FactoryTalk® Historian SE 10.0

FactoryTalk

Oct/2024

Rockwell Automation
expanding human possibility®

Agenda

1 System Overview

2 FactoryTalk® Historian SE – What's New

3 Why Update? Why now?

4 MyRockwell Software Portal

5 FactoryTalk® View TrendPro

6 Recommended Deployments

7 Additional Information

FactoryTalk
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FactoryTalk® Historian SE Server

A FactoryTalk Historian SE server includes a data point-limited license, Asset Framework, Event Frames, Analysis (calculation engine with results stored as time series) and Notifications.

Additionally, server licenses include the FactoryTalk® Live Data Interface and FactoryTalk® Linx for communications to Rockwell Automation controllers. Communications to third-party devices can occur through the FactoryTalk® Live Data interface using a third-party OPC UA or DA server (purchased separately).

Tag licensing is additive. Multiple license activations can be used on a single FactoryTalk Historian SE server.

FOR NEW FACTORYTALK HISTORIAN SERVER[1] DEPLOYMENTS:

- The maximum server size is 60,000 tags.

- 10% of total tags can be from any data source (Rockwell Automation or third-party data source).

- A Rockwell Automation data source is defined as a Rockwell Automation device or data shown on

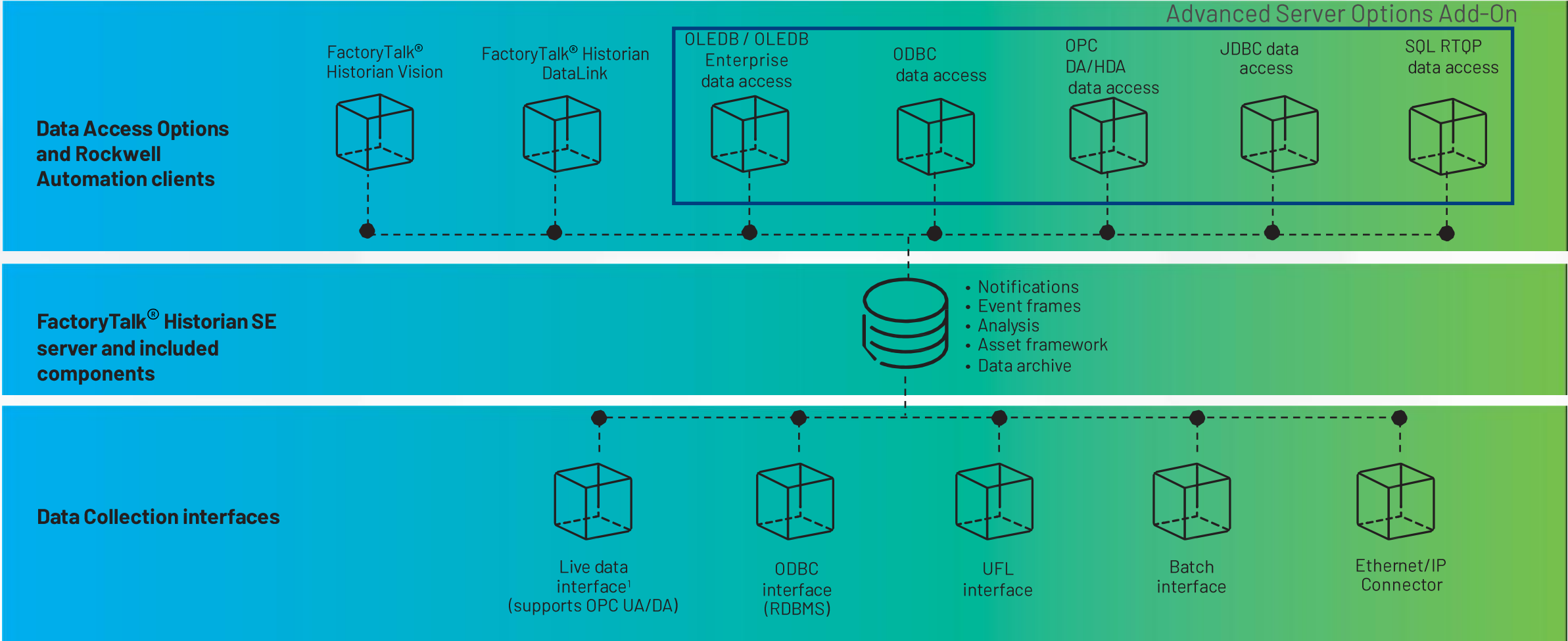- Rockwell Automation HMI as part of a FactoryTalk® System.

Tag Bundles

FactoryTalk®
Historian SE
250 tags

FactoryTalk®
Historian SE
500 tags

FactoryTalk®
Historian SE
1000 tags

FactoryTalk®
Historian SE
5000 tags

FactoryTalk®
Historian SE
10,000 tags

FactoryTalk®
Historian SE
20,000 tags

FactoryTalk®
Historian SE
50,000 tags

FT FactoryTalk
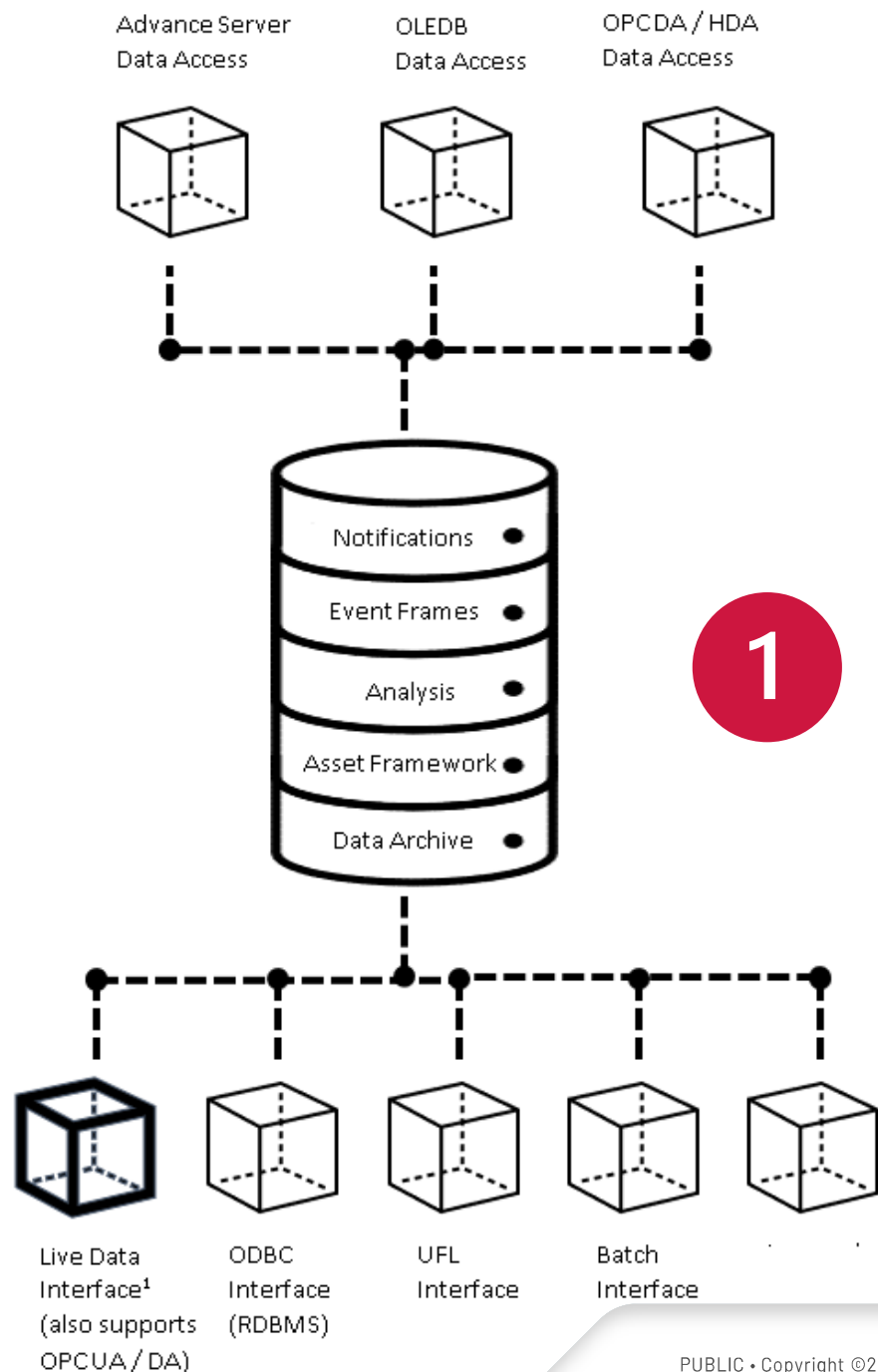by ROCKWELL AUTOMATION

[1] Version 8.00 and higher

FactoryTalk® Historian SE System Overview

FactoryTalk Historian Site Edition (SE) is a system of record for your operations across the entire plant. It provides the capability to collect, store, analyze and contextualize data using a powerful engine. The system optimizes data collection, compresses vast amounts of data in a small format and enables high-speed data retrieval.

