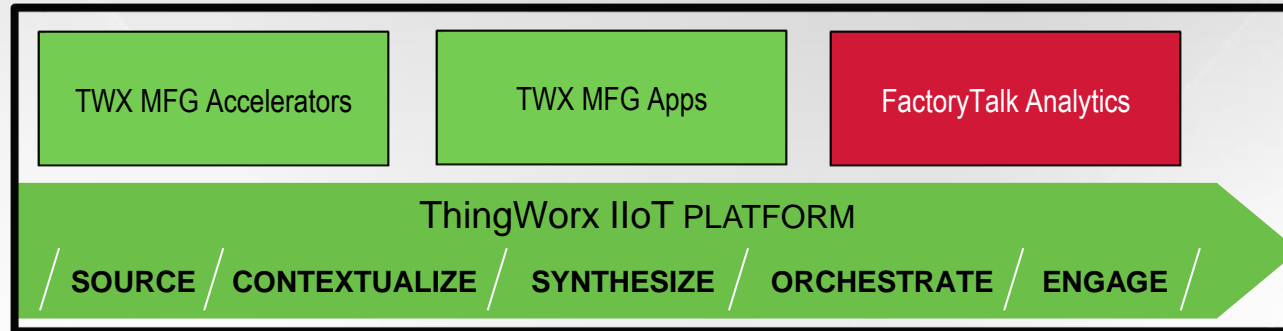
- Upon initial connection, rather than all clients connecting to the primary member of a collective, client connections will now be automatically distributed between the primary and secondary collective members.

- After an HA failover, failback switches the client connection back to the original member.

- This feature is available for AF SDK-based applications. To enable this feature on a client computer, first upgrade to PI AF Client 2018. Then use PI System Explorer to set the priority in the KST by setting the connection priority for all collective members to 1

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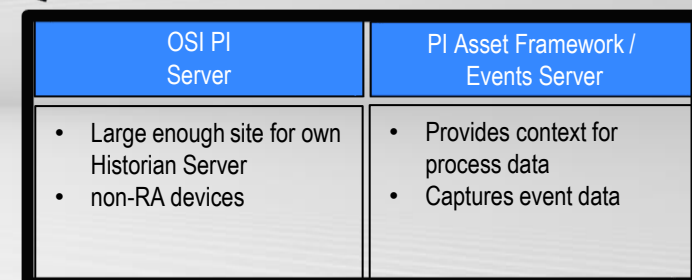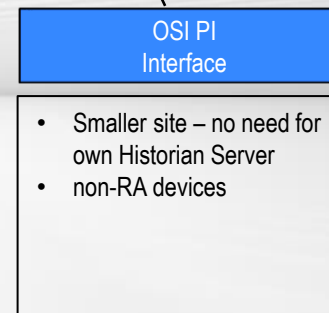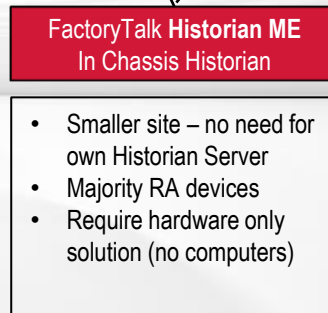# Architecture flexibility to fit all needs
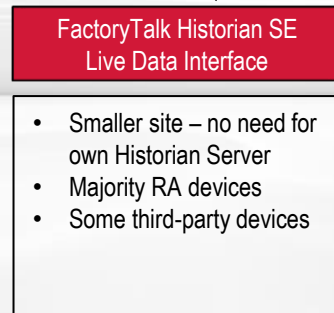
FactoryTalk® InnovationSuite powered by PTC

TWX MFG Accelerators	TWX MFG Apps	FactoryTalk Analytics

ThingWorx IIoT PLATFORM

SOURCE / CONTEXTUALIZE / SYNTHESIZE / ORCHESTRATE / ENGAGE

Enterprise

OSI Enterprise PI Server | Asset Framework | Event Frames | Notifications

Site

Rockwell Clients

View SE	Vantage Point	Other RA App

Fit for Purpose Apps

RA MES Platform

Regional Hub

FactoryTalk Historian SE Server	OSI PI Server

FactoryTalk Asset Framework / Events Server	FactoryTalk Historian SE Server	FactoryTalk Historian SE Live Data Interface	FactoryTalk **Historian ME** In Chassis Historian	OSI PI Interface	OSI PI Server	PI Asset Framework / Events Server
• Provides context for process data • Captures event data • Only available to Rockwell Automation (RA) Clients	• Large enough site for own Historian Server • Majority RA devices • Some third-party devices	• Smaller site – no need for own Historian Server • Majority RA devices • Some third-party devices	• Smaller site – no need for own Historian Server • Majority RA devices • Require hardware only solution (no computers)	• Smaller site – no need for own Historian Server • non-RA devices	• Large enough site for own Historian Server • non-RA devices	• Provides context for process data • Captures event data