



**Rockwell
Automation**

What's new in FactoryTalk AssetCentre version 10.00?

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10 • 22 • 2020

Agenda

1 Platform Support
& Scalability

2 Installation
Changes

3 Architecture
Updates

4 Asset Firmware
Reporting

5 E300 Electronic
Overload DR

6 Comparison
Enhancements

7 Database
Maintenance
Option

8 Other Additions &
Enhancements

Operating System / Platform Support

FactoryTalk® AssetCentre v10.0 Software – OS/Platform Support

FactoryTalk® AssetCentre Server

Windows Server 2019 Std / Datacenter (64 bit)
Windows Server 2016 Std / Datacenter (64 bit)
Windows Server 2012 R2 Std / Datacenter (64 bit)
Windows Server 2012 Std / Datacenter (64 bit)

Database - MSSQL Server

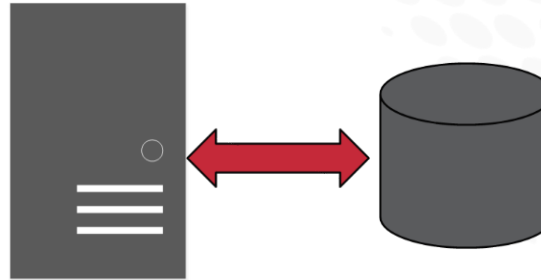
2019 Enterprise / Std / Express (64 bit)
2017 Enterprise / Std / Express (64 bit)
2016 SP1 Enterprise / Std / Express (64 bit)
2014 SP2 Enterprise / Std / Express (64 bit)
2012 SP3 Enterprise / Std / Express (32/64 bit)

FactoryTalk® AssetCentre Client

All FactoryTalk® AssetCentre Agent
Operating Systems
Windows 10 Pro / Enterprise (64 bit)
Windows 7 SP1 Pro/ Enterprise (32/64 bit)

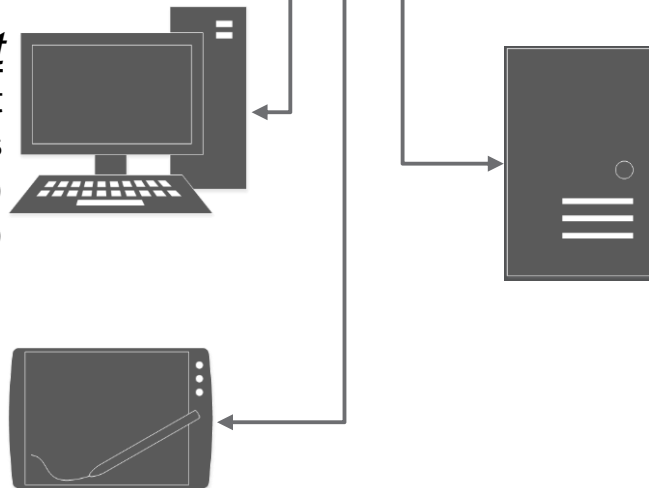
Mobile Support

Windows IE11, Chrome 53 - 78
IOS 10, 11, 12, 13
Android 7, 8, 9, 10



FactoryTalk® AssetCentre Agent

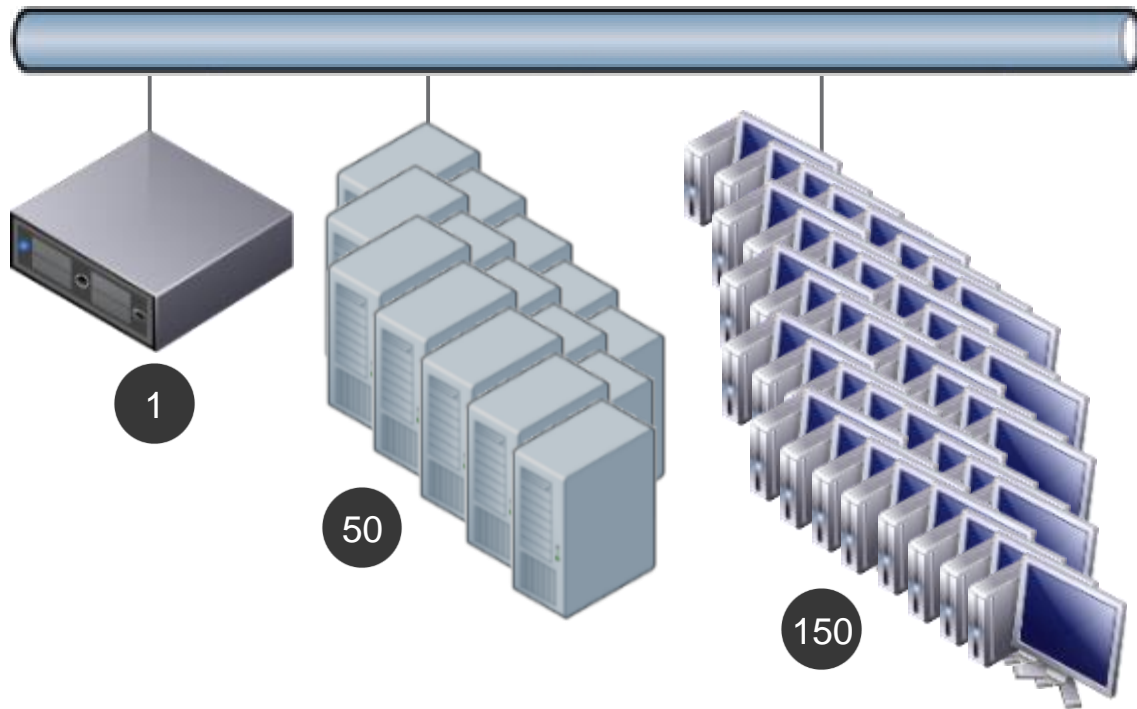
Windows Server 2019 Std / Datacenter (64 bit)
Windows Server 2016 Std / Datacenter (64 bit)
Windows Server 2012 R2 Std / Datacenter (64 bit)
Windows Server 2012 Std / Datacenter (64 bit)
Windows 10 Pro/ Enterprise (64 bit)
Windows 7 SP1 Pro/ Enterprise (32/64 bit)