Advanced Server Options Add-On

Data Access Options and Rockwell Automation clients

- FactoryTalk® Historian Vision
- FactoryTalk® Historian DataLink
- OLEDB / OLEDB Enterprise data access
- ODBC data access
- OPC DA/HDA data access
- JDBC data access
- SQL RTQP data access

FactoryTalk® Historian SE server and included components

- Notifications
- Event frames
- Analysis
- Asset framework
- Data archive

Data Collection interfaces

- Live data interface[1] (supports OPC UA/DA)
- ODBC interface (RDBMS)
- UFL interface
- Batch interface
- Ethernet/IP Connector
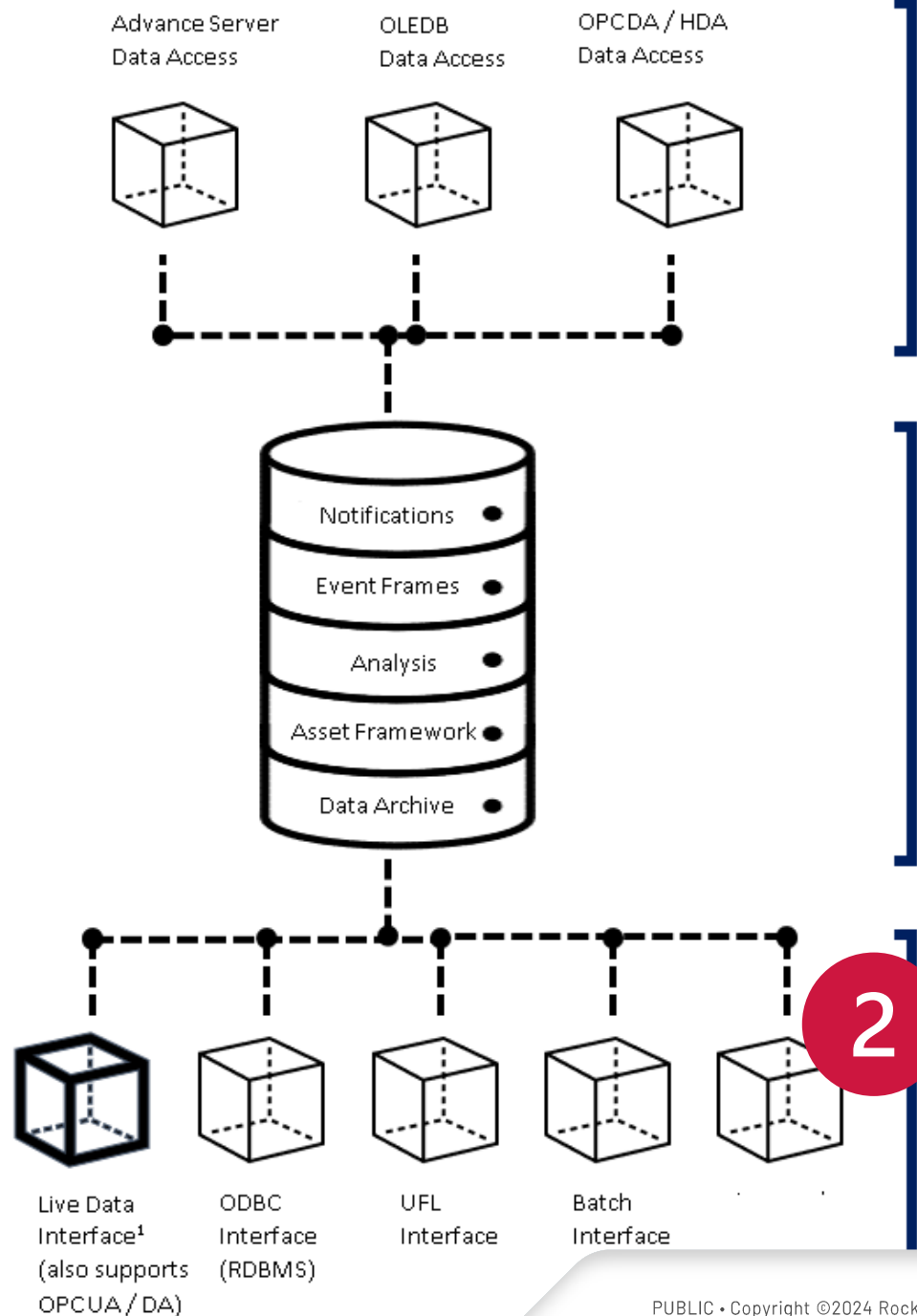
FactoryTalk Historian SE Server

Includes a data point-based license, Asset Framework, calculation engine, Event Frames and Notifications.

Additionally, server licenses include the FactoryTalk® Live Data Interface and FactoryTalk® Linx for communications to Rockwell Automation controllers.

Calculations such as Totalizers and Performance Equations do not consume tag licenses.

Communications to third-party devices can occur through the FactoryTalk® Live Data interface using a third-party OPC UA or DA server (purchased separately).

The diagram shows data access components (Advance Server Data Access, OLEDB Data Access, OPCDA/HDA Data Access) connecting to a database with layers: Notifications, Event Frames, Analysis, Asset Framework, Data Archive. Below are data collection interfaces: Live Data Interface[1] (also supports OPCUA/DA), ODBC Interface (RDBMS), UFL Interface, Batch Interface.

[1] included with FactoryTalk Historian SE Server

② Data Collection Interfaces

Interfaces are the software applications that take the data from your data source and send them to the FactoryTalk Historian SE server.

In addition to the **FactoryTalk® Live Data Interface**, which is included with every FactoryTalk Historian server, the following data collection interfaces are available;

- Historian **ODBC** Interface (aka RDBMS)
- Historian **Universal File Loader** (aka UFL)
- Historian **Batch Interface**
- Historian **Ethernet/IP Connector**
- Historian to Historian (**SE to SE**) Interface

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3 Data Access Options

Data access options are components that provide third-party client applications access to the data in the FactoryTalk Historian SE server.

When considering data access options, consider the following required steps:

1. Select the desired data access option:
   1. OLEDB Data Access
   2. OPC Data Access
   3. Advanced Server Option Add-On

2. Select the appropriate Unlimited Users Client Access Licenses (CAL) based on the Historian server tag count

Rockwell Automation Clients

Rockwell Automation Clients do not require any of the data access options

FT View SE / **FT** ViewPoint

FT Historian Vision (based on PI Vision)

FT Historian DataLink Excel Add-in

FT VantagePoint®

thingworx®

(used with the *FactoryTalk®*
Historian ThingWorx Connector)

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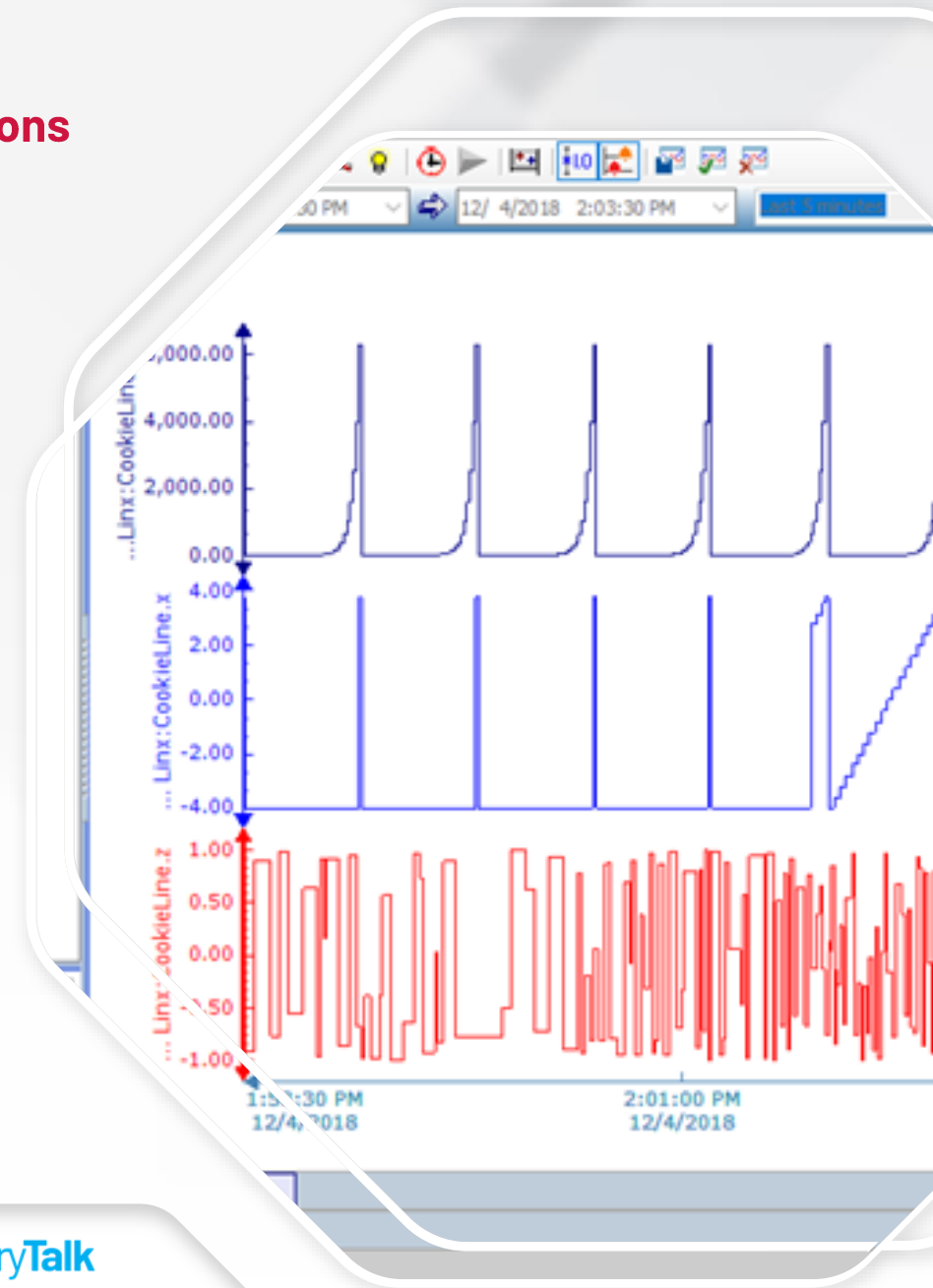
FactoryTalk® Historian Site Edition

Features – Overview

- Premier integration with Logix-based controllers

- Optimize data store with exception and compression

- Minimize data loss with redundant FactoryTalk® Live Data interface nodes – included with every FactoryTalk Historian SE server

- Contextualize data and link to external data sources using Asset Framework

- Track important events, like downtime with Event Frames

- Leverage a built-in powerful calculation engine - Analysis

- Stay informed with the Notification service

- Backfill data when migrating from legacy systems

- Access your data anytime with FactoryTalk Historian SE server high availability

What's New

FactoryTalk® Historian SE 10.00.00

Release Summary   Released October 2024

- Seamlessly integrate your FactoryTalk Historian SE with FactoryTalk DataMosaix™ SaaS using the built-in FactoryTalk DataMosaix Extractors for PI and PI-AF

- Includes the most stable and secure PI System release available

- A common experience across the FactoryTalk portfolio
  - Aligned with FactoryTalk® View v15.00, Studio 5000® v37.00 and PlantPAx® DCS System Release 5.3 (released in June 2024), FactoryTalk® Services Platform 6.50 (CPR 9 SR 15)

