

LISTEN.
THINK.
SOLVE.®

Communications for The Connected Enterprise

What's NEW in Communication Software at Rockwell Automation

March 2018

CPR9 SR10.0



PUBLIC

 *Allen-Bradley • Rockwell Software*

**Rockwell
Automation**

What's New in Communications Software

New FactoryTalk® Linx Name

Studio5000 adds option to utilize FactoryTalk® Linx

New OPC UA Client and Server communications

Redundant network paths to a Logix controller

Improved operation with ControlLogix® redundancy

FactoryTalk® Linx™

New FactoryTalk® Linx Gateway catalog numbers

FactoryTalk® Linx Gateway delivers CIP Energy data

FactoryTalk Linx direct access to Logix Tag Based Alarm attributes

New Data Bridge software to move data between servers

KepServer Enterprise adds additional communications drivers

Extending the reach of The Connected Enterprise®

Introducing FactoryTalk® Linx

**Rockwell
Automation**

RSLinx®
ENTERPRISE



FactoryTalk® Linx™

Data Server For Rockwell Automation
Control Hardware

Name changed to appropriately reflect FactoryTalk® Linx
as the premier communications service included with
FactoryTalk® software portfolio

FactoryTalk® Gateway



FactoryTalk® Linx™ Gateway

Purchased For Third-party OPC DA & UA
Software Access

Revised name for FactoryTalk® Linx Gateway provides a
closer tie between the communications service and
purchased OPC option.
(New catalog numbers and activation keys)

RSLinx® Classic retains original name

Connectivity Software Typical Uses



DESIGN

Browse a network to locate the desired device and communications service for Rockwell Automation Software to manage equipment



MAINTAIN

View all connected devices and access details, diagnostics and configuration



OPERATE

Access runtime operational data for Visualization and Information Software

RSLinx[®]
CLASSIC



FactoryTalk[®] Linx[™] CommDTM



EXTENDED

FactoryTalk[®] Linx[™]

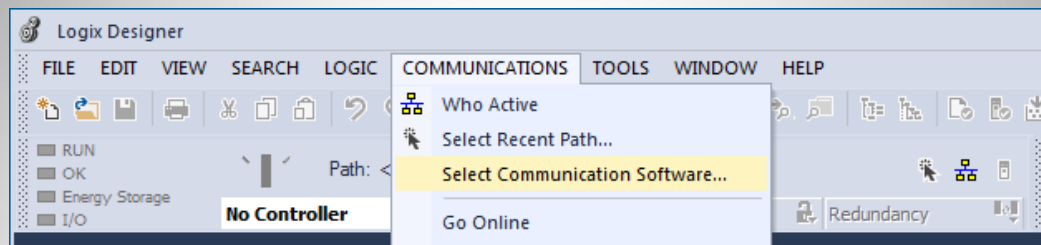
FactoryTalk[®] Linx[™] Gateway

KeServer Enterprise

FactoryTalk® Linx Communications

Studio 5000® Adoption

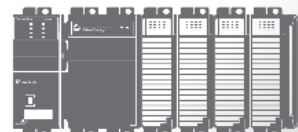
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RSLinx®
CLASSIC



FactoryTalk® Linx™



Overview

- FactoryTalk® Linx V6.00 added network browsing component and communications services for Studio 5000 Logix Designer®
- Choose which Linx edition for on-line interactions
- Driver configuration integrated in network browser
- Enhanced usability, topology search and auto EDS Upload
- Large 4,000 byte connection for download operations

Benefits

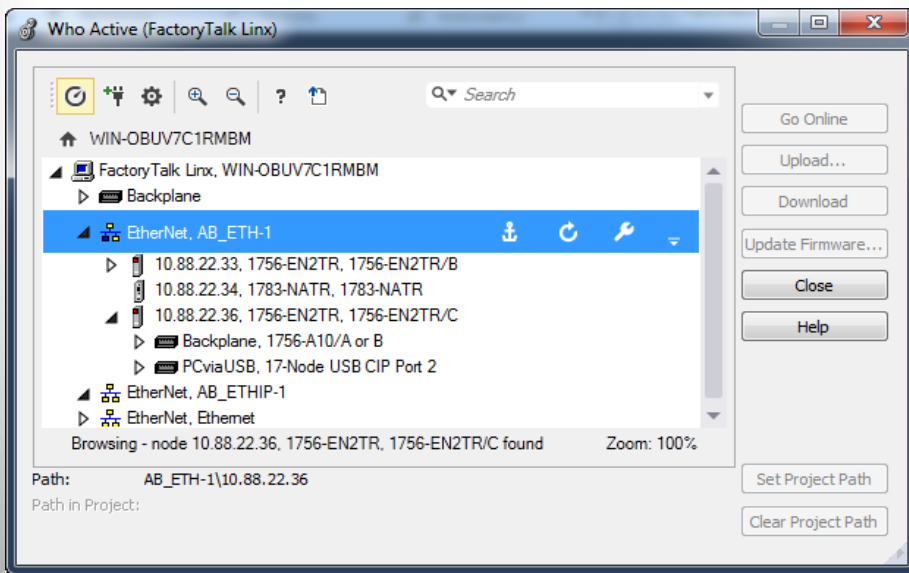
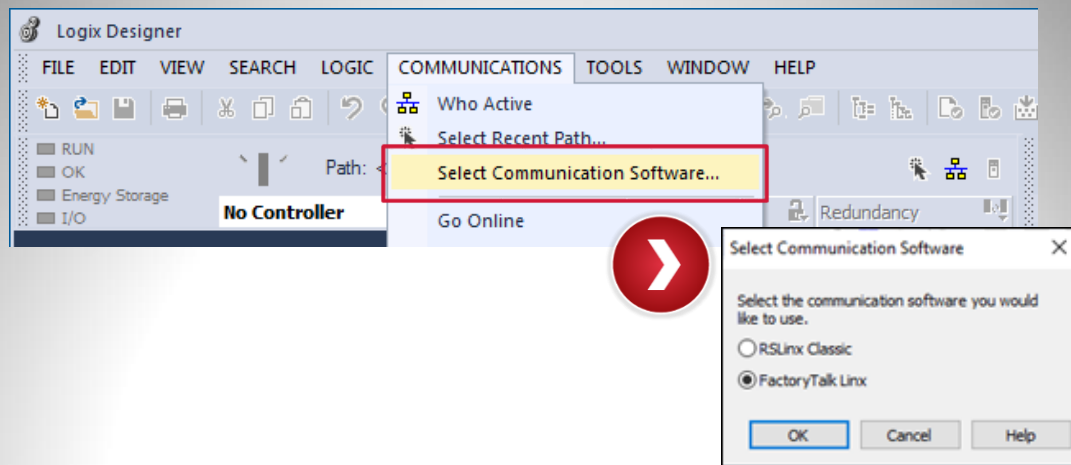
- Reduces steps and time required to configure network drivers
- Streamlines network setup and system navigation
- Shorter download time over Wi-Fi and VPN remote connections gives faster startup and system recovery

FactoryTalk[®] Linx Communications

Studio 5000[®] Adoption

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LGX => V31.00, FTL=>V6.00



Overview

- New option for Studio 5000 Logix Designer[®] V31 to utilize FactoryTalk[®] Linx to interface with controllers

Benefits

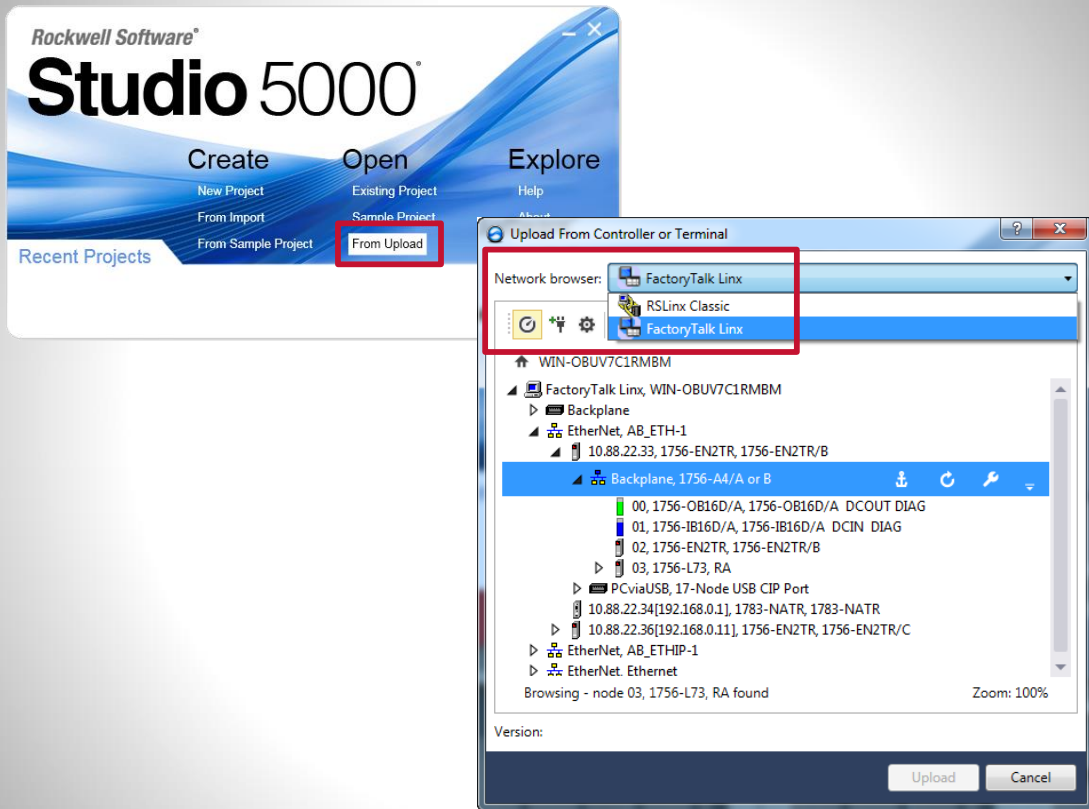
- The new FactoryTalk[®] Linx network browser enhances productivity
- Add / change Ethernet driver configuration within the browser directly (vs. external app)
- Search function to locate a browsed device more quickly
- Zooming to adjust the tree to see an appropriate level of detail
- Option for automatic EDS upload
- Configure range of IP addresses (Ex. 10.88.22.1 – 10.88.22.100)
- Copy / paste full IP address list to text editors

FactoryTalk[®] Linx Communications

for Studio 5000[®]

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S5K=>V31.00, FTL=> v6.00



Overview

- Upload option from the Studio 5000[®] Launcher can now utilize either RSLinx[®] Classic or FactoryTalk[®] Linx
- User choice or automatic if only one install (RSLinx[®] Classic is default)
- FactoryTalk[®] Linx improvements
 - Configure Ethernet drivers directly in the browser
 - Search, zooming, anchor and many other usability extensions

Benefits

- Improved productivity with FactoryTalk[®] Linx network browser

FactoryTalk[®] Linx Network Browser

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FTL => v5.90

Settings (New)

Tree Size Zooming (New)

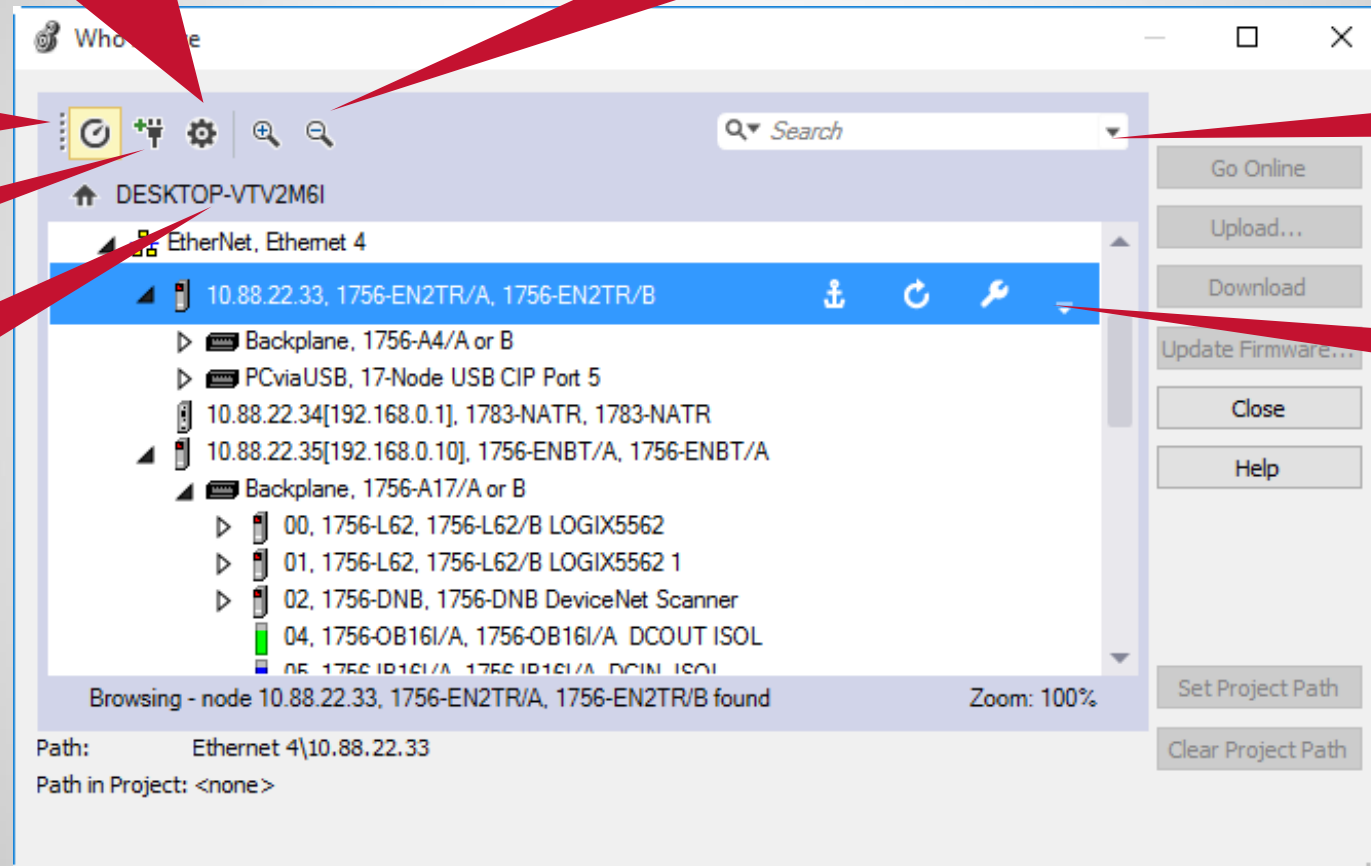
Auto-Browse Enable /
Disable

Add Driver (New)

Path Breadcrumb

Search Previously
discovered topology (New)

Inline / touch friendly Item
context options

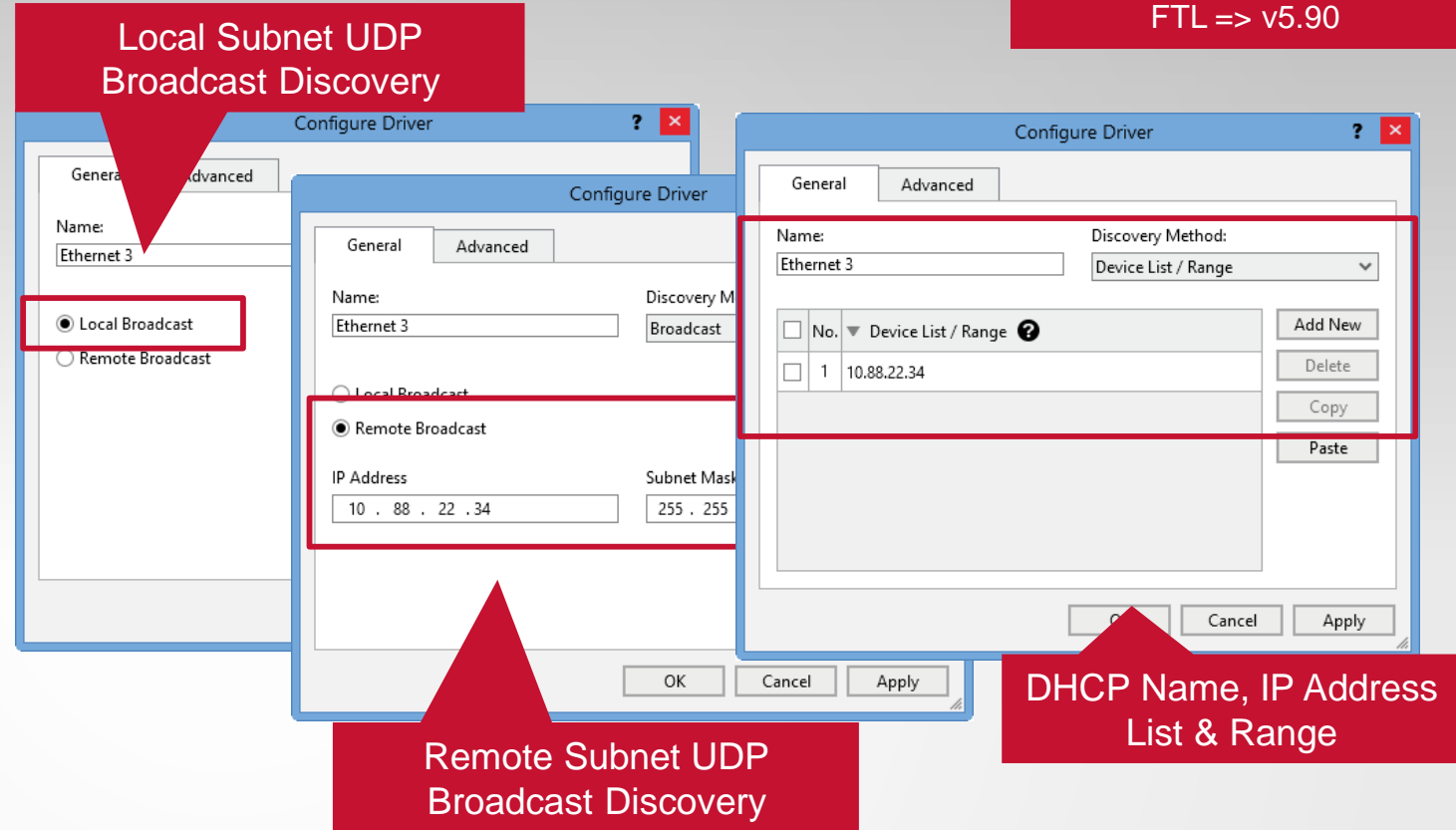
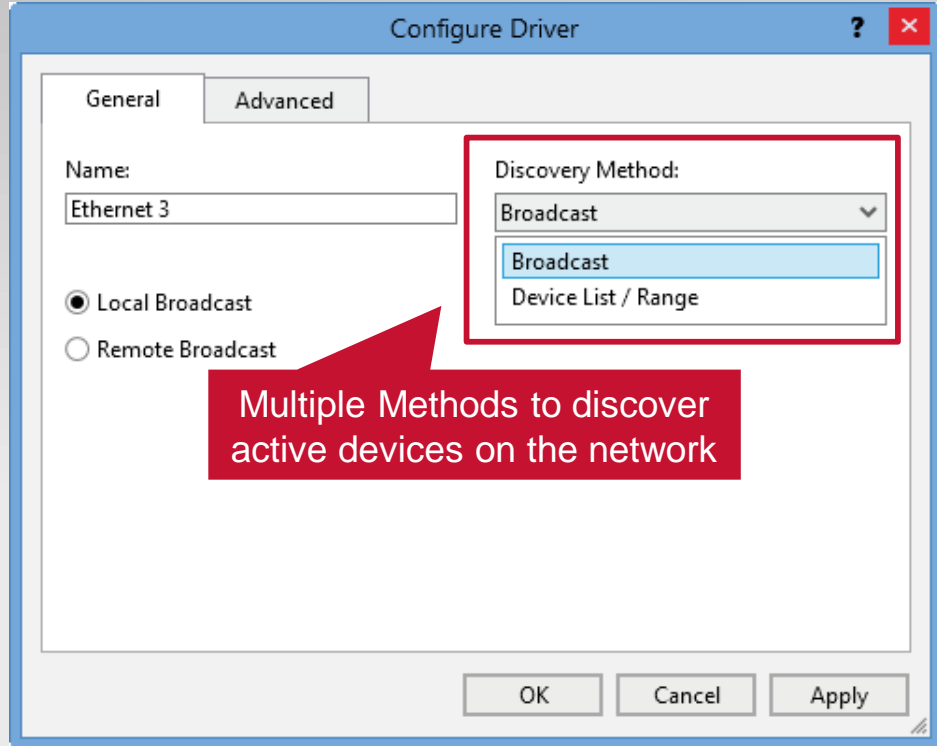


FactoryTalk[®] Linx Network Browser

Network Device Discovery

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FTL => v5.90



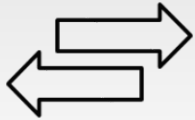
- Merges the Capabilities from RSLinx Classic “EtherNet/IP” and “Ethernet Devices” into a single interface

- A Broadcast message is transmitted locally or on the specified subnet (most switches block this message by default)
- CIP Devices respond accordingly and are added to the topology tree

FactoryTalk[®] Linx Discovery Methods

NETWORK POLL

Ping each available address on the network



- Can create unwanted traffic
- Unused Ethernet addresses create ARP messages
- Non-Ethernet drivers and downstream Ethernet in new shared network browser control

BROADCAST

UDP Broadcast sent to all devices on a subnet



- Requires every device to respond
- Typically only works on local subnet, most Ethernet switches are pre-configured to block
- “Ethernet” driver

DEVICE LIST

User defined list of devices



- Results in the least amount of network traffic
- Requires user to track down and desired address
- User entered devices and list in new shared network browser control

FactoryTalk[®] Linx utilizes different approaches for device discovery to control or optimize the network impact

FactoryTalk[®] Linx Discovery Methods

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FTL => v5.9.0

Configure Driver

General Advanced

Name: Ethernet 4 Discovery Method: Broadcast

Local Broadcast
 Remote Broadcast

IP Address: . . . Subnet Mask: . . .

OK Cancel Apply

Configure Driver

General Advanced

Name: Ethernet 4 Discovery Method: Broadcast

No.	Device List / Range
1	10.88.22.33
2	10.88.22.34
3	10.88.22.37-39 (3)

Bridge Configuration

General Advanced

Name: Bridge 2 Serial Number: 98D519 Port Number/IP Address: 2\192.168.0.11

No.	Device List / Range
1	192.168.0.1-128 (128)

Add New Delete Copy Paste

OK Cancel Apply

Bridge Configuration

General Advanced

Poll Timeout (msec): 3000
(Default=3000, Min=1, Max=65535)

Maximum concurrent packets to this network: 64
(Default=64, Min=1, Max=128)

Poll interval between browse cycles (msec): 1000
(Default=1000, Min=1, Max=65535)

Enable discovery using subnet mask

Reset

OK Cancel Apply

Broadcast

- UDP Broadcast CIP Identity request
- Local subnet for the workstation
- Option to choose the computer's Network Interface Connection (NIC) and listen to unsolicited CIP message (avoids conflicts with RSLinx[®] Classic)

List / Range

- User selected device and IP address or a range of IP Addresses (unused IP addresses will result in Network ARPs)
- Available for both device list and downstream configurations
- Individual UPD CIP Identity request

Bridged Ethernet (Downstream)

- Results in the least amount of network traffic
- Requires user to track down and desired address
- User entered devices and list in new shared network browser control

FactoryTalk[®] Linx Network Browser

Point to Point List

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FTL => v5.90

Multiple IP
Addresses

IP Address
Range
(new)

DHCP Name

Copy/Paste selected items to
clipboard (New method to
move between drivers or
email to a different computer)

FactoryTalk[®] Linx

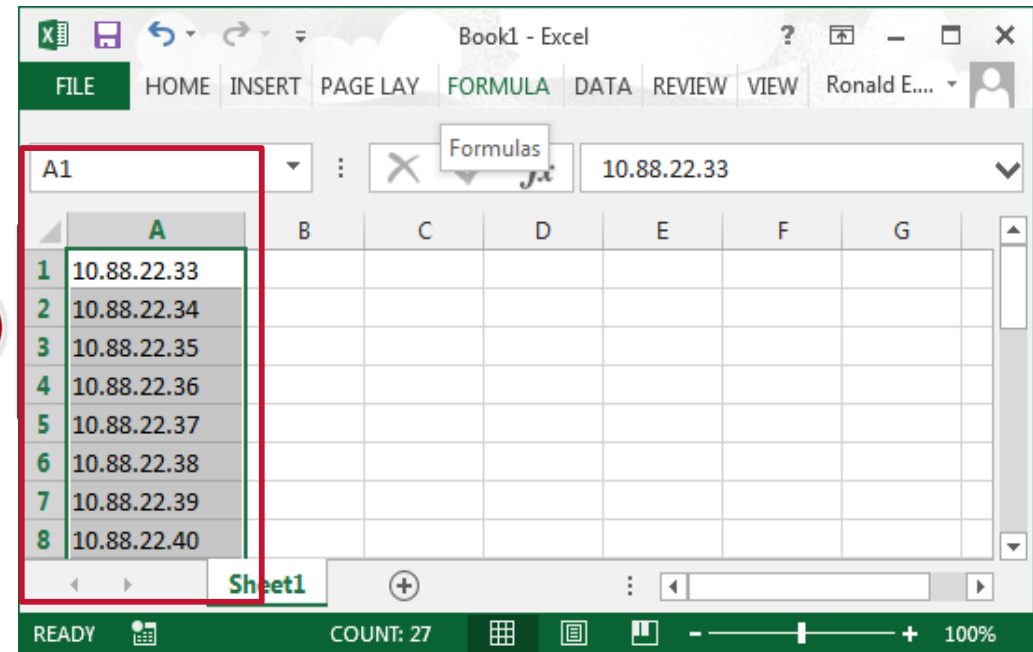
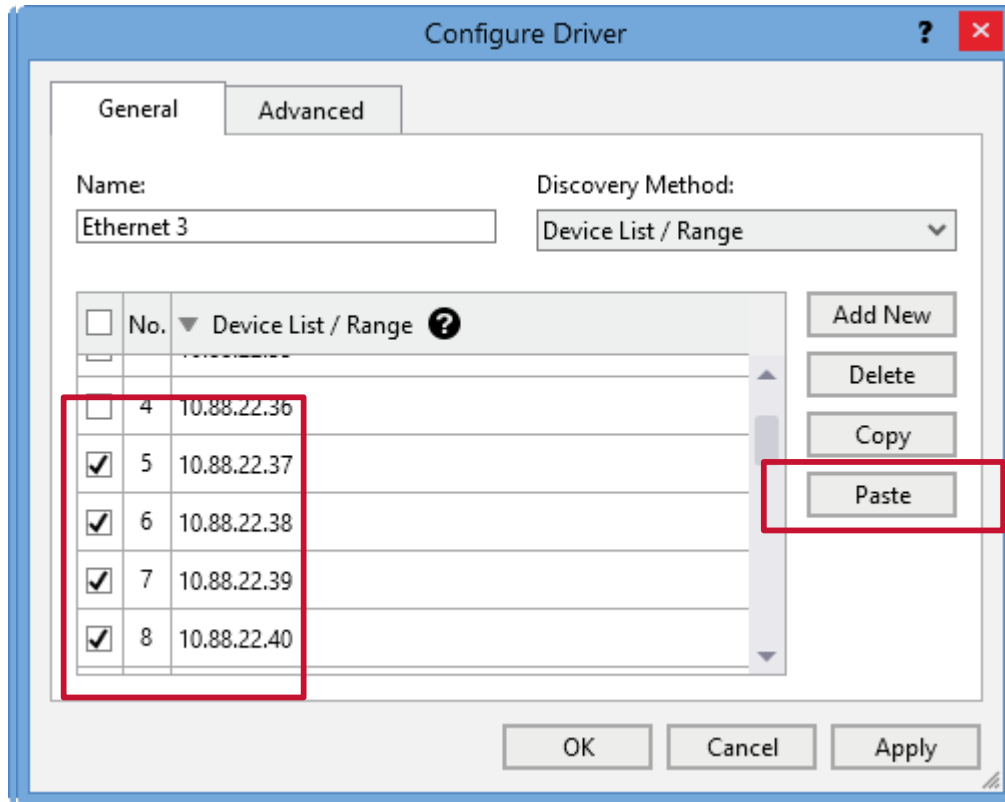
- Will send a targeted message to each item to identify the device
- Similar to the RSLinx[®] Classic “Ethernet Devices” Driver
- Multiple ways to specify the target device
- IP Address
- IP Address with Descriptive Text
- DHCP Device / Host Name
- IP Address Range (New)

FactoryTalk[®] Linx Network Browser

Access the list configuration with other tools

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FTL => v5.90



Alternative method to configure, deliver to another person or even simple backup/restore for address list

FactoryTalk[®] Linx Network Browser

Search / Filter browsed contents

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FTL => v5.90

Text search to locate devices more quickly

The screenshot shows the 'Who Active' window in the FactoryTalk Linx Network Browser. A search bar at the top contains the text '1756-L'. Below the search bar, a table displays the results of the search. The table has four columns: Device, Address, OnlineName, and Location. The results are as follows:

Device	Address	OnlineName	Location
1756-L73	03	BlueDemo_V28	DESKTOP-VTV2M61\Ethernet 4\10.88.22.2
1756-L62	00	1756-L62/B LOGIX5562	DESKTOP-VTV2M61\Ethernet 4\10.88.22.2
1756-L62	01	1756-L62/B LOGIX5562 1	DESKTOP-VTV2M61\Ethernet 4\10.88.22.2

At the bottom of the window, the status bar shows 'Browsing - node 10.91.79.181, . PowerFlex 755 found' and 'Zoom: 100%'. The path is 'Ethernet 2' and the path in the project is '<none>'. On the right side of the window, there are several buttons: 'Go Online', 'Upload...', 'Download', 'Update Firmware...', 'Close', 'Help', 'Set Project Path', and 'Clear Project Path'.

Overview

- Searched the browsed topology and provides a filtered view of the devices that match the requested string
- Limit the text to a specific attribute
- Compound expressions supported
- Cancel to restore topology view
- Double click to navigate back to tree with context

Benefits

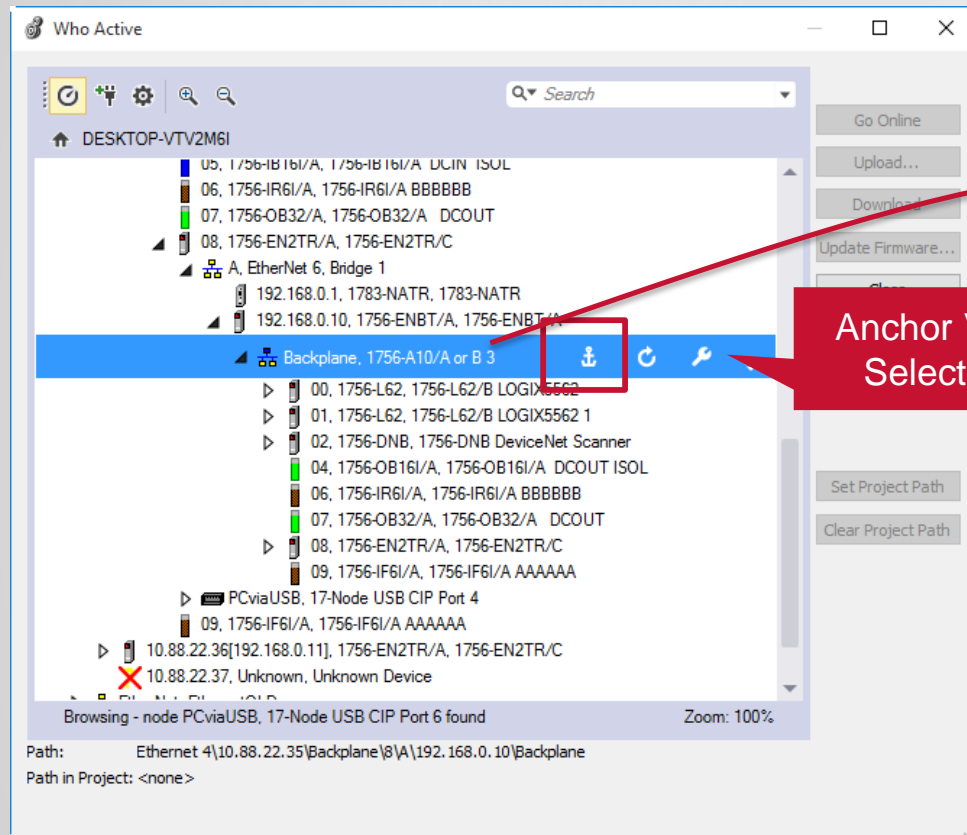
- Locate items and go on-line more quickly
- Diagnose and reduce system downtime

FactoryTalk[®] Linx Network Browser

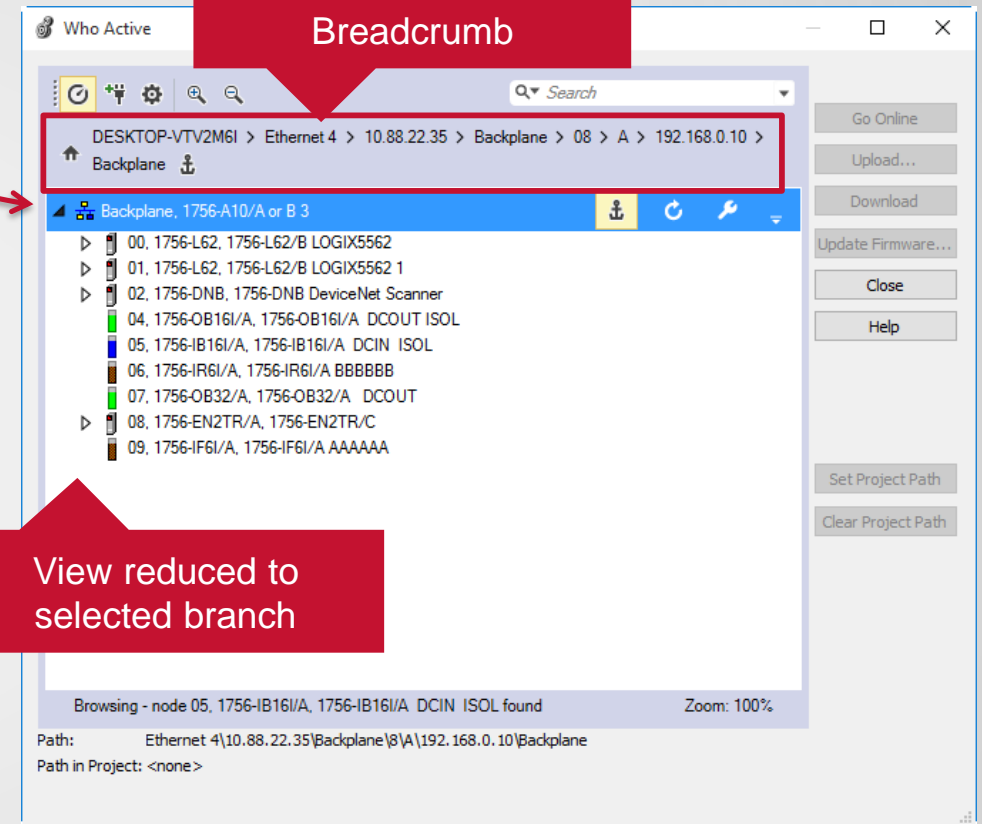
Display Anchor

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FTL => v5.9.0



Anchor View Selection



Hot Links in Path Breadcrumb

View reduced to selected branch

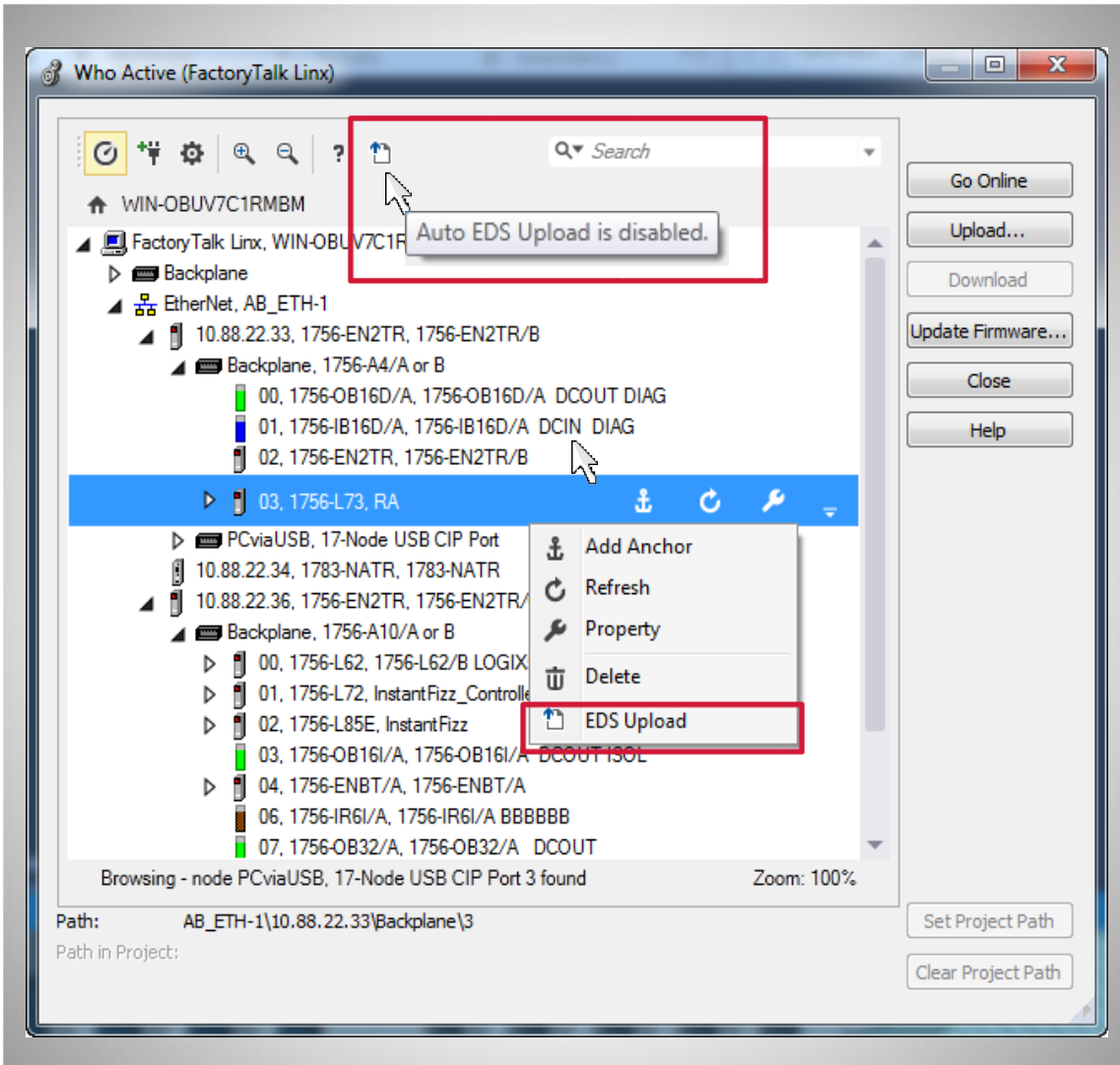
Limits the view to selected area of topology to reduce clutter

FactoryTalk[®] Linx Network Browser

Electronic Data Sheet (EDS) Upload

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Automation

S5K=>V31.00, FTL=>v6.00



Overview

- Electronic Data Sheet (EDS) files provide information for a device (name, icon, parameters and communications methods)
- Most EDS files delivered and installed with FactoryTalk[®] Linx. Many devices embed EDS files
- New FactoryTalk[®] Linx network browser option to perform EDS upload (Manual or Automatic options)

Benefits

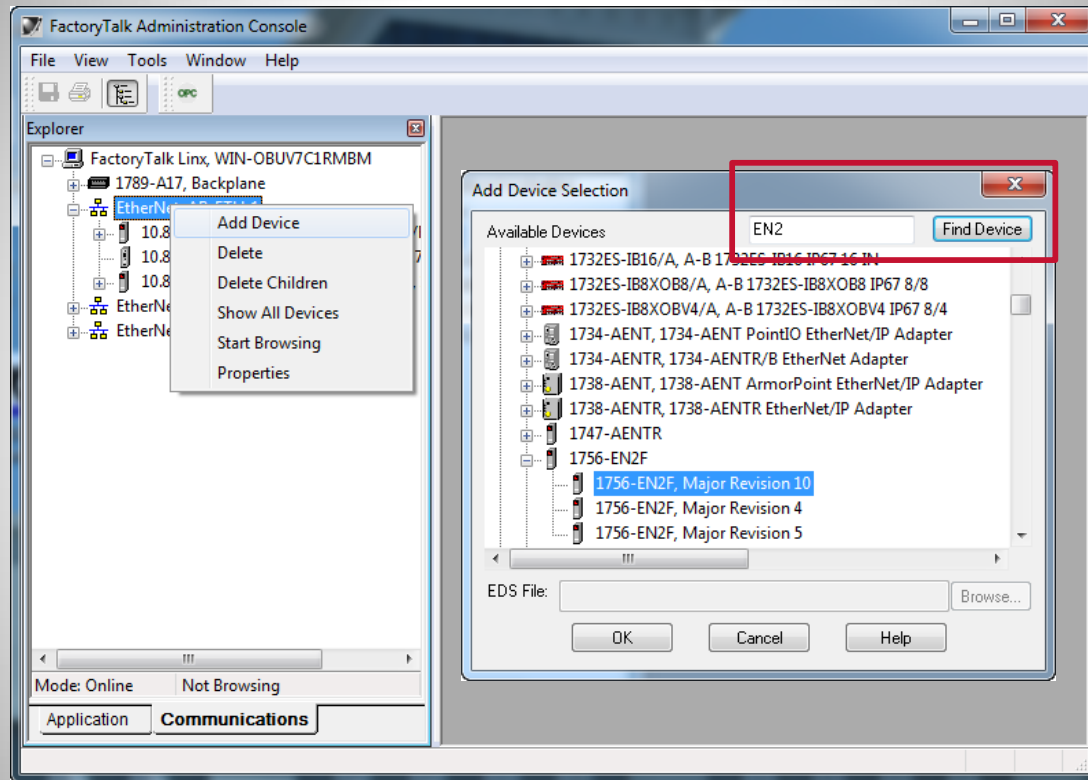
- Teaches FactoryTalk[®] Linx how to work with new devices
- Enhanced productivity when using FactoryTalk[®] Linx network browser to navigate the system from within Studio 5000[®] or ControlFLASH[™]

FactoryTalk[®] Linx

Find on add Add Device Selection Dialog

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Automation

FTL=> v6.00



Overview

- FactoryTalk[®] Linx allows manual addition of devices to the network topology hierarchy
- New “Find” option added to help locate desired item(s)
 - Searches for partial or full string
 - Opens the device to show revisions
 - Click “Find” again for next / multiple items

Benefits

- Permits off-line configuration when devices are not available
- Permits FactoryTalk[®] Linx to discover devices are on different subnets
- “Find” option enhances productivity by locating items more quickly

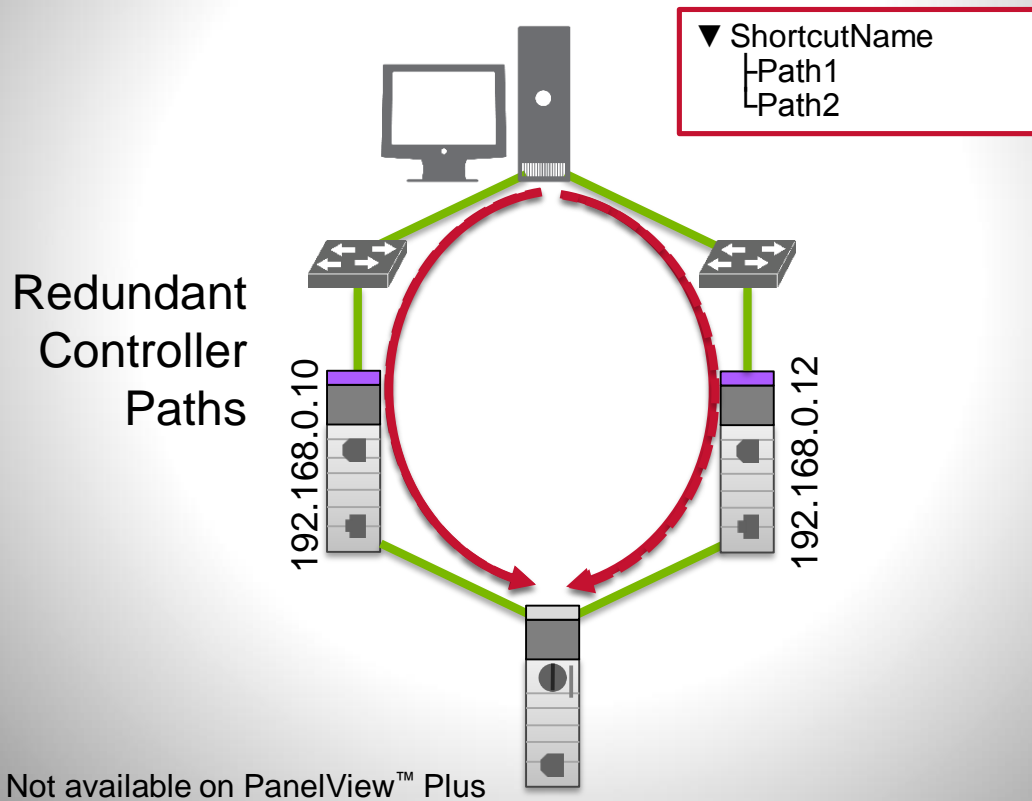
FactoryTalk[®] Linx

Redundant Paths to Single Logix Controller

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FTL=> v6.00

FactoryTalk[®] Software



Overview

- Two paths configured to a Logix 5000[™] controller
- Simultaneous connections via both paths
- Communicate via one path a time
- Queries controller ~2sec to detect path failure and switches automatically
- Shares single set of optimized tag lists
- Holds last state to minimize HMI blind time
- @Define tags to monitor and switch paths

Benefits

- Prevents network hardware or cable failure from impacting system operation
- Increased system availability with minimal impact to network traffic
- Fast recovery maximizes system output

FactoryTalk[®] Linx

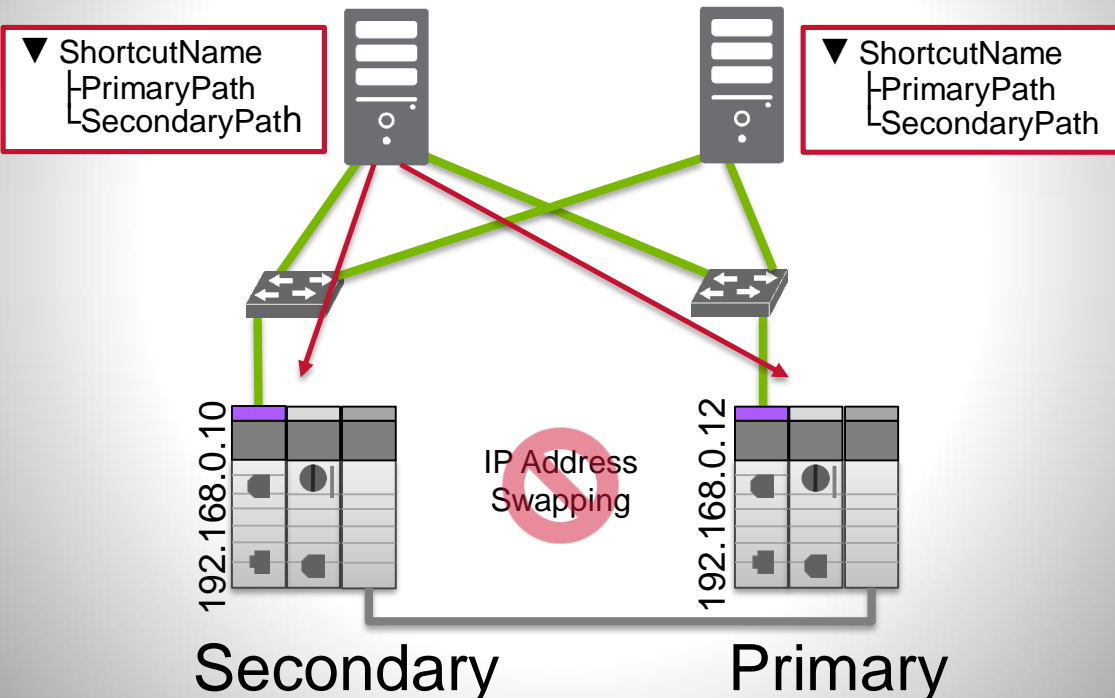
Redundant ControlLogix[®] Controller Paths

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LGX => V31.5x, FTL=> v6.00

FactoryTalk[®] Software

Primary Data Server Secondary Data Server



Requires new Logix v31.5x and EN2T Firmware (Mid 2018)
Not available on PanelView[™] Plus

Overview

- Set of paths configured to each ControlLogix[®] Redundant Controller
- Simultaneous connections to both controllers
- All communicate to primary (cross-loads secondary)
- Queries secondary ~100msec for redundancy switchover and switches paths automatically
- ControlLogix redundancy switchover on CPU/network connection loss (add PRP for increased availability)
- Fast switchover with last state held to maintain HMI data presentation (avoids blind time)
- @Define tags to monitor and switch paths from HMI

Benefits

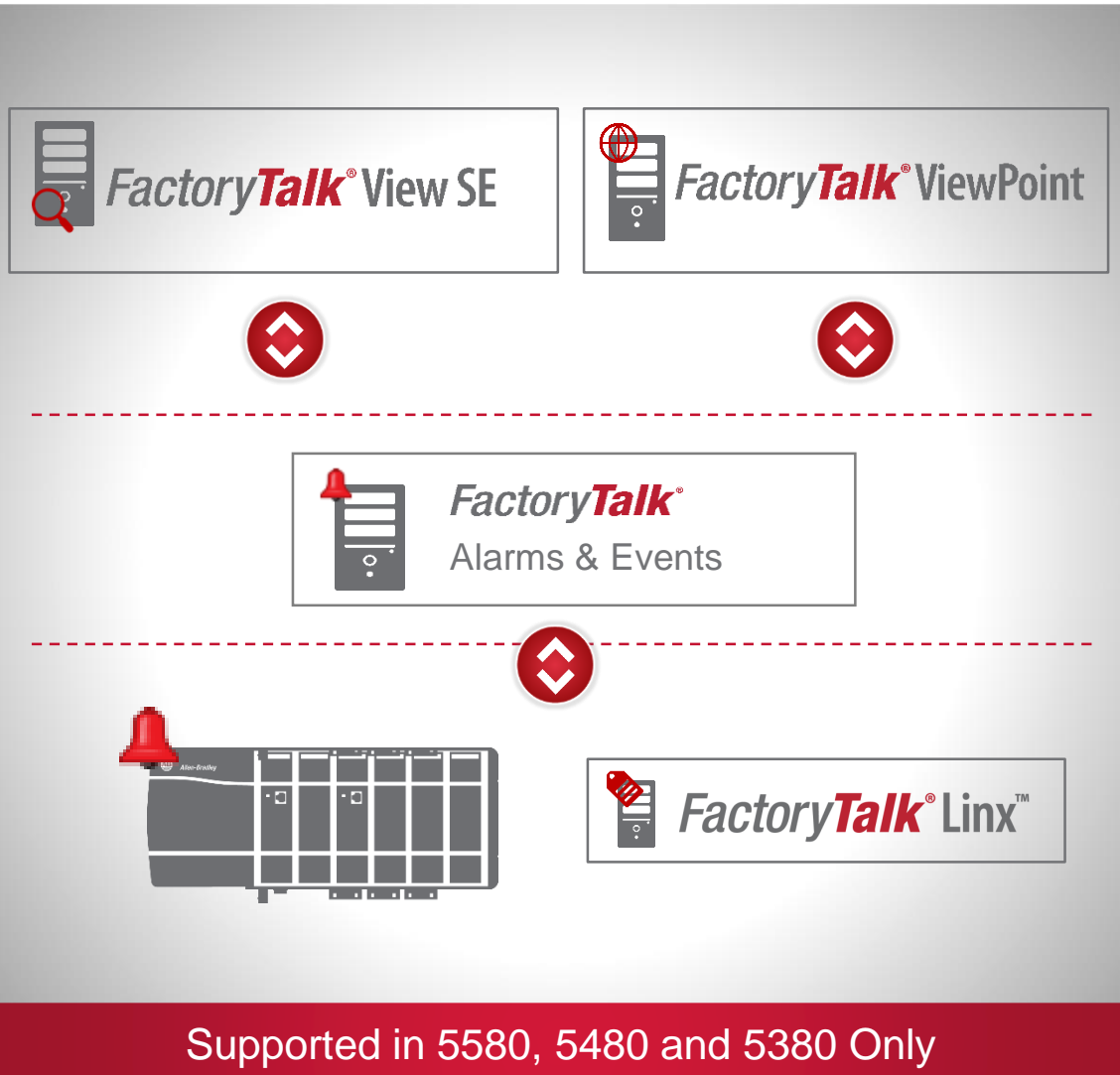
- Continuous HMI data feed to increase system availability with minimal impact to network traffic
- Fast recovery maximizes system output

FactoryTalk® Linx Access

Logix Tag-Based Alarms

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LGX => V31, FTL=> v6.00



Supported in 5580, 5480 and 5380 Only

Overview

- Studio 5000 Logix Designer® v31 adds new alarming functionality in the controller. With the new Logix Tag-Based Alarming, alarms can now be defined on “tags” or “structures” in the controller with periodic evaluation.
- FactoryTalk® Linx extended to support direct access to alarm data members
 - To configure user select base reference and manually types member names (future tag browser extension)
 - Access to alarm and alarm set values (shelve, disable, state and configuration)

Benefits

- Useful to animate or initiate alarm actions from FactoryTalk® View SE graphics*

* Not supported on FactoryTalk® View ME / PanelView® Plus or the FactoryTalk® Linx Gateway

Logix Tag-Based Alarms

Adding an Alarm to Any Structure of Tags (example: UDTs and AOIs)

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LGX => V31

The screenshot shows the Logix Designer interface. On the left, the Controller Organizer tree is expanded to 'Alarm Manager' > 'Alarms'. The main window displays a table of alarm instances with the following data:

Us	Owner	Name	Type	Input	Expression	Limit	Message	Target Tag	Class	Alarm Group
<input checked="" type="checkbox"/>	Example1	HiHi	HI	Example1.Member3	>=	0				
<input checked="" type="checkbox"/>	Example2	HiHi	HI	Example2.Member3	>=	0				
<input checked="" type="checkbox"/>	Example3	HiHi	HI	Example3.Member3	>=	0				

Every structure instance will now have an alarm. Alarm instances can now be customized!

Logix Tag-Based Alarm Attributes

LGX => V31, FTL=> v6.00

MyTagName.@Alarms.MyAlarmName._____

- InFault
- Condition
- AckRequired
- Latched
- ProgAck
- OperAck
- ProgReset
- OperReset
- ProgSuppress
- OperSuppress
- ProgUnsuppress
- OperUnsuppress
- OperShelve
- ProgUnshelve
- OperUnshelve

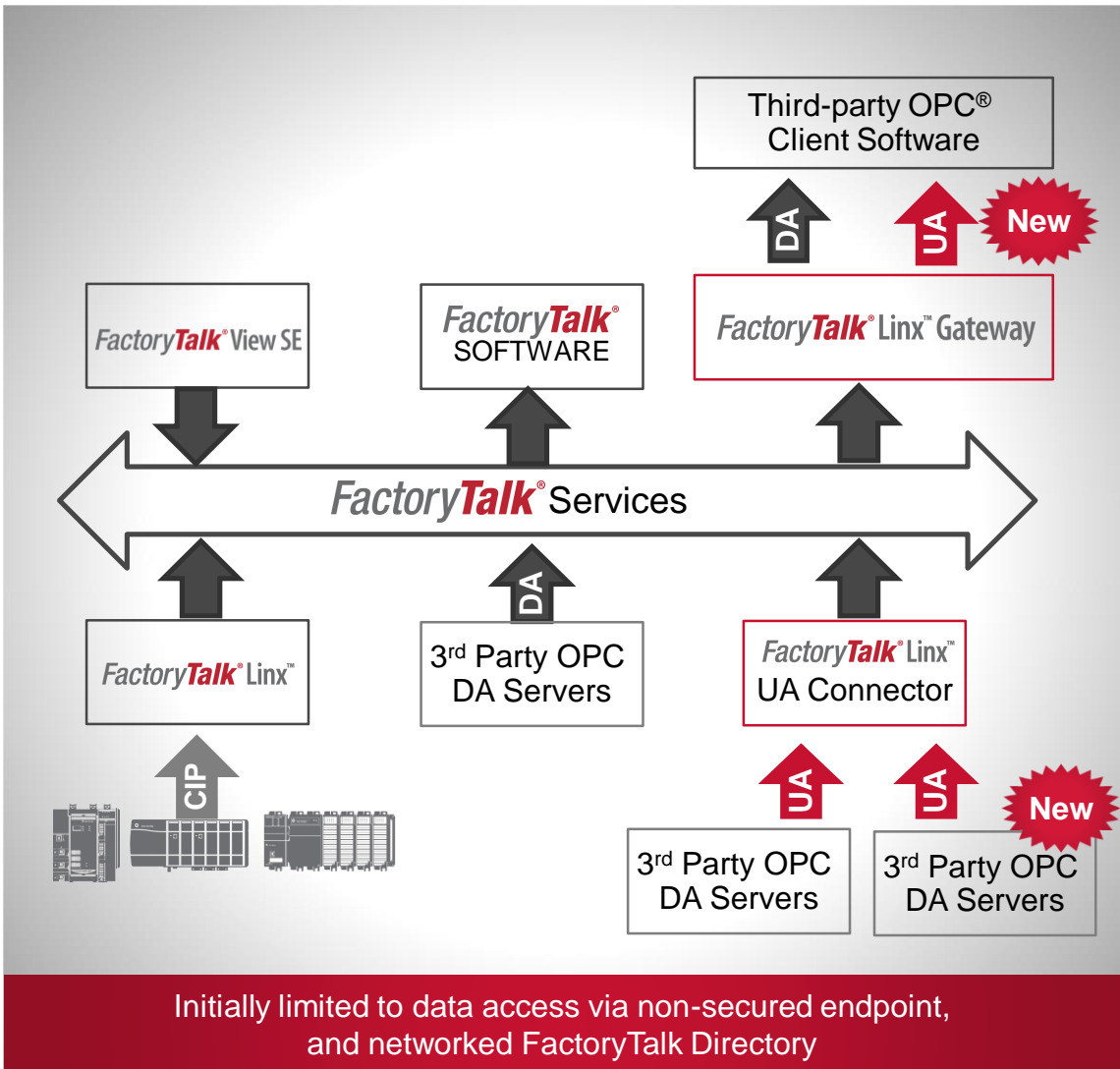
- ProgDisable
- OperDisable
- ProgEnable
- OperEnable
- AlarmCountReset
- Limit
- Severity
- OnDelay
- OffDelay
- ShelveDuration
- MaxShelveDuration
- Deadband
- InAlarm
- Acked
- InAlarmUnack

- Suppressed
- Shelved
- Disabled
- Used
- AlarmCount
- InAlarmTime
- AckTime
- RetToNormalTime
- AlarmCountResetTime
- ShelveTime
- UnshelveTime
- Status
- AlarmFault
- InFaulted
- SeverityInv

- LimitInv
- DeadbandInv
- Overflow
- Alarm