FactoryTalk® Services Platform Support (CPR9 SR12)

Increased Designed Recommendations for Larger Systems

FactoryTalk® AssetCentre v10.0 Software – Architecture

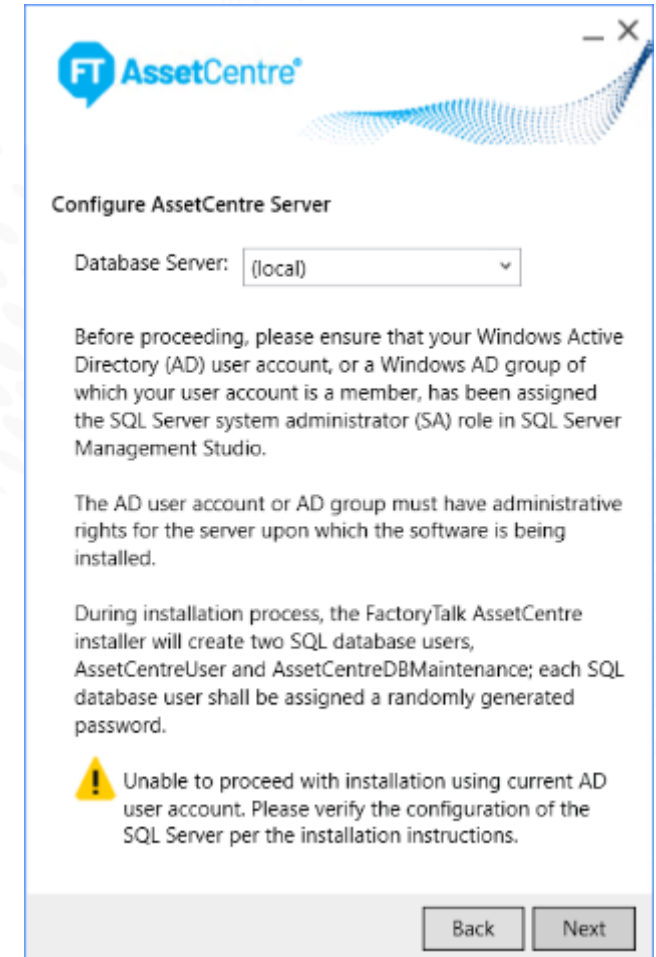


- **One (1)** FactoryTalk® AssetCentre Server
- **Fifty (50)** FactoryTalk® AssetCentre Agents & Agent Groups
 - Single agent services ~100 assets/12 hours
 - Limit of 50 agent groups
- **150** concurrent FactoryTalk® AssetCentre Clients

Installation Process Changes

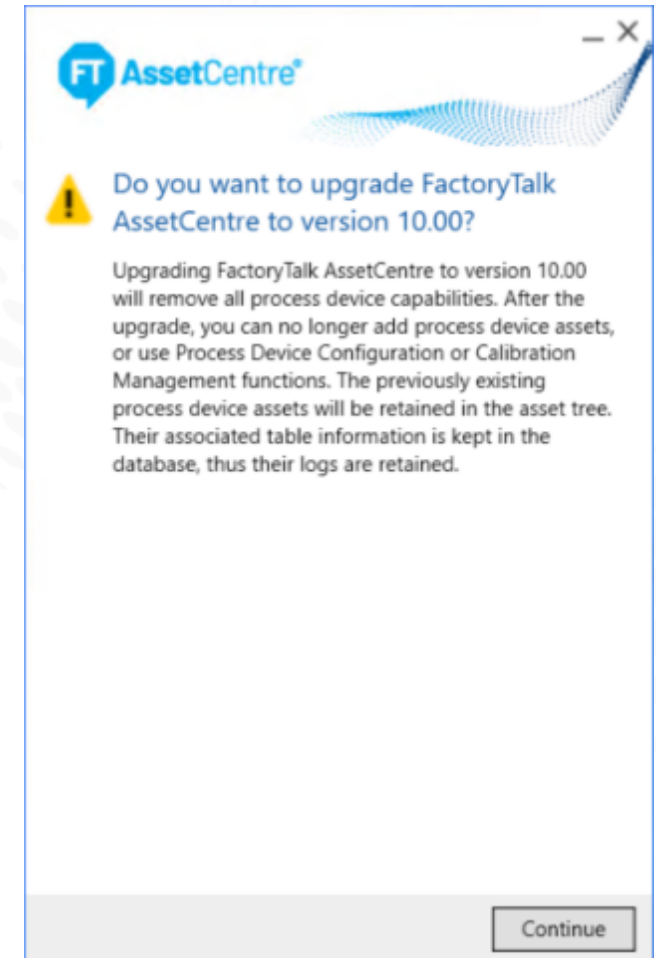
Maintaining System Security

- FactoryTalk AssetCentre installation process no longer **allows** use of SQL Server SA account to perform FactoryTalk AssetCentre server installation
- User performing FactoryTalk AssetCentre server v10.00 installation must have Microsoft SQL Server System Administrator (SA) role
 - Grant active directory group, of which user is a member, SQL Server System Admin role
 - Directly grant user active directory account SQL Server System Admin role