- Modern and improved user experience and UI throughout: Data Collection interface configuration, New Historian configuration in FactoryTalk Administration Console
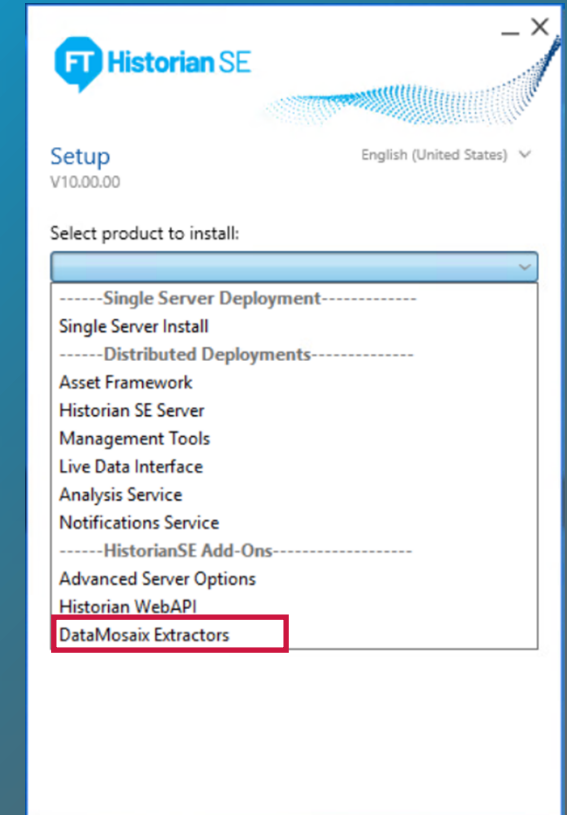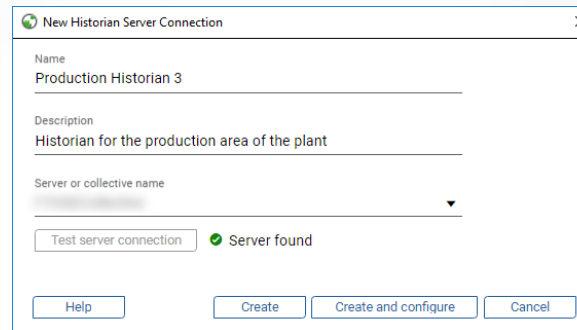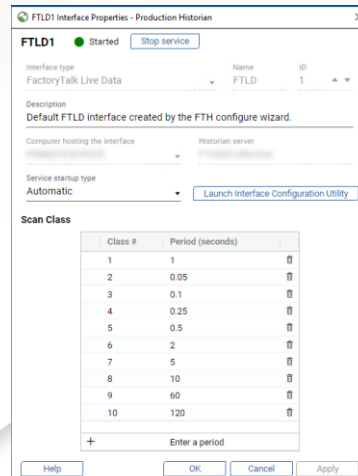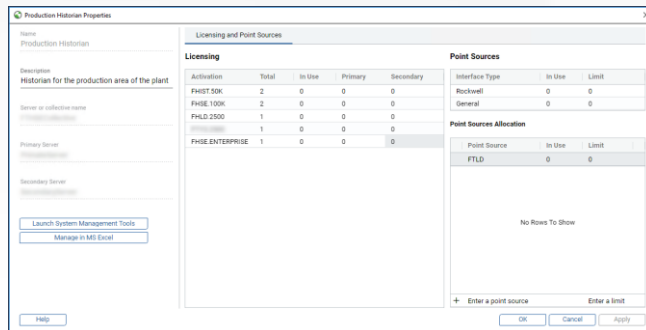
FactoryTalk® Historian SE 10.00.00 (cont.)

Release Summary   Released October 2024

- Deploy with ease using the Rockwell Automation intuitive common installer
  - **Single-Server Deployment**
    - Set it and forget it installation option for new small systems with less than 5000 tags.
  - **Support for silent installs / unattended installations**
    - Use when uniformity is important during a clean or new install

- More flexible enforcement of licenses when configuring a FactoryTalk Historian SE Collective (high availability).
  - For example, it is possible to activate one member of a collective using two 5000 tag license activations (2 x 5000 = 10,000) and use ten 1000 tag license activations (10 x 1000 = 10,000) to activate the second member of the collective.

- Supports the silent installation and unattended installation of components in Advanced Server Options during new installation

- Improved integration with TrendPro in FactoryTalk View SE: users can now add annotations and have them stored in FactoryTalk Historian SE with the relevant tag data.
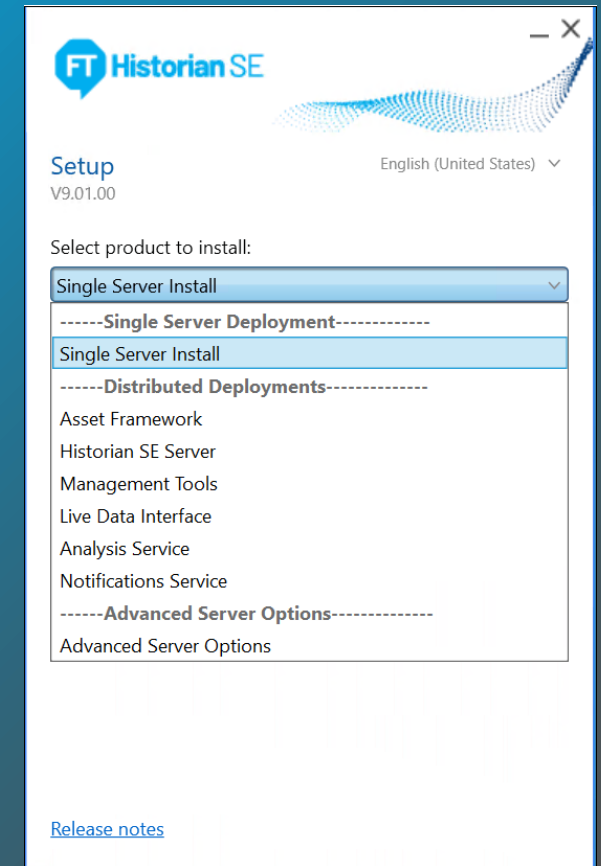
Common Experience across the FactoryTalk® System

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 alarms and events that require action

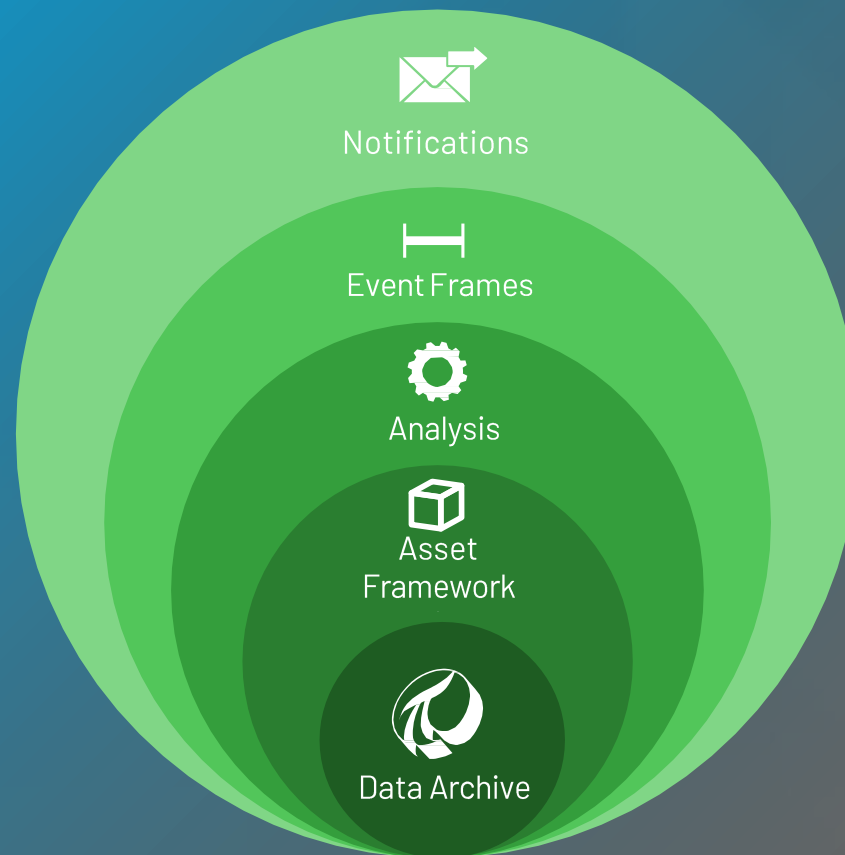FT FactoryTalk
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Updated PI Components

FactoryTalk® Historian SE 10.00

Incorporates the most stable and secure PI Server release available

- PI Data Archive
  2018 SP3 Patch 4 version 3.4.450.165

- PI Asset Framework Server
  2018 SP3 Patch 5 version 2.10.11.2717

- PI AF Client 2018 SP3 Patch 5 version 2.1.11.2717

- PI Analysis Service
  2018 SP3 version 2.10.6.195

- PI Notifications Service
  2018 SP3 Patch 4 version 2.10.11.2697

- PI SQL Data Access Server (RTQP Engine) 2023 SP1 version 1.9.23317.2

Store & Enhance

Notifications

Event Frames

Analysis

Asset Framework

Data Archive

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Platform Support

What's New in FactoryTalk® Historian SE Version 10.0

Server OS (Historian SE server)

- Windows Server 2022
- Windows Server 2019

Clients (Data Collection Interfaces, management tools e.g. PI SMT, etc.)

- Windows 11
- Windows 10
- Windows Server 2022
- Windows Server 2019

FactoryTalk Services Platform

- FTSP 6.50.00

SQL Server – Standard & Express

- SQL Server 2022
- SQL Server 2019

Microsoft Excel (PI DataLink)

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

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

FactoryTalk® Historian Vision 3.08

New Recommended Products - Released January 2024

- Includes PI Vision 2023

- Latest Enhancements

  - **Support for editable PI ProcessBook displays**:

    - Use the ProcessBook to Vision Migration utility to migrate existing, editable Vision displays.

    - This is an enhancement from previous versions that had read-only viewing of imported ProcessBook displays.

  - **Improved Editing and Design capabilities**:

    - New enhancements in absolute sizing / positioning of shapes, images with better control of colors and configuration of symbols.

- Vision is a web-based server/client application that enables you to easily retrieve, monitor and analyze process information on desktop or mobile platforms.

FactoryTalk® Historian Vision (cont.)

- Vision enables you to view and analyze your FactoryTalk Historian SE data during the time range of a particular event. For example, you may examine the performance of an asset during an operator shift or compare the data for several assets during a downtime period.

- FactoryTalk Historian Vision application server is licensed by the number of named-users. Each user can be an Explorer and a Publisher. Each Vision client is one named-user. The maximum number of Vision clients per FactoryTalk Historian SE Server is 20.

- FactoryTalk Historian Vision replaces ProcessBook and allows you to bring forward monitoring displays in a convenient, modern environment.

FactoryTalk® Historian Ethernet/IP Connector

New Recommended Product – version 1.02.09 released in April 2022

- The FactoryTalk Historian Ethernet/IP Connector is a new data collection interface for high-speed data collection from ControlLogix® and CompactLogix® controllers.

- Runs on a dedicated host and uses Class 1 I/O messaging for high-speed data collection.

- Supports data rates from 1 millisecond to 750 milliseconds.

- It is available as a separate purchase.

FactoryTalk® Historian Ethernet/IP Connector

More information

- Max number of tags:
  - INT or SINT: 2480 tags (configured in 10 arrays)
  - DINT or REAL: 1240 tags (configured in 10 arrays)
- Fastest RPI is 1 millisecond and supports
  - INT or SINT: 1 Array with 248 Members
  - DINT or REAL: 1 Array with 124 Members
- Minimum hardware requirements
  - RAM: 4 GB minimum or more
  - Available hard drive space: 25 GB or more
  - Processor: Dual-core or greater
- Logix redundancy is not supported
- Connector can't be configured as a redundant node

FactoryTalk® Historian Server

EtherNet/IP Connector

ControlLogix® CompactLogix®
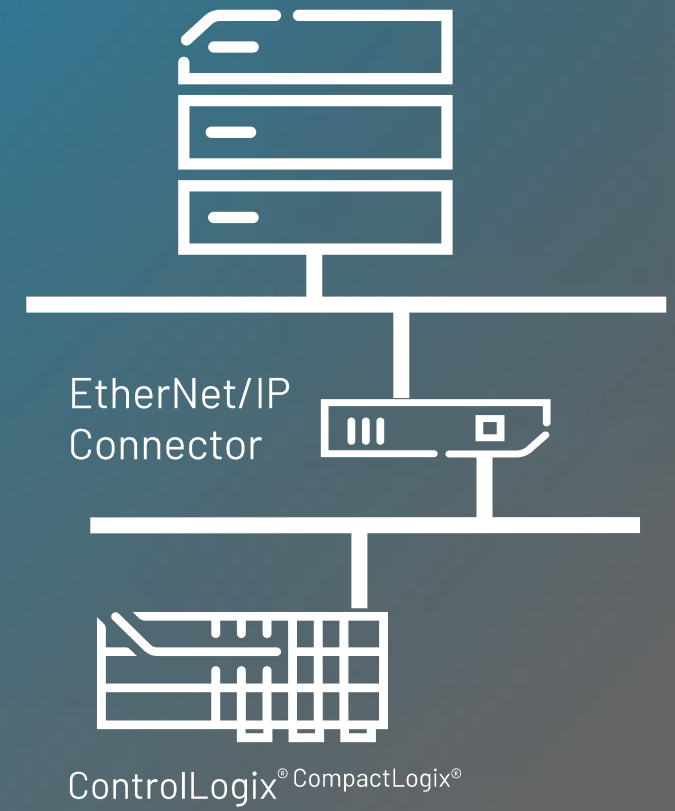
Data Collection Interface Performance

	Live Data Interface	Ethernet/IP Connector
Max Tag Count Per data collection interface	75,000	**2480** INT or SINT tags (configured in 10 arrays) **1240** DINT or REAL tags (configured in 10 arrays)
Max Events Per data collection interface	50,000 events / second	Varies (Depends on array type and size)
Max Events Per redundant data collection interface	40,000 events / second	N/A
Class 1 (I/O messaging) connection to ControlLogix® and CompactLogix® controllers	N/A	1 array (size **248** - INT or SINT) / millisecond 1 array (size **124** - DINT or REAL) / millisecond

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Comparing FactoryTalk® Historian Ethernet/IP Connector and FactoryTalk Historian ME

Not the same solution

Ethernet/IP Connector Data Collection Interface	FactoryTalk Historian ME module
Requires FactoryTalk Historian SE version 8.00 or newer	Supports FactoryTalk Historian SE 4.01 or higher
Runs on a **dedicated** industrial PC (Server OS is NOT required)	1756 module
Supports ControlLogix® and CompactLogix®	Requires an open slot in a ControlLogix Chassis
Class 1 messaging on Ethernet	Class 3 messaging via backplane
HMI cannot access the local buffer	HMI can access the local data archive
High-speed data collection – Supports data rates from 1 millisecond to 750 milliseconds configured using Logix Designer application as a generic Ethernet device in the I/O tree.	High-speed data collection – 2500 events per second. Fastest supported rate is 10 milliseconds for 25 tag.
Supports buffering (store and forward to the FactoryTalk Historian SE server). However, exception and filtering at the interface node is not supported. This is **not ideal for cellular or satellite communications** between the interface node and Historian SE.	The data is stored locally on the module with support for exception, filtering and compression. Data transfer is used to send the data to either a FactoryTalk Historian SE server or PI Server.
Available as a Subscription and Perpetual w/ Maintenance	Available as Perpetual only

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FactoryTalk® Historian SE – Advanced Server Options

For FactoryTalk Historian SE versions 8.00 and higher, the installation of the Advanced Server Options is now exposed and made available through the common installer GUI.

Installation requires a serial number. Please use the serial number that was issued for the following products

- Historian SE, OPC Data Access
- Historian SE, OLEDB Data Access
- Historian SE, Advanced Server Options Add-On
- Historian SE, Unlimited User CAL (Client Access Licenses)

See AID 1134780 titled "FactoryTalk Historian SE Advanced Server Options installation Serial Number"
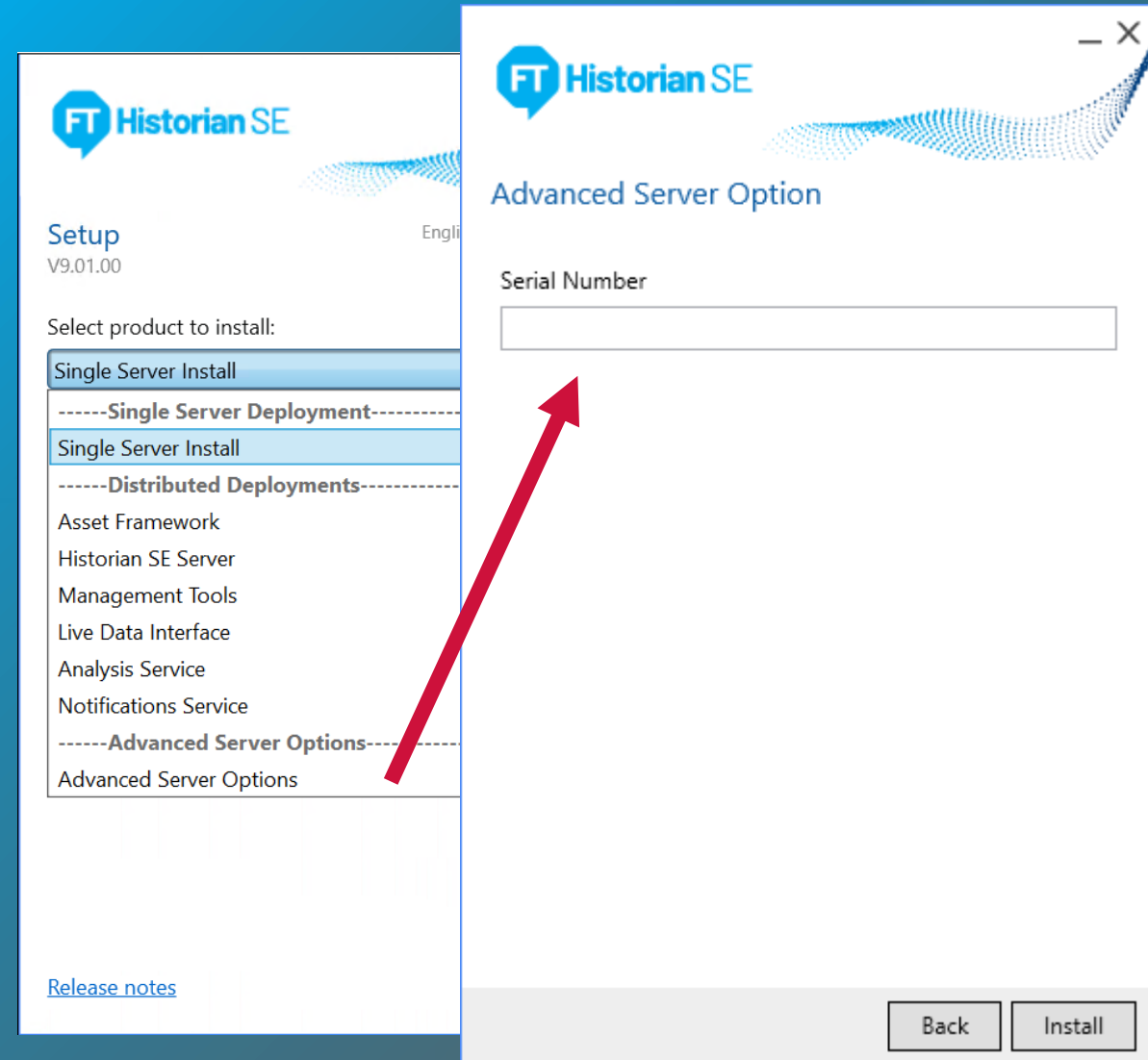
High Availability with FactoryTalk® Historian SE 10.0

Option 1 – Redundant Live Data Interfaces

- If you require minimal data loss, then you need redundant interface nodes

- Does not cost extra.

- Interfaces are installed and configured as redundant.

Redundant Live Data Interfaces

Data Archive

Buffering Service
Live Data Interface
FactoryTalk® Linx

Buffering Service
Live Data Interface
FactoryTalk® Linx

Recommended
Redundant ControlLogix®
Chassis
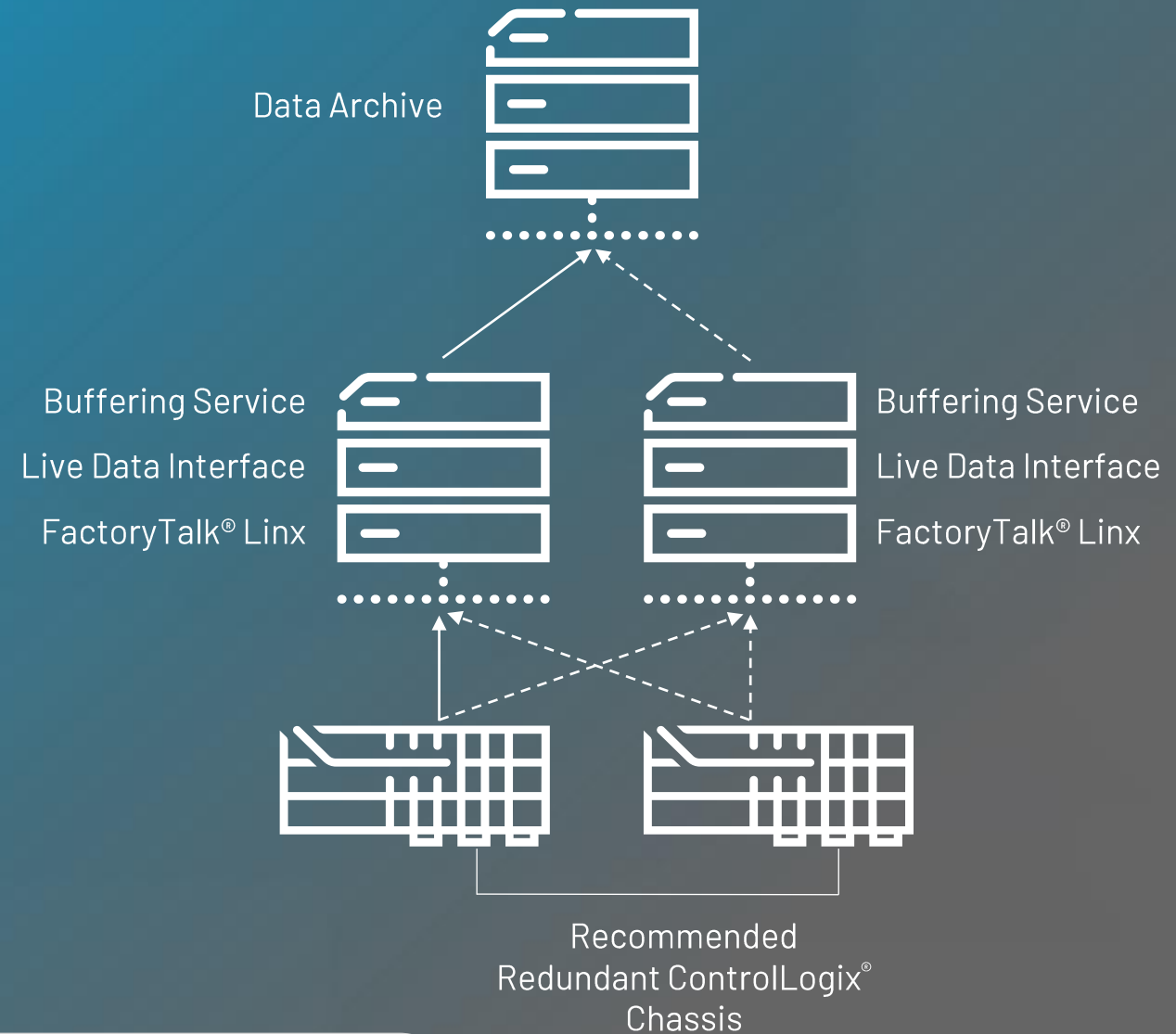
High Availability with FactoryTalk® Historian SE 10.0

Option 2 – Historian SE Collective (High Availability) with Redundant Live Data Interfaces

- If you require highly available data for reporting, then you need redundant servers (Collective).

- Each member of the collective requires separate tag licenses.

- For data access, one license activation for the Advanced Server options is needed.

FactoryTalk Historian SE Collective with Redundant Live Data Interfaces

Data Archive Collective **Member 1**

Data Archive Collective **Member 2**

Configuration Change

Buffering Service

Live Data Interface

FactoryTalk® Linx

Buffering Service

Live Data Interface

FactoryTalk® Linx

Recommended Redundant ControlLogix® Chassis
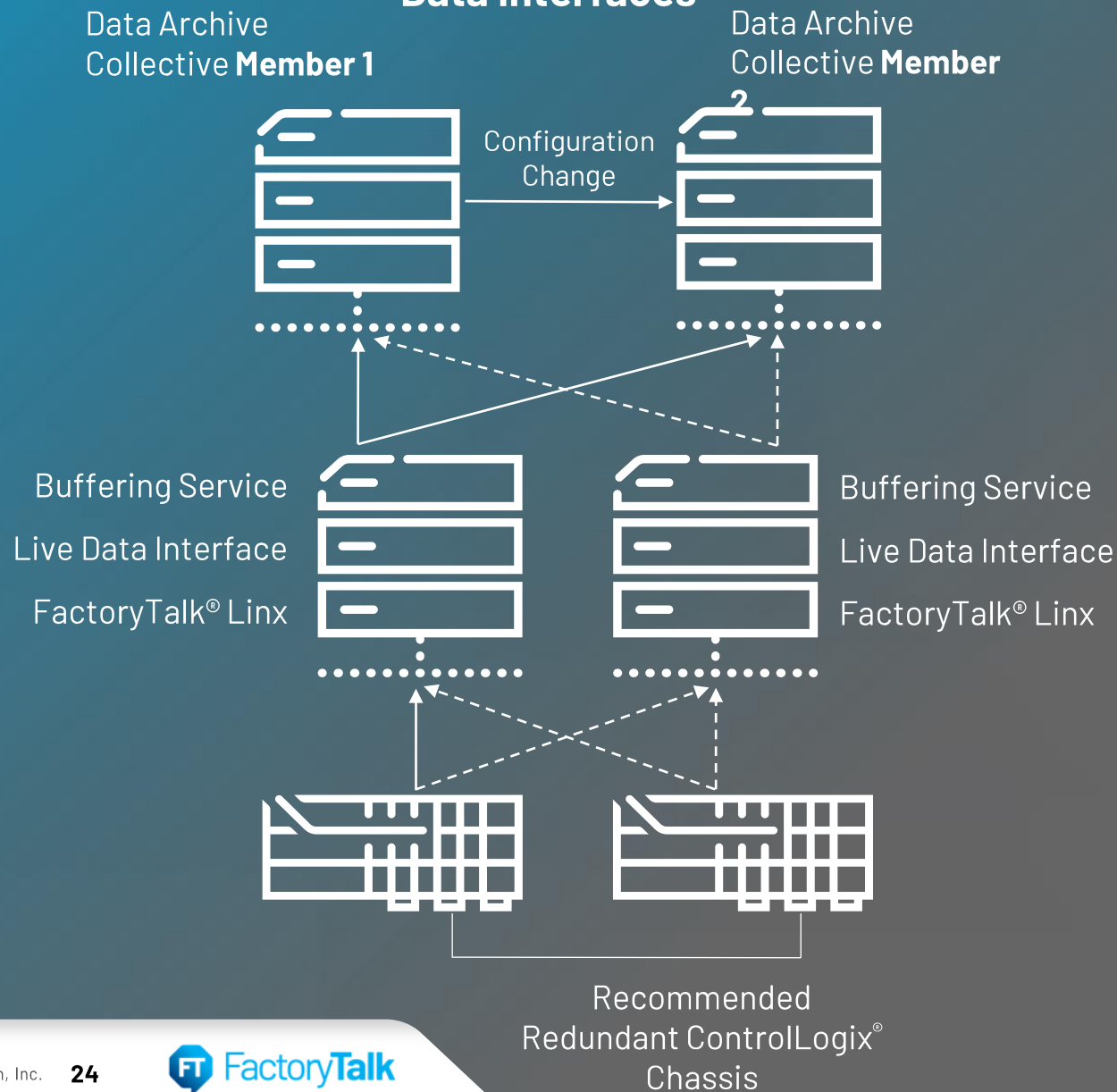
FactoryTalk® Historian SE 9.01 Collective (High Availability)

Licensing and Activation

In FactoryTalk Historian SE versions 8 and higher, configuring a Collective is more flexible when mixing and matching license activations.

Examples	Primary	Secondary	Valid
Example 1	FHSE.1000 (Qty **5**)	FHSE.5000 (Qty **1**)	Yes
Example 2	FHSE.1000 (Qty **5**) FHIST.1000 (Qty **5**)	FHIST.10K (Qty **1**)	Yes
Example 3	FHSE.5000 (Qty **1**)	FHSE.10K (Qty **1**)	No
Example 4	FHIST.1000 (Qty **1**)	FHIST.1000 (Qty **1**)	Yes
Example 5	FHIST.1000 (Qty **1**)	FHLD.1000 (Qty **1**)	Yes

Why update to version 10.0

Why Consider Updating

In addition to offering a more flexible enforcement of licensing in a collective and the ability to recognize new and old activations, there are several reasons to consider updating to FactoryTalk® Historian SE 10.0 :

- Seamless integration between on-premises FactoryTalk Historian SE and FactoryTalk DataMosaix™ SaaS via the built-in PI and PI-AF extractors

- Support for the latest Microsoft software, such as Windows Server 2022 and Microsoft SQL Server 2022

- There are PI system vulnerabilities that affected multiple versions of several Rockwell Automation products. FactoryTalk Historian SE 9.00 and older versions are impacted and the best measure is to upgrade FactoryTalk Historian SE to version 9.01 or higher. Further details: FactoryTalk® Historian SE vulnerable to AVEVA-2024-001 and AVEVA-2024-002 and OSIsoft PI System Vulnerabilities Affect Multiple Rockwell Automation Software

- FactoryTalk Historian SE versions 5.01 and older have a lifecycle status of Limited. Some older versions have also been Retired. See Product Compatibility and Download Center (PCDC)

- Microsoft announced the mainstream end date for Windows Server 2012 R2 as Oct 9, 2018 (Windows Server 2012 R2 is the latest operating system supported by FactoryTalk Historian SE version 5.01)

- Microsoft Office 2019 and Office 365 (click-to-run install) support requires FactoryTalk Historian SE version 7.00 or higher.
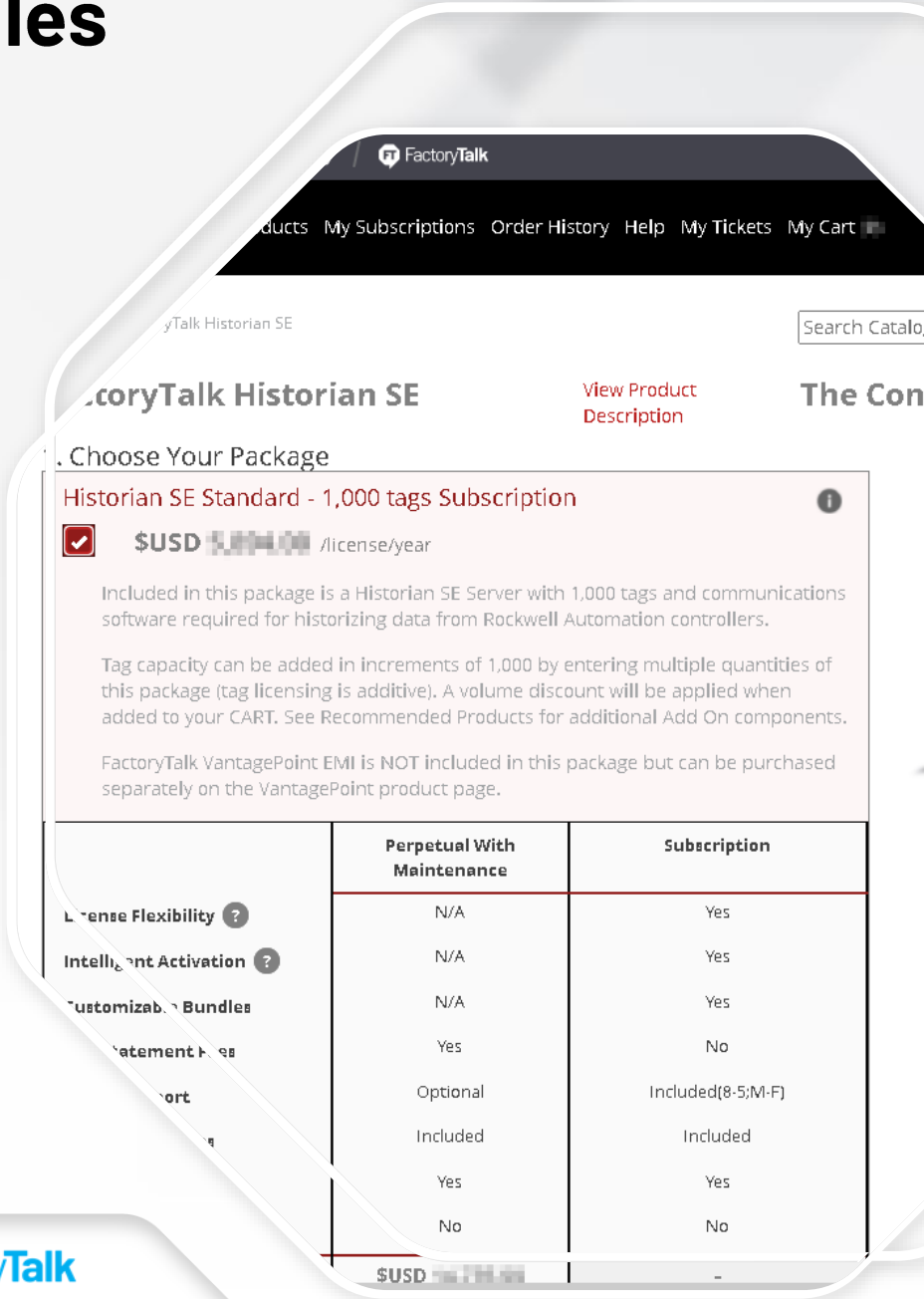
FactoryTalk® Historian SE – Large Tag Bundles

The following tiered packages are available through the MyRockwell Software Portal

- Historian SE – **1000 tags**   🛈 **Volume Discount Eligible**
- Historian SE – **250 tags**
- Historian SE – **5000 tags**   `NEW`
- Historian SE – **10,000 tags**   `NEW`
- Historian SE – **20,000 tags**   `NEW`
- Historian SE – **50,000 tags**   `NEW`
- Historian SE – **500 tags with Productivity Clients**
  - This is the only FactoryTalk Historian SE package, which is bundled with FactoryTalk VantagePoint®.
  - We will reconsider the availability of this package as FactoryTalk VantagePoint moves to EOL.

FactoryTalk Historian SE license activation is additive. Multiple activations can be installed on one server up to the max server size.

FactoryTalk® Historian SE – Large Tag Licenses

Frequently Asked Questions

1. I need 500 tags without Productivity Clients. What should I order?

    - FactoryTalk Historian SE, 500 Tags will continue to be available as a Recommended Product. Please note that Recommended Products can be added to cart independently from any main tiered package.

2. I need 10,000 tags. What should I order?

    - Pick the option that will best meet the application and project needs
        - Selecting quantity 10 of the Historian SE – 1000 tags package will deliver quantity 10 of the FHIST.1000 license activation.
        - Selecting quantity 2 of the Historian SE – 5000 tags package will deliver quantity 2 of the FHIST.5K license activation.
        - Selecting quantity 1 of the Historian SE – 10,000 tags package will deliver one FHIST.10K license activation.

3. Are FactoryTalk Historian SE tag licenses additive?

    - Yes. Tag licenses are additive. However, FactoryTalk Historian SE version 6.00 or higher is required for the new activation to be used.

4. What is the FactoryTalk Historian SE max server size?

    - New FactoryTalk Historian SE servers deployed after Oct. 1, 2021 have a max of 60,000 tags. These servers use the new FHIST license activation only.

    - Existing FactoryTalk Historian SE servers deployed before Oct. 1, 2021 can be expanded to either 60,000 tags or by 50% of existing tags; whichever one is higher. These servers have a mix of old license activation (FHLD or FHSE) and new FHIST activation.

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Example Use Case 1

**I want to purchase a 250 tag FactoryTalk®
Historian SE Server subscription, 8x5 support**.

In this example, we order quantity 1 of Historian SE
Starter – 250 tags Subscription. Add to Cart and
Checkout.

Note: FactoryTalk Historian SE tag licensing is additive.
Tag capacity can be expanded up to the maximum
server size by selecting any of the FactoryTalk Historian
SE server packages available.

Example Use Case 2

I want to purchase a 2500 tag FactoryTalk® Historian SE Server and five Historian Vision Client subscriptions, 8x5 support.

STEP 1

In this example, we order quantity **3** of *Historian SE Standard – 1000 tags* Subscription. Add to Cart and Continue shopping.

STEP 2

From the Recommended Products section, we order **5** quantities of the *Historian SE*, *PI Vision Client*, *one User* Subscription. Add to Cart and Checkout.

Note: Part of our licensing simplification is to offer increments of 1000. Ordering quantity 2 of Historian SE Standard – 1000 tags Subscription and quantity 1 of Historian SE, 500 Tag Add-On Subscription, to get exactly 2500 tags, will result in a similar price due to the volume discount that is available to the Historian SE Standard – 1000 tags package.

Your Cart

Please review the items and quantities below before completing your order.

Historian SE Standard - 1,000 tags Subscription ⓘ
ID: 9518C-HSTT11
DS: N3/80H
✓ Volume Discount Applied

Annual Cost ⌄	≈USD 11,316.43/year
One Time Cost ⌄	0.00
No. of Licenses	3
Bundle Total	$11,316.43

Historian SE, PI Vision Client, 1 User Subscription
ID: 9518C-HSTRT41
DS: N3/80H

Annual Cost ⌄	≈USD 504.00/year
One Time Cost ⌄	0.00
No. of Licenses	5
Bundle Total	$504.00

Annual Cost Subtotal:	≈USD 11,820.43
One Time Cost Subtotal:	0.00
Cart Total:	≈USD 11,820.43

Example Use Case 3 - A

I want to purchase a 5000 tag Historian SE server with High Availability (Collective) perpetual, 8x5 support.

We have two possible options in this example since FactoryTalk® Historian SE licensing is additive. Select the one that better fits the application and project needs.

OPTION 1 – Using two 5000 tag licenses

We can order quantity **2** of *Historian SE – 5000 tags* Perpetual. Add to Cart and Checkout.

Note: Customers have the flexibility to either deploy one server with 10,000 tags, or a collective (high availability) with 5000 tags on each member.

Your Cart

Please review the items and quantities below before completing your order.

Historian SE - 5000 tags Perpetual
ID: 9518M-HST5KT41
DS: N3/80H

Annual Cost ⌄	$USD 1,540.00/year
One Time Cost ⌄	$USD 12,694.00
No. of Licenses	2
Bundle Total	$39,234.00
Annual Cost Subtotal:	$USD 6,543.00
One Time Cost Subtotal:	$USD 12,694.00
Cart Total:	$USD 39,234.00

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Example Use Case 3 - B

I want to purchase a 5000 tag Historian SE server with High Availability (Collective) perpetual, 8x5 support.

As mentioned earlier, we have two possible options in this example since Historian SE licensing is additive. Select the one that better fits the application and project needs.

OPTION 2 – Using ten 1000 tag licenses

We can order quantity **10** of *Historian SE Standard – 1000 tags* Perpetual. Add to Cart and Checkout.

Note: A volume discount is applied to the *Historian SE Standard – 1000 tags* quantity of 10. Customers have the flexibility to either deploy 1 server with 10,000 tags, 10 servers with 1000 tags on each server, or a collective (high availability) with 5000 tags on each member.

Your Cart

Please review the items and quantities below before completing your order.

Historian SE Standard - 1,000 tags Perpetual ℹ️
ID: 9518M-HSTT11
DS: N3/80H
✓ Volume Discount Applied

Annual Cost ⌄	~~$USD 10,019.80~~/year
One Time Cost ⌄	~~$USD 50,089.00~~
No. of Licenses	10
Bundle Total	~~$60,118.80~~

Annual Cost Subtotal:	~~$USD 10,019.80~~
One Time Cost Subtotal:	~~$USD 50,099.00~~
Cart Total:	~~$USD 60,118.80~~

Example Use Case 4

I want to purchase a 500 tag FactoryTalk Historian SE server without FactoryTalk® VantagePoint, OLEDB data access, subscription, 8x5 support.

STEP 1

Confirm that Subscription is selected for the first tiered package and 8x5 support. Do NOT Add to cart.

STEP 2

From Recommended Products, order quantity 1 of *Historian SE, 500 Tag Add-On* Subscription. Add to Cart and Continue shopping.

STEP 3

From Recommended Products, we order a quantity 1 of *Historian SE, OLEDB Data Access* Subscription. Add to Cart and Continue shopping.

STEP 4

From Recommended Products, we order *Historian SE, Unlimited User CAL for 500 tag servers* Subscription. Add to Cart and Checkout.
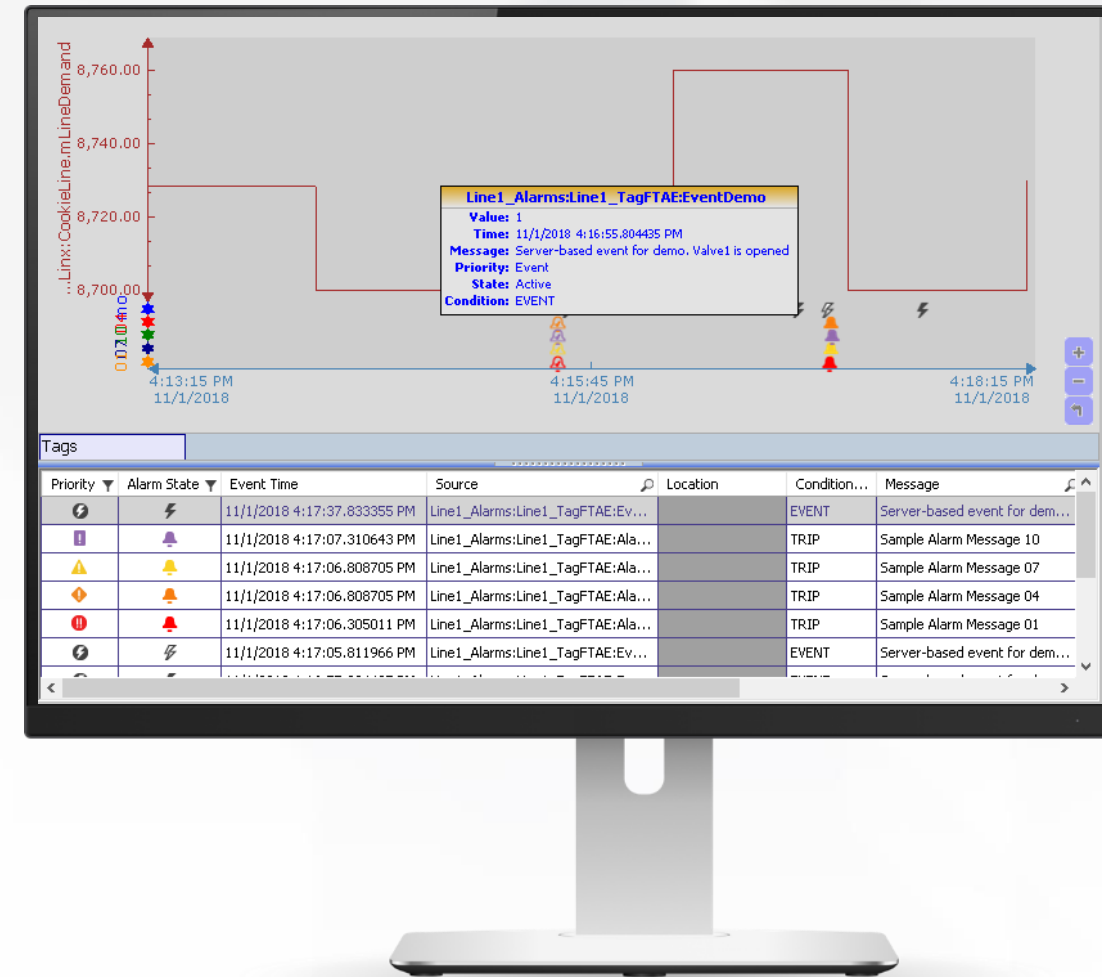
Integration with FactoryTalk® View

Easy Access to Contextual Troubleshooting

FactoryTalk® View SE TrendPro Built-in advanced trending and analysis

- Associate data points on the trend with related actions and information to drive decisions visually

- Annotate FactoryTalk Historian SE data within TrendPro

- Troubleshoot production anomalies quickly and visually, right in the HMI

- Plot time-series data along with related actions on trend
  - Historical data from FactoryTalk® Historian SE and ME
  - Alarms
  - System events
  - Operator actions from FactoryTalk® AssetCentre
  - Runtime comments (FactoryTalk® Alarms and Events Remarks)

- Save TrendPro configuration and traces as centralized templates

- Filter time-series data directly on the trend at runtime

- Drag and drop traces from multiple sources at runtime

Premier Integration with FactoryTalk® View SE

Easy to own and quick to deploy / fast retrieval of data in trending

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

FactoryTalk Historian SE 10.00 and FactoryTalk View SE 15.00 ship with FactoryTalk Services Platform 6.50 (CPR 9 SR 15)

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"
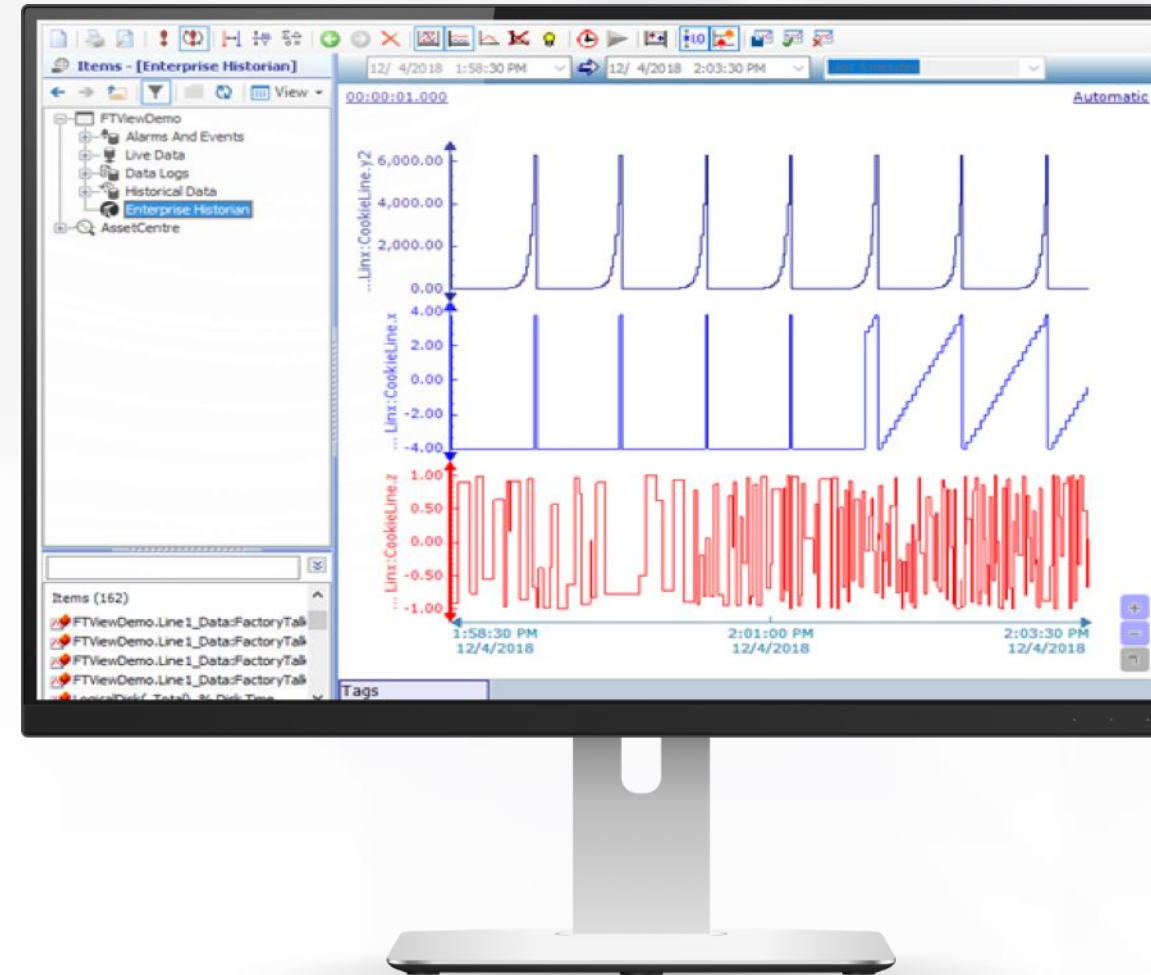
Recommended Deployments

FactoryTalk® Historian SE - Single Host

Single-Server Deployment

- A single-host FactoryTalk Historian SE system is supported for small systems with 5000 tags or less. This is a good option when:
  - Redundant interfaces and Historian SE Collective (High Availability) are not desired today or in the future
  - 5000 tags or less satisfies the system needs
- Single-Server Installation option for new/clean installs (available in FactoryTalk Historian SE 8.0 or higher)

Important:

- To maximize the benefits of additive licensing with FactoryTalk Historian SE, it is recommended to use a two-host or a three-host solution for 5000 tag servers that must expand in the future. This will minimize having to rearchitect the system when more tags are needed.

Setup
V10.00.00

Select product to install:

------Single Server Deployment-------
Single Server Install
------Distributed Deployments-------
Asset Framework
Historian SE Server
Management Tools
Live Data Interface
Analysis Service
Notifications Service
------HistorianSE Add-Ons-------
Advanced Server Options
Historian WebAPI
DataMosaix Extractors

FactoryTalk® Historian SE - Two Host

A two-host FactoryTalk Historian SE system is a good solution when:

- Historian SE Collective (High Availability) is not desired today or in the future.

- Host 1: FactoryTalk Historian server
  - FactoryTalk® Directory
  - FactoryTalk® Historian SE server (Data Archive)
  - FactoryTalk® Historian Asset Framework server + SQL Server Express

- Host 2: Interface Node
  - FactoryTalk® Live Data Interface
  - FactoryTalk® Linx (Data Server)

Note: A two-host system leverages data collection buffering (aka store and forward) between the interface node and the FactoryTalk Historian SE server.

FactoryTalk® Historian server

Data Collection
Interface Node

Data Source
(DCS ,PAC,PLC and
so on)
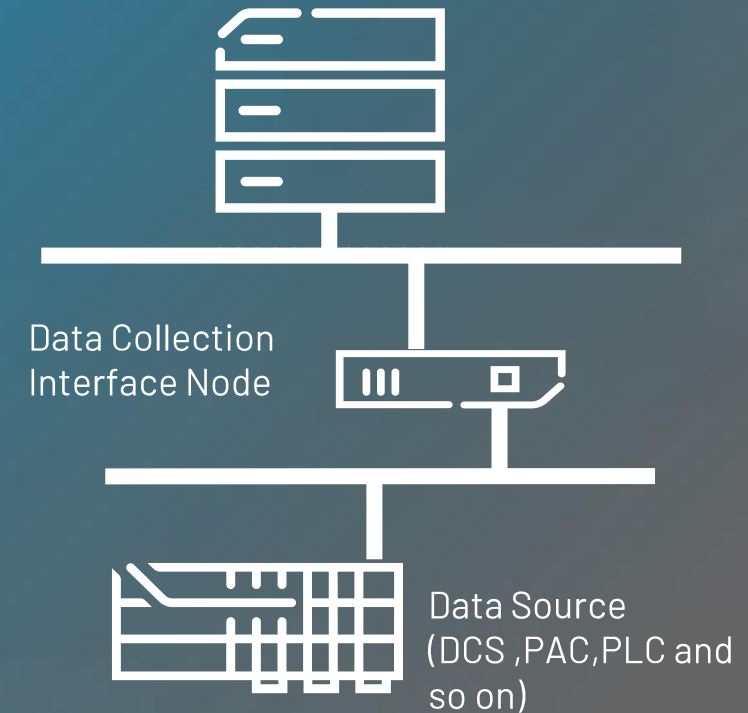
FactoryTalk® Historian SE – Three Host

Best practice is to use a three-host FactoryTalk Historian SE system because it is the most scalable and it minimizes the potential for resource conflicts:

- Host 1: Asset Framework
  - FactoryTalk® Directory
  - FactoryTalk® Historian Asset Framework
  - SQL Server Express
- Host 2: Data Archive
  - FactoryTalk® Historian SE server (Data Archive)
- Host 3: Interface Node
  - FactoryTalk® Live Data Interface
  - FactoryTalk® Linx (Data Server)

FactoryTalk® Historian servers

Data Archive

Asset Framework

Data Collection
Interface Node

Data Source
(DCS ,PAC, PLC and so on)
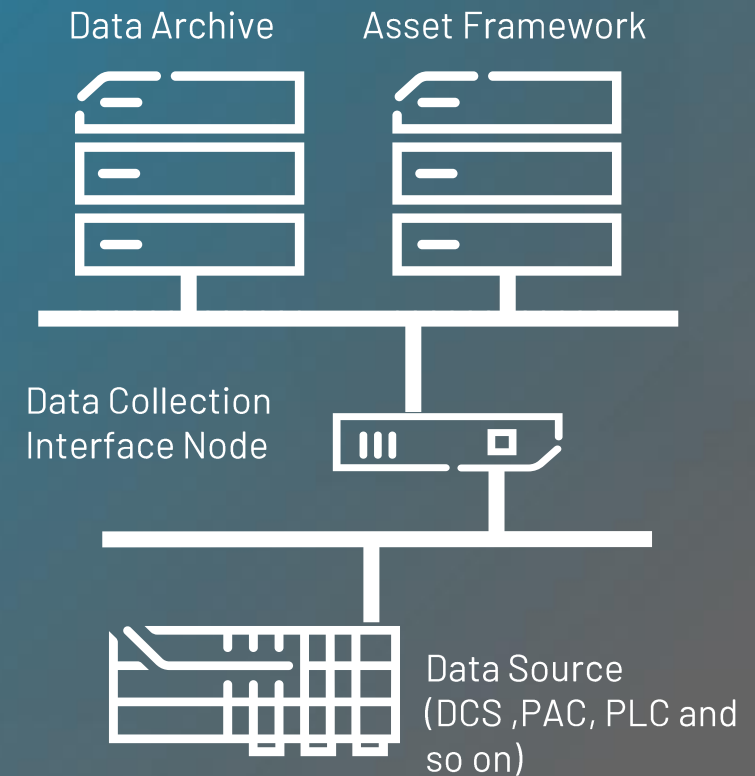
FactoryTalk® Historian SE Server Limits

- Two per FactoryTalk Directory

  - Or two Collective consisting of two members

- Maximum server size: 60,000 Tags

  - Servers deployed before Oct. 1, 2021 can be expanded to the greater of either 60,000 tags or to 150% of the existing tag count.

- 100,000 Events/sec (sum all events on all interfaces)

- 50 Inbound Connections

  - 50 FactoryTalk® Live Data Interface nodes

  - Or 25 Redundant pairs (FactoryTalk® Live Data Interface nodes)

  - Or 50 FactoryTalk Historian ME modules

 - Or a mix of data collection interfaces totaling 50 inbound connections

FactoryTalk® Historian Server

Interface node

Data Source (DCS, PAC, PLC, etc.)
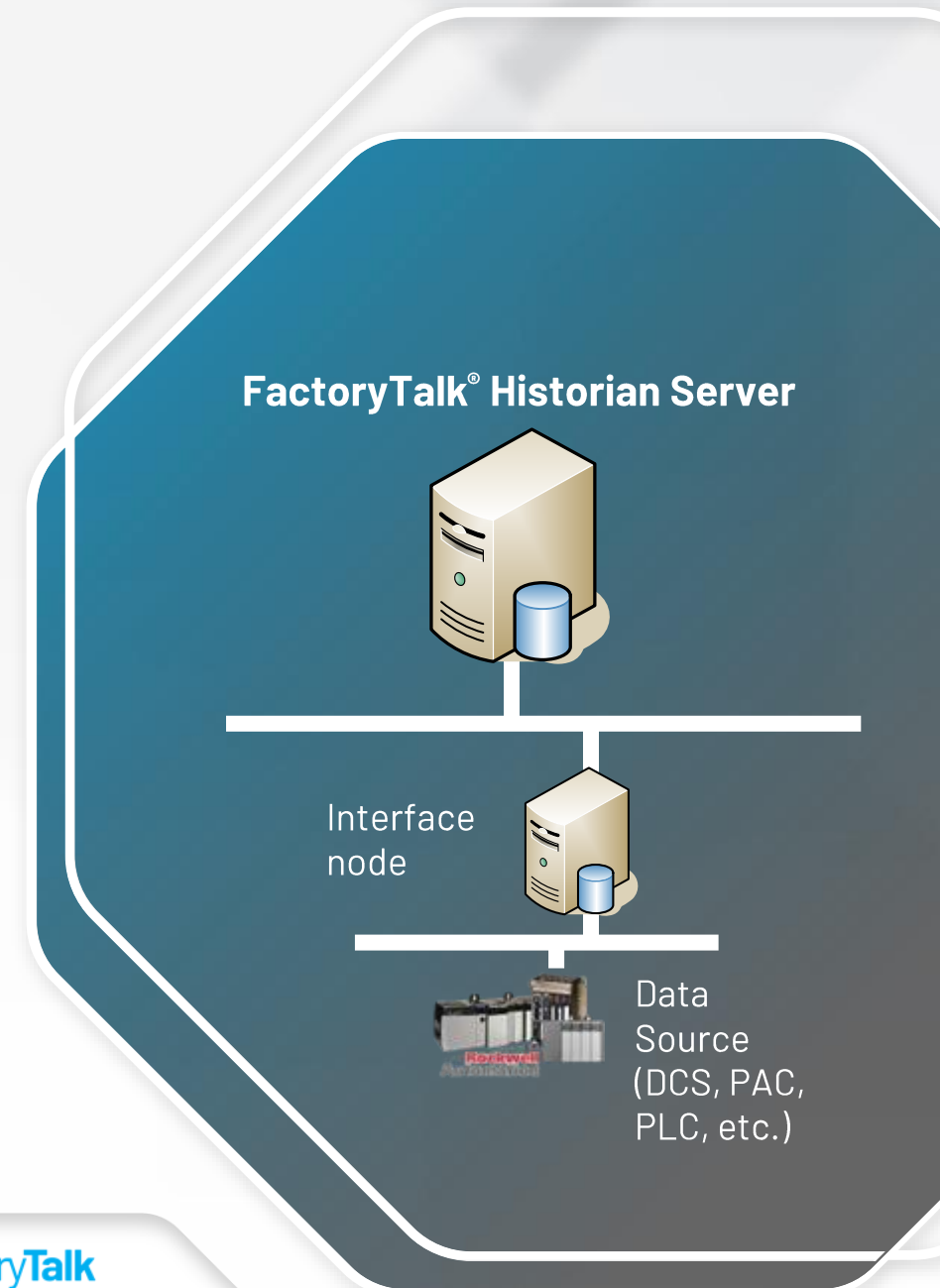
Additional Information

Every PlantPAx® System needs FactoryTalk® Historian SE

- FactoryTalk Historian SE is a world class process historian optimized for Logix-based controllers
  - Data exception, compression and redundant interfaces to deliver reliable and uninterruptible data that can be stored for 10+ years
  - High availability to access the data at any time with fast data retrieval
- Leverage the FactoryTalk Historian ME module
  - An in-rack historian for high-speed data collection
  - Easily aggregate data to a FactoryTak Historian SE server

- FactoryTalk Historian SE is best positioned as part of a PlantPAx system.
- Every PlantPAx system needs FactoryTalk Historian SE.

FactoryTalk
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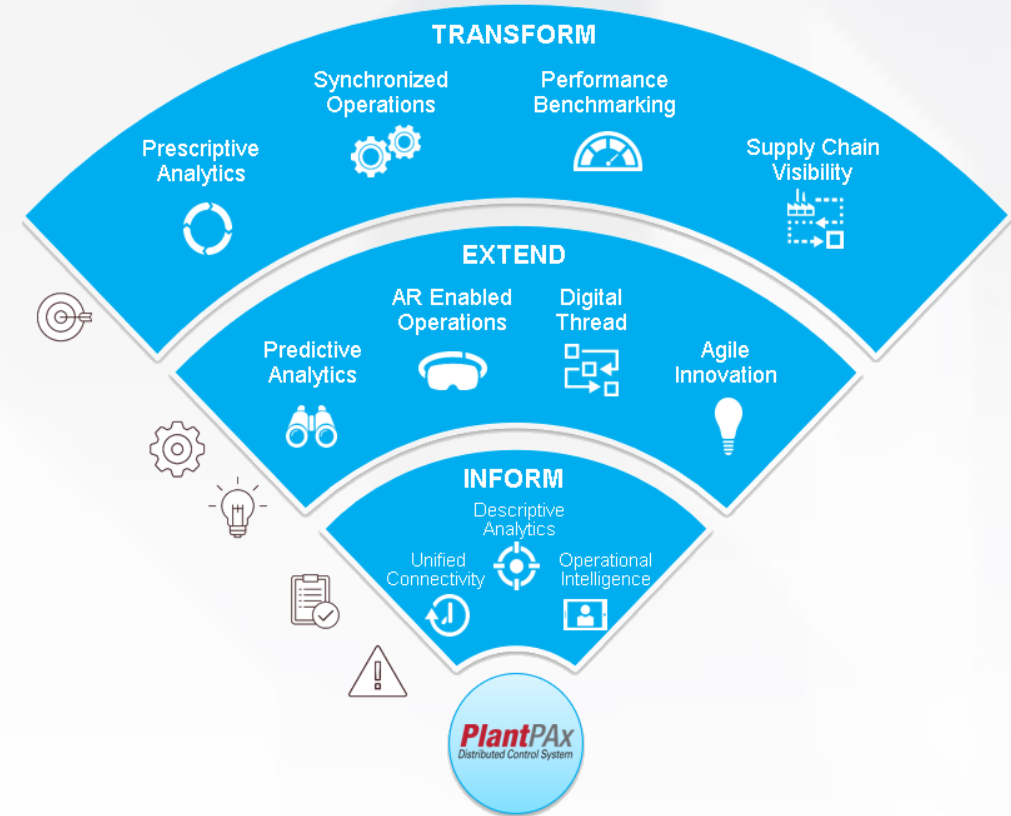
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