T68 - FactoryTalk® AssetCentre
Protecting Your Investment and Reducing Risk
Agenda

Why Do You Need an Asset Management Solution?

Overview of FactoryTalk® AssetCentre

Release Update

Customer Success Stories
Why Do You Need an Asset Management Solution?
Industrial Organizations have

100s or 1000s OF AUTOMATION ASSETS
PHYSICAL, PROGRAMMED AND CONFIGURED COMPONENTS

Automation Controller Programs
Human Machine Interface Configurations
Drives, Motion, Robot Configurations
Ethernet Switch Configurations
Process Instruments, Measuring Devices
Common Challenges & Potential Risks

- Lost Configuration & Device Failure
- Production Environment Change
- Unauthorized & Undocumented Access
Financial Impact & Business Outcomes

TOP REQUESTED CAPABILITIES

Better collaboration between maintenance and operations
Capture incident resolutions and build knowledge base
Search control system content

COST OF DOWNTIME (Per Hour)

- 76% between $1K-10K
- 11% between $10K-50K
- Several over $100K
- Few over $1 MILLION!

Loss of PRODUCTION ➔ Idled EMPLOYEES ➔ Damaged EQUIPMENT ➔ Concerns of SAFETY ➔ Increased LABOR COSTS

Rockwell Automation TechED™ 2014 Customer Survey of Downtime Cost (~300 Customer Responses)
Overview of FactoryTalk® AssetCentre
FactoryTalk® AssetCentre Overview

**FactoryTalk® AssetCentre**

**ARCHIVE & DISASTER RECOVERY**
- Centrally manage versions of programs, files and folders
- Automate backup of automation assets
- Generate detailed difference detection reports of assets

**AUDIT**
- Track user actions – Who did What, When, Where?
- Produce ad-hoc reports associating users, assets and programs to paint a full picture
- Automate the reporting process via email

**SECURITY**
- Restrict viewing of artifacts
- Prevent unauthorized access to make changes
- Prevent unauthorized users from creating new versions

**EXTENSIBILITY**
- Ability to extend and add support for third-party devices
- Web client available to track assets from a mobile device

**CONFIGURATION & CALIBRATION**
- Support for Process Device Configuration using FDT-DTM technology
- Paperless management of instrument calibration data
Modular Approach

FactoryTalk AssetCentre

EASY TO SCALE
Designed to grow with the customer’s needs

(10 ASSETS INCLUDED)
Add more capabilities as needed
Scalable Deployment

**STANDALONE FactoryTalk AssetCentre**
- Server
- Client
- Agent

**DISTRIBUTED FactoryTalk AssetCentre**
- Multiple Servers
- Client
- Multiple Agents

**FactoryTalk® AssetCentre Server**
Governs the system’s operations

**FactoryTalk® AssetCentre Client**
AssetCentre configuration & view system operation & reports

**FactoryTalk® AssetCentre Agent**
Perform backup, compare & search operations

**FactoryTalk® Directory / Security**
Common security provider for all FactoryTalk® components

**Microsoft SQL Server**
Hosts AssetCentre databases (SQL Express = Smaller systems)

AssetCentre agents can be added to handle systems with higher asset count
Archive: Version Control / Source Control

MASTER FILE
Automatic version control maintains proper file management
Disaster Recovery can optionally be configured to create a new archive version when a difference is detected.
Disaster Recovery Options

Allen-Bradley® products, Windows Files, non-Rockwell Automation Devices and Third-Party Assets
Tamper Detection

DETECTS CHANGES IN REAL TIME

Without needing AssetCentre Clients and Logix 5000™ installed anywhere
Searching and Reporting

CREATE
Ad-hoc or Scheduled Searches

VISUALIZE
Reports

Program Modification By Shift Or Line
Archive History For Modifications
Search Audit Logs
### Track User Actions: Audits / Events

<table>
<thead>
<tr>
<th>Logged Time</th>
<th>Occurred Time</th>
<th>Source</th>
<th>Location</th>
<th>Resource</th>
<th>Username</th>
<th>Message</th>
</tr>
</thead>
<tbody>
<tr>
<td>4/2/2015 1:56.13</td>
<td>4/2/2015 1:56.9</td>
<td>Logix Designer</td>
<td>FTAC-DEMO15</td>
<td>Filler_CLX(S/N 7</td>
<td>FTAC-DEMO15\LABUSER</td>
<td>Changed Data Value of Tag</td>
</tr>
<tr>
<td>4/2/2015 1:55.2</td>
<td>4/2/2015 1:55:15</td>
<td>Logix Designer</td>
<td>FTAC-DEMO15</td>
<td>Filler_CLX(S/N 7</td>
<td>FTAC-DEMO15\LABUSER</td>
<td>Going Offline from Controller</td>
</tr>
<tr>
<td>4/2/2015 1:55.0</td>
<td>4/2/2015 1:54:59</td>
<td>Logix Designer</td>
<td>FTAC-DEMO15</td>
<td>Logix Designer</td>
<td>FTAC-DEMO15\LABUSER</td>
<td>Started Application</td>
</tr>
<tr>
<td>4/2/2015 1:54.3</td>
<td>4/2/2015 1:54:31</td>
<td>FactoryTalk® AssetC..</td>
<td>FTAC-DEMO15</td>
<td>Client</td>
<td>FTAC-DEMO15\LABUSER</td>
<td>Checked out file</td>
</tr>
</tbody>
</table>

**Log Time Details**

- **Logged at:** 4/2/2015 1:56.13 PM  
  **Location:** FTAC-DEMO15
- **Occurred at:** 4/2/2015 1:56.09 PM  
  **Username:** FTAC-DEMO15\LABUSER
- **Source:** Logix Designer  
  **Resource:** Filler_CLX (S/N 70243FF1)
- **Attachments:** 0
User Access and Authentication

User 1
RESTRICTED ACCESS

Restricts access rights in system

User 2
FULL ACCESS

Changes can only be made by authorized users
Asset Inventory Agent

Maintains a version inventory of devices running in the plant
HELPS TO ORGANIZE AUTOMATION INVESTMENT
Asset Inventory Agent

- Inventory Agent will scan (any combination of)
  - Rockwell Common Industrial Protocol devices over Ethernet/IP, ControlNet, DeviceNet, DH+™, etc.
  - SNMP devices like network switches
  - Windows-based PCs & workstations for SW
- Drop new assets into AssetCentre
- Integrated with AssetCentre’s Agent Framework
  - User configures scan using AssetCentre’s Client
  - Schedules the scan with Agents
  - Agents are equipped with Inventory Agent
  - Results get persisted within AssetCentre’s Archive

*Ethernet/IP is recommended for the best performance
Asset Inventory Agent to Product Compatibility & Download Center

Scan your network

Turning the inventory of your assets into actionable results

COMPARE AND SEE THE LIFECYCLE OF YOUR ASSETS
Web (Mobile) Client

Disaster Recovery Status Dashboard

Asset and Schedule Information

Audits and Events Reports
Custom Device Plug-In

Execute
Backup Compare
FOR YOUR DEVICE

FactoryTalk AssetCentre

ADD-ON
Disaster Recovery

Store Results of Operation in…
Process Device Configuration

**FIELD DEVICE TOOL**

- **Access** instrument parameters
- **Configure** & commission process devices
- **Help** with diagnostics
Calibration Management Capability

Master Records

Scheduling

Calibration Results

Work Orders

Reports

Hand-held Interfaces

Remote Workstation
Operating System Platform Support – CPR9/SR9

**AssetCentre Server**
- Windows Server 2016 Std / Datacenter (64 bit)*
- Windows Server 2012 R2 Std / Datacenter (64 bit)
- Windows Server 2012 Std / Datacenter (64 bit)
- Windows Server 2008 R2 SP1 Standard / Enterprise

**Database - MSSQL Server**
- 2016 SP1 Std / Express (64 bit)
- 2014 SP2 Std / Express (64 bit)
- 2012 SP3 Std / Express (32/64 bit)
- 2008 R2 SP3 Std (32/64 bit)

**AssetCentre Client**
- All AssetCentre Agent Operating Systems
- Windows 10 Pro / Enterprise (32/64 bit)*

**AssetCentre Agent**
- Windows Server 2016 Std / Datacenter (64 bit)*
- Windows Server 2012 R2 Std / Datacenter (64 bit)
- Windows Server 2012 Std / Datacenter (64 bit)
- Windows Server 2008 R2 SP1 Standard / Enterprise
- Windows 8.1 Pro, Enterprise (32/64 bit)
- Win 7 SP1 Pro, Home Prem., Ent., Ultimate (32/64 bit)

**Mobile Support**
- Windows IE11, Chrome 53
- iOS 9.1, 9.2, 9.3
- Android 4.4/5/6

* Note: Siemens S5 may not be supported for these operating systems.
Release Updates and Roadmap
What’s New in v7.10

AssetCentre 7.1
Released January 2017

- Export to PCDC for Lifecycle report
- Windows Server 2016 and SQL 2016 support
- Windows 10 support
- Force comment on Check-In
- Enhance security
- Inventory Agent licensing improvements
- Generic FTP DR recovery file filtering

- Improve lifecycle management experience for customers with integration to PCDC
- Simplify software acquisition
- Meeting more compliance requirements
- Secured and encrypted communications
- Enhanced FTP support
2018 Releases – Next Up

AssetCentre 8.0
Planned February 2018

- Import/Export Utility
- Lifecycle Management
- Silent upgrades
- FactoryTalk® Directory Assets

- Expand asset content quickly
- See Rockwell Automation lifecycle status
- Easier upgrade of existing systems
- Additional assets like the FactoryTalk® Directory

Preliminary Information - Subject to Change
OVERVIEW

- This external utility will allow customers to create large FactoryTalk® AssetCentre systems quickly.
- From the wizard, you will be able to select the location where to add the assets, the asset type, and quantity.

BENEFITS

- For end-users or system integrators that want to stand up a FactoryTalk® AssetCentre system quickly, this feature will allow them to add a large quantity of assets to an existing system.
AssetCentre 8.0 – Import / Export Utility: Asset Import

**OVERVIEW**

- Use a spreadsheet to configure a large quantity of assets for FactoryTalk® AssetCentre
- User creates an import file can be edited with asset details and then imported in FactoryTalk® AssetCentre

**BENEFITS**

- Create a FactoryTalk® AssetCentre system using a spreadsheet to rapidly create asset content
- Simply import the spreadsheet and your FactoryTalk® AssetCentre system is ready for the final details to complete deployment

Preliminary Information - Subject to Change
AssetCentre 8.0 – Import / Export Utility: Branch Edits

OVERVIEW
- This portion of the Import/Export utility will allow customers to make branch edits quickly
- From the wizard, you will be able to export the asset branch, edit the contents within a spreadsheet and then import the updates

BENEFITS
- For customers that need to make a lot of branch changes quickly with a spreadsheet format, this utility within the Import/Export Utility will enable those changes

Preliminary Information - Subject to Change
OVERVIEW

- This utility will allow customers to duplicate FactoryTalk® AssetCentre branches quickly
- From the wizard, you will be able to export the branch, make edits with a spreadsheet and then import the new branch

BENEFITS

- For end users that want to create one line or machine model and then duplicate those lines or machines, this feature will enable quick branch duplications within FactoryTalk® AssetCentre
BENEFITS

- FactoryTalk® AssetCentre customers don’t have to leave the software do see the lifecycle status of their Rockwell Automation hardware assets
- Seeing the hardware moving through its lifecycle will allow for more proactive hardware management

OVERVIEW

- Using the FactoryTalk® AssetCentre’s Inventory Agent, customers can import (from the Product Compatibility and Download Center website) the known Rockwell Automation hardware lifecycle status for display
- Pulls from catalog information either pre-populated or entered by the customer
- Export the lifecycle content to sort and filter on lifecycle to make informed lifecycle decisions
AssetCentre 8.0 – Event Log Extractor & Archive Cleanup Wizard

OVERVIEW

- Customers can extract the last attachment from the FactoryTalk® AssetCentre in case the server is not available
- Administrators can select to remove asset versions from the database with the option to save to an SDF format

BENEFITS

- For industries that need access to attachment content at all times, this will provide the extraction of the last attachment
- To support greater database management, save versions of an asset to reduce the database size

Preliminary Information - Subject to Change
AssetCentre 8.0 – Generic FTP Compare Options

**OVERVIEW**

- For customers using the Generic FTP asset, this will give them the option to select a custom compare utility.

**BENEFITS**

- When comparing Generic FTP files, now you will be able to select an external compare tool like Beyond Compare in addition to the existing checksum compare.

Preliminary Information - Subject to Change
AssetCentre 8.0 – Disaster Recovery – FactoryTalk® Directory

OVERVIEW

- Customers will be able to archive, via Disaster Recovery, the entire FactoryTalk® Directory in FactoryTalk® AssetCentre

BENEFITS

- The FactoryTalk® Directory is a critical component within the FactoryTalk® Platform. By archiving the content on a schedule or ad-hoc, customers will have the latest version if they need to redeploy.

Preliminary Information - Subject to Change
AssetCentre 8.0 – Silent Install & Upgrades

Allow installation and upgrades of AssetCentre with minimal user intervention

- Fewer errors during installation
- Greater consistency during a rollout
- Shorter installation times
- Lower support costs
- Manage AssetCentre upgrades silently
  - Support for Server, Agent and Client
  - Log files to track progress
  - Support for v4.10 through v7.10 upgrades to v8

Upgrade your AssetCentre system easier and faster!

Preliminary Information - Subject to Change
AssetCentre 8.0 – Increased System Sizes

- **One** FactoryTalk® AssetCentre Server
  - ProCalV5 Server (if using Calibration Management)

- **Twenty-Five** FactoryTalk® AssetCentre Agents & Agent Groups
  - Single agent services ~100 assets/ 12 hrs
  - Limit of twenty-five agent groups

- **60** concurrent FactoryTalk® AssetCentre Clients
  - ProCalV5 Client (if using Calibration Management)
  - Web client limited to IIS connections (up to 65,000)

Preliminary Information - Subject to Change
AssetCentre 8.0 – OS/Platform Support

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**Platform Support (SR10)**
- RSLinx® Classic: v4.00
- FactoryTalk® Linx: v6.00
- FactoryTalk® Services Platform: v3.00
- FactoryTalk® Activation: v4.02.00

* Note: Siemens S5 may not be supported for these operating systems.
Customer Success Stories
Major U.S. Food Company

**CHALLENGE**

- Inadequate control measures in place to manage automation control system
- Excessive downtime resulting from unknown or unauthorized changes to controller programs

**SOLUTION**

- Implemented FactoryTalk® AssetCentre software to provide change management control and disaster recovery
- Leveraged user security to restrict who could make changes to controller programs
- Provided audit reports showing authorized changes to the automation control system
- Leveraged FactoryTalk® AssetCentre archive to provide change control for production-related documentation

**RESULTS**

7% **REDUCED DOWNTIME** events by 7% or more

**REDUCED WASTED PRODUCT** by 10% due to equipment stoppages

**IMPROVED ACCESS** to audit reports and archived repository through change management system

CUSTOMER SUCCESS
International Metals Company

CHALLENGE
• 150+ systems, Multiple OEMs, 30+ engineers
• Versioning from commission to steady state
• Manual backup procedure

SOLUTION
• Implemented FactoryTalk® AssetCentre software to provide change management control and disaster recovery as part of overall asset management program
• Disciplined change management process implemented across four district site operations
• Audit trail history provides summary of non-conformance

RESULTS
IMPROVED PRODUCTIVITY
IMPROVED ACCESS to audit reports and archived repository through change management system

CUSTOMER SUCCESS
Medical Device Manufacturer

CHALLENGE
• Upgrading a proprietary control system
• Time to market was not keeping pace with increasing demand
• Production data and configuration information were dispersed

SOLUTION
• FactoryTalk® AssetCentre was implemented as part of broader control system upgrade

RESULTS
REduced Validation Cost by $2 million dollars
Reduced Time to Market
Recognized for Operational Excellence
Thank You!