Installation Process Changes

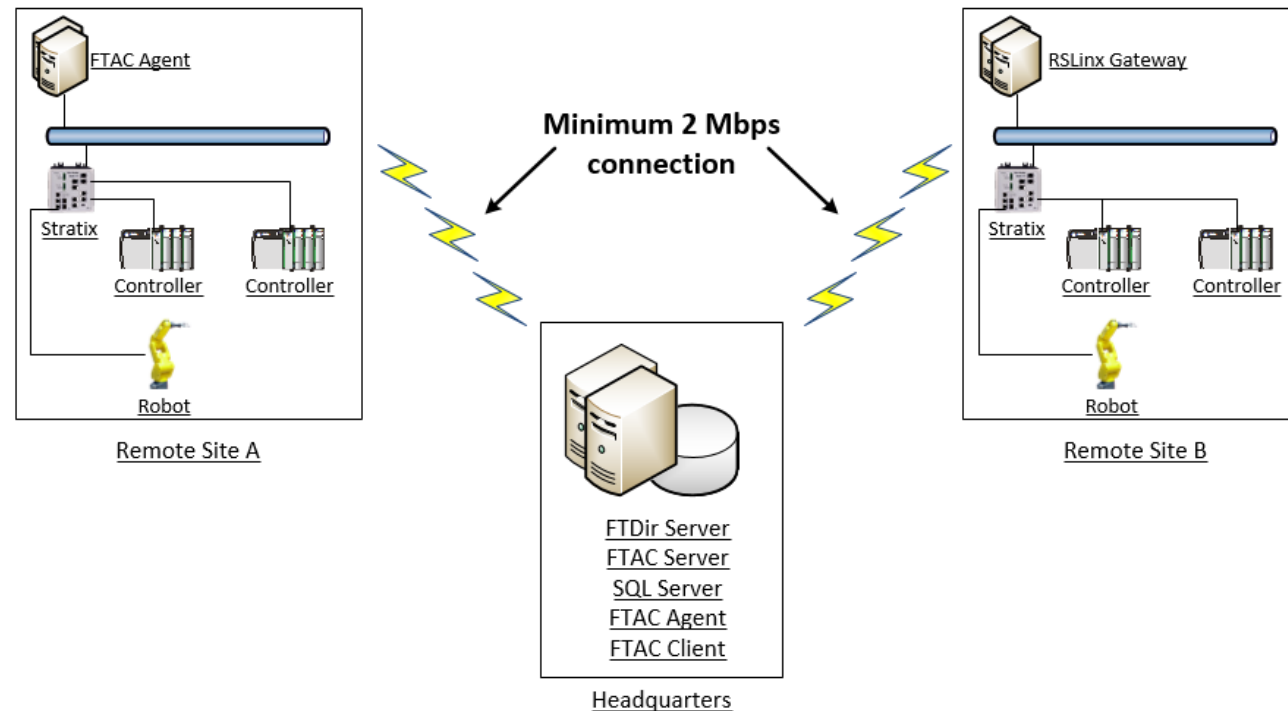
- Deprecate Process Capabilities
 - Remove process-related asset types and FTD/DTM functionality
 - Remove ProCal calibration management functionality
- What to expect after an upgrade?
 - All process-related functions removed
 - Existing process assets including related information (read-only) retained
 - No longer able to add or configure existing process assets
 - ProCalV5 database retained
- Database schema upgrade is irreversible
- [1125567 - FactoryTalk AssetCentre Capability Discontinuation Migration Guidance](#)



Understanding Constraints Broaden Supported Architectures

Better Support for Geographically Disperse Systems

- Added new database indices to improve extremely large database performance |
- Both agents and RSLinx® Gateway can be deployed at remote sites to support disaster recovery operations
- Unfortunately, this does not yet mean FactoryTalk AssetCentre can be deployed as an **enterprise** solution





Asset Firmware Reporting

Asset Inventory Displays Firmware Metadata

Know **More** About What You Have...

- Asset Inventory displays **firmware** metadata for discovered Rockwell Automation devices
 - Firmware found **in device** on plant-floor
 - Firmware metadata display **most current minor** and **major release** available from PCDC
 - Firmware version displayed **links** to
 - Release Notes
 - Product Notice
 - Product Safety Advisory
- Requires internet access and Knowledgebase account
 - [Cloud Connectivity to a Converged Plantwide Ethernet Architecture](#)
- Disaster Recovery Asset Inventory Capability

Device	Description	In Device	Most Current Minor Release	Most Current Release
1756-ENBT	CONTROLLOGIX ENET/IP COMMS MODULE	5.000	5.001(Series A)	6.006(Series A)

Lifecycle Status	Last Update Date	Discontinued Date	Replacement Product	Replacement Category
Mature	9/17/2020		1756-EN2T	Direct Replacement

Device	Description	In Device	Most Current Minor Release	Most Current Release
1768-L43	COMPACTLOGIX L43 2MB MEMORY CONTROLLER			20.019(Series A) 20.019(Series B) 20.019(Series C) 20.019(Series D)

Lifecycle Status	Last Update Date	Discontinued Date	Replacement Product	Replacement Category
Disc	9/17/2020	6/30/2020	1769/5069 CMX ControllerFamily	Engineering Replacement



Asset Firmware Reporting Demo

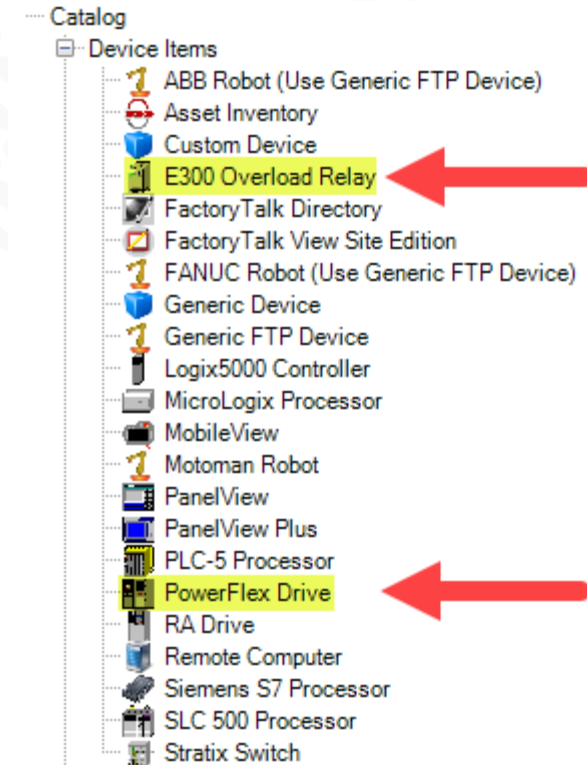


Additional Rockwell Automation Asset Support

Additional Rockwell Automation Device Support

Increase Devices Supported by Disaster Recovery for Rockwell Automation

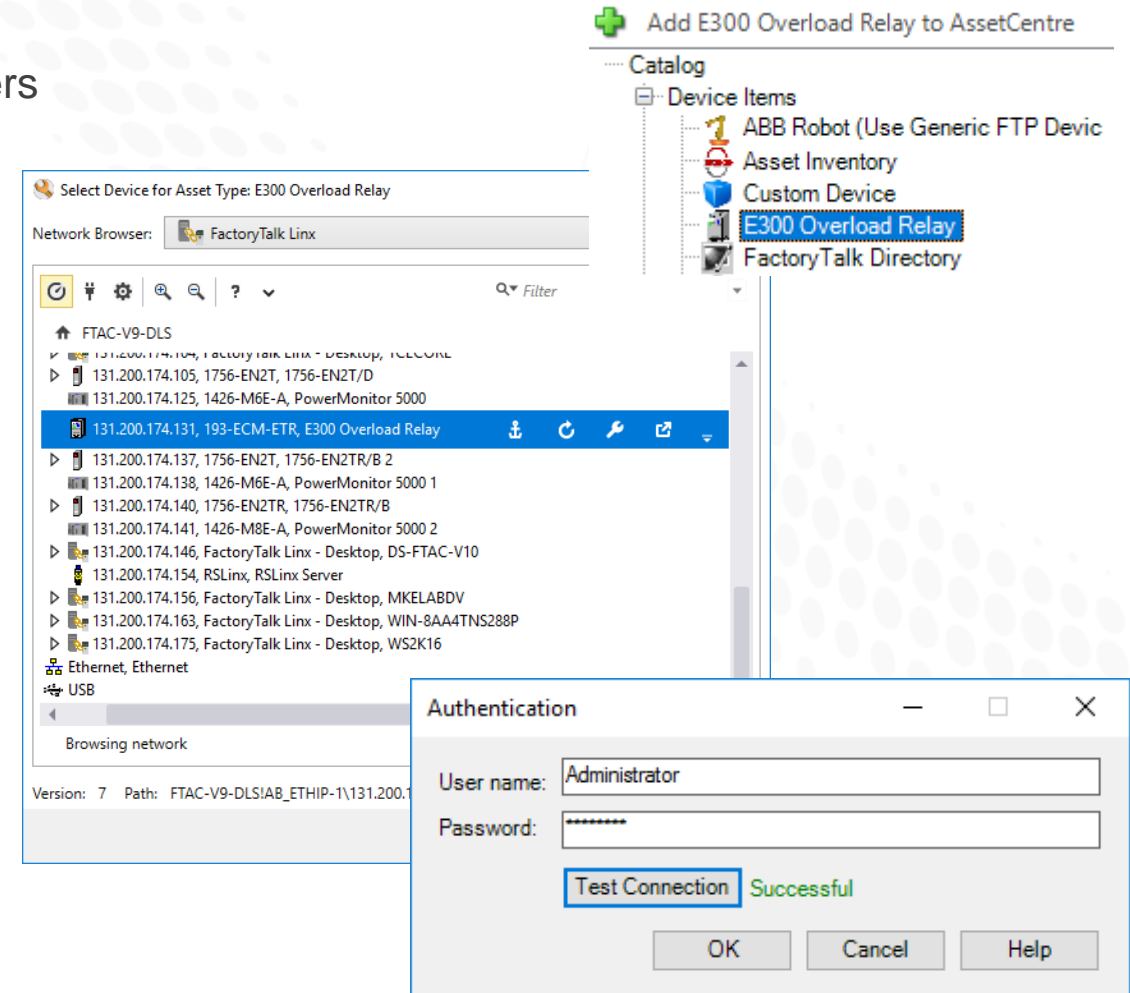
- Disaster recovery for Rockwell Automation now supports
 - New ControlLogix® 5580 standard and process controllers
 - 1756-L8*NSE, 1756-L8*EXT, 1756-L8*EP
 - New CompactLogix™ 5380 process controllers
 - 5069-L3*ERP
 - Stratix® 5800 managed switch
 - E300™ Electronic Overload Relay, Ser. B, and later
 - PowerFlex® 755T drive



E300 Electronic Overload Disaster Recovery

Increase Devices Supported by Disaster Recovery for Rockwell Automation

- Backup E300 Electronic Overload device configuration parameters
 - Scheduled task returns the JSON file
- Detailed compare report (WinMerge)
 - No compare options
- Requirements
 - Series B Control Module and later
 - Firmware 7.x and later
- Administrator account required for authentication
- Disaster Recovery Rockwell Automation Capability





E300 Electronic Overload DR Demo

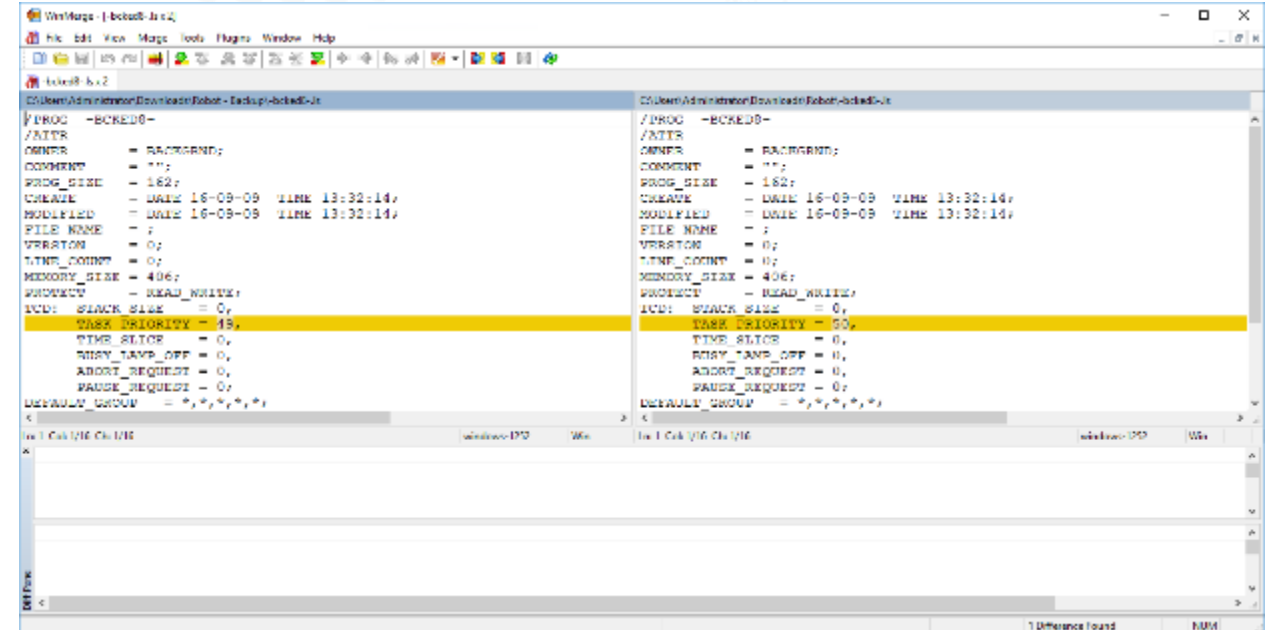


Compare Enhancements

Modernized Text Comparison

WinMerge Integration Improves User Experience

- Compare Engines
 - Enable for Disaster Recovery comparison
 - Archive version to version comparison
- WinMerge integration can compare any ASCII based file
 - For example: XML, TXT, CSV, and many more
- Detailed compare report with differences highlighted
- Additional Disaster Recovery capabilities can leverage
 - Generic FTP Device Capability
 - Remote Computer Capability





Compare Demo

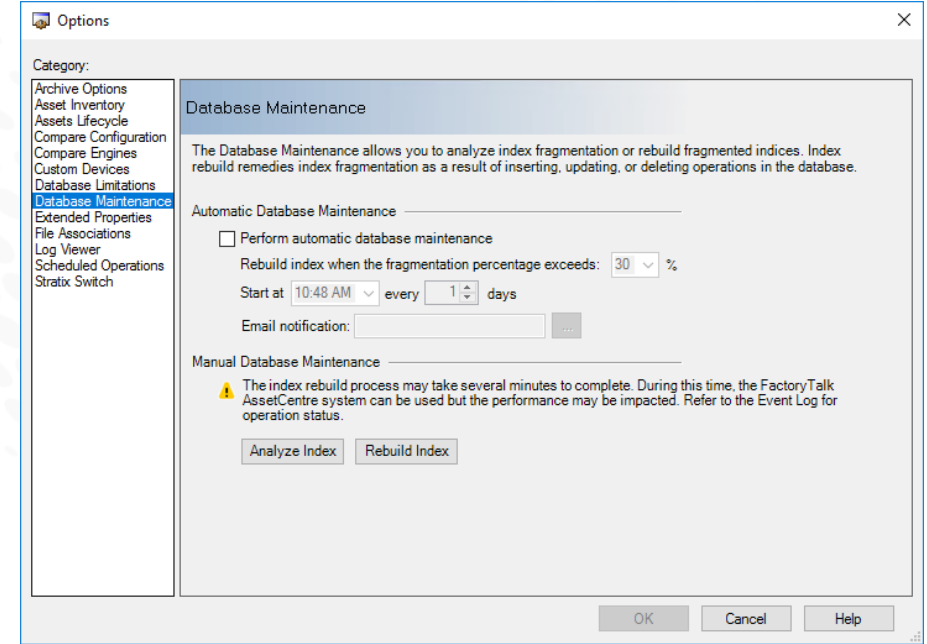


Database Maintenance

Periodic Database Index Rebuild

Maintain FactoryTalk AssetCentre in a High-Performance State

- Automatically analyze index fragmentation and rebuild FactoryTalk AssetCentre database index to improve performance
 - Schedule periodic index fragmentation analysis
 - Rebuild database index when fragmentation reaches a configurable threshold – 20%, 30%, 40%, and 50%
- Manually, on demand
 - Analyze database index fragmentation
 - Rebuild the database index
 - Fixed threshold of 30% index fragmentation



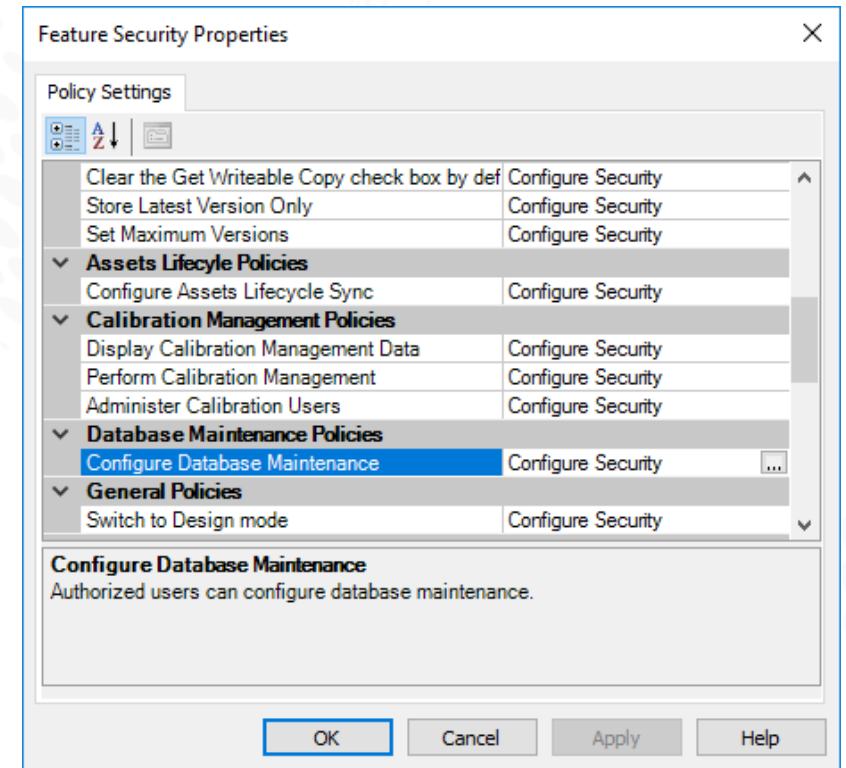
A	B	C
Table	Index	Average Fragmentation Percentage
log_LogAttachment	PK_LogAttachmentAttachmentIDLogEntryID	99.36
log_EventLog	PK_EventLog	99.3
arch_ActivityLog	IX_arch_ActivityLog_AssetId_VersionId	99
arch_ActivityLog	IX_arch_ActivityLog_AssetId_VersionId_Action	98.1
log_AuditEventLog	PK_AuditEventLog	56.87
log_EventLog	IX_EventLog_Severity	44.72

A	B	C	D
Table	Index	Average Fragmentation Percentage Before Rebuilding	Average Fragmentation Percentage After Rebuilding
log_LogAttachment	PK_LogAttachmentAttachmentIDLogEntryID	99.36	0.12
log_EventLog	PK_EventLog	99.3	0.03
arch_ActivityLog	IX_arch_ActivityLog_AssetId_VersionId	99	0.14
arch_ActivityLog	IX_arch_ActivityLog_AssetId_VersionId_Action	98.1	0
log_AuditEventLog	PK_AuditEventLog	56.87	0.05
log_EventLog	IX_EventLog_Severity	44.72	0

Periodic Database Index Rebuild Technology

Maintain FactoryTalk AssetCentre in a High-Performance State

- New **AssetCentreDBMaintenance** SQL user created to run database index rebuild
- New **Configure Database Maintenance** FTD feature security policy to authorize configuration
- Not all tables are analyzed, only tables whose page count is greater than 1000
- Index Rebuild are performed **offline**
 - Tables temporarily unavailable
 - No transactions are lost / possible delay
 - Recommend to run during “idle” hours





Database Maintenance Demo



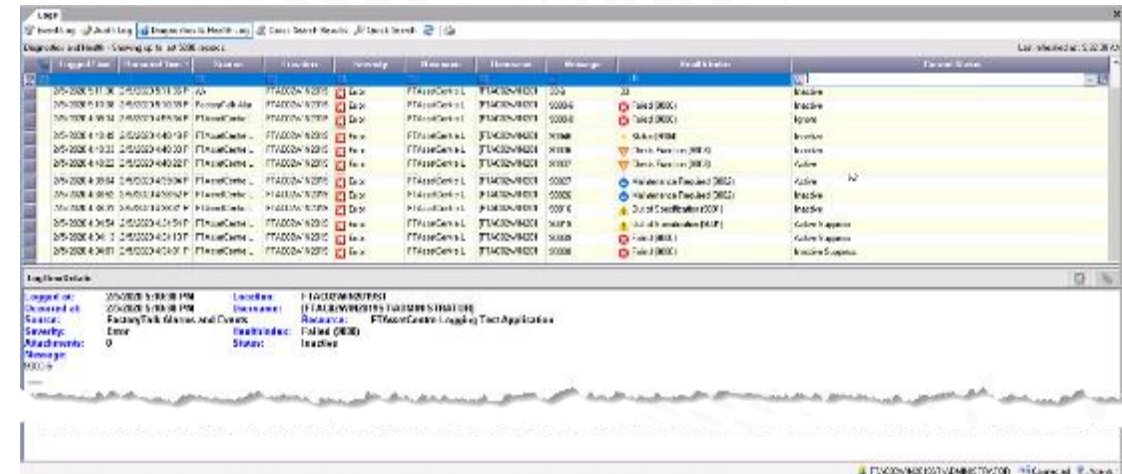
Additions & Enhancements

Automatic Device Descriptive Analytics Logging and Support

Central Repository for System Wide Device Diagnostics

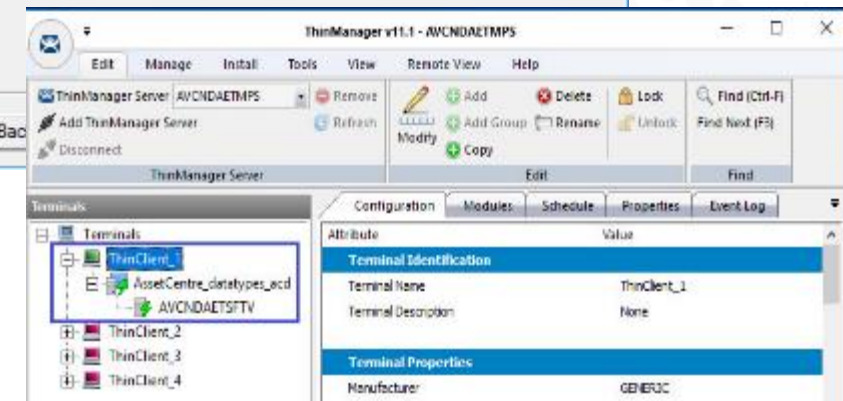
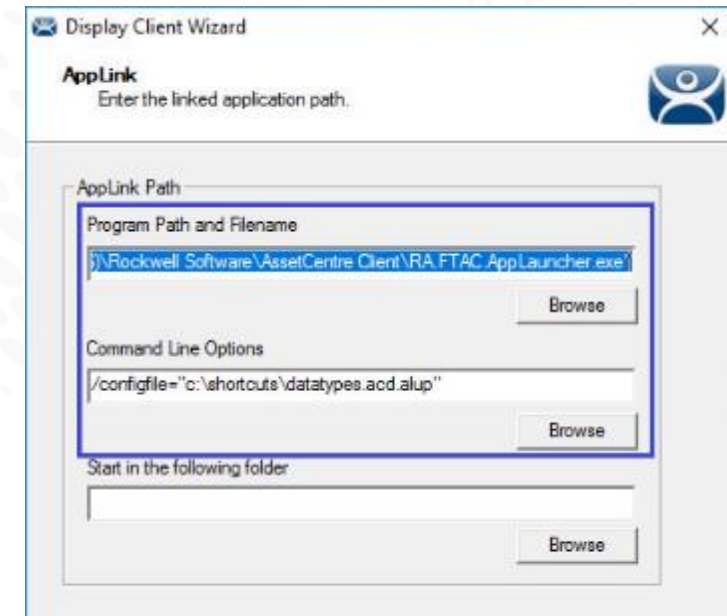
- System wide device diagnostics added with V33 are collected and logged for historical preservation, searching, and reporting
- Diagnostics & Health log displays device health diagnostic published by FactoryTalk Alarms & Events
 - NAMUR NE 107 States: Failed, Out of Specification, Maintenance Required, and Check Function
- **Automatic Diagnostics** must be enabled in the controller v33
- **Alarm & Events** support must be enabled in FT Linx
 - Subscribe to consume diagnostics from the controller
 - Controller shortcut must be configured

Assessment	Meaning
FAILED	High severity: signal invalid due to malfunction in the device; sensor; or actuator.
OUT OF SPECIFICATION	Medium severity: permissible ambient or process conditions exceeded or the measuring uncertainty of sensors or deviations from the set value in actuators is probably greater than expected.
MAINTENANCE REQUIRED	Low severity (advisory): although the signal is valid, the remaining life is nearly exhausted or a function will soon be restricted due to operational conditions e.g. aging of a pH-electrode.
CHECK FUNCTION	Signal temporarily invalid (e.g. frozen) due to on-going work on the device.



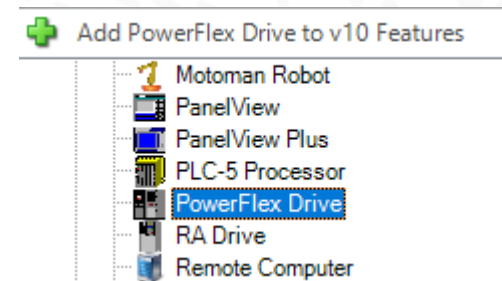
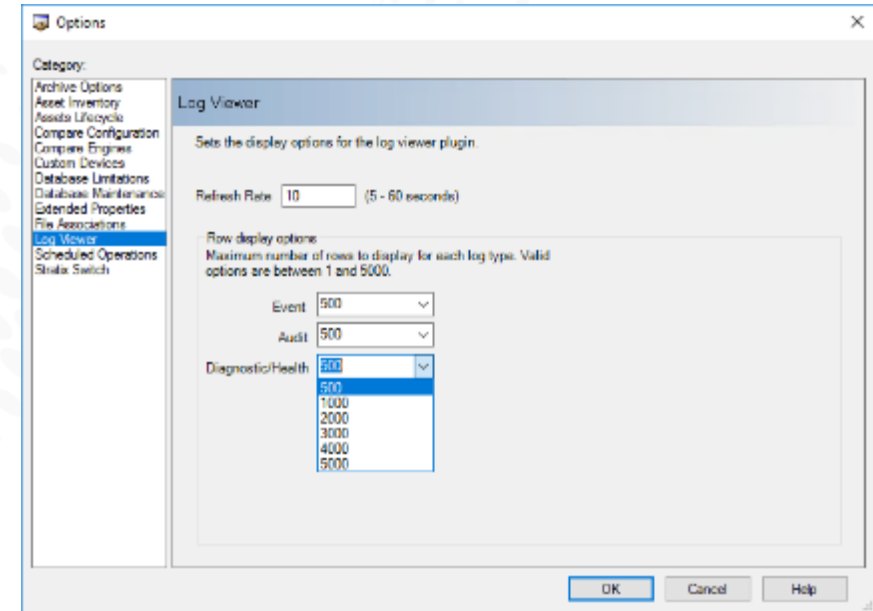
Archive check-out integration with ThinManager client

- Configure ThinManager client to use FactoryTalk AssetCentre's archive check-out capability
 - Automatically check-out a file and open the associated application on the ThinManager client
 - Limit the file and applications a user can access on a ThinManger® client instance
- Automatically create a new version capturing user changes
 - Configure FactoryTalk Archive Automatic Check-in when associated application is closed
- Increase user effectiveness and simplify the user's work



Additional Improvements

- Increase Audit/Event/Health Diagnostics log entries between 500-5000
- Export Asset Inventory to CSV from Asset Lifecycle
- Asset Inventory displays Logix controller project name
- Security permission to control user's ability to change Archive property "Store latest version only"
- Security permission to allow a GET "writable copy" operation by default
- Rename "RA Motor Control" asset to "PowerFlex Drive" improving clarity
 - On-line help now lists devices supported by "PowerFlex Drive" asset
 - [1093013 - FactoryTalk AssetCentre RA Motor Control Device Type Support](#)





FTAC v10 Release Material

FTAC v10 Release Material

CE and Product Team Collaboration

- [FTAC YouTube Videos](#) – (Oct/Nov 2020)
 - Asset Firmware Reporting
 - E300 Electronic Overload
 - Automatic Diagnostics
 - Database Maintenance
- Documentation Updates
 - [Design Considerations Guide](#) – (Oct 2020)
 - [FANUC whitepaper](#) – (Nov 2020)
 - [FANUC Robot Demo GTC Webinar](#) – (June 2020)
 - Many Knowledgebase AIDs – (Oct 2020)
- Seismic
 - [FTAC Version 10 Launch Kit](#) – (Oct 2020)



Feature Summary

FactoryTalk AssetCentre v10.00 Software

**FactoryTalk
AssetCentre 10.00
Software**
Released Sept. 2020



- Asset firmware reporting
- Additional Rockwell Automation device support
- ThinManager® integration
- Performance improvements
- Modernized text comparison
- Increase supported system size
- Deprecate Process Device Configuration capability
- Deprecate Calibration Management capability
- Report firmware release and release notes and product notices by version/series
- Support disaster recovery for PF755T and E300 Ser. B devices
- Improve user experience
- Updated architecture guidance
- Improve large asset databases support
- Integrated WinMerge to improve UX
- More agents, agent groups, concurrent clients
- Remove process-related asset types and FDT/DTM functionality
- Remove ProCal calibration management functionality



**Rockwell
Automation**

Questions



www.rockwellautomation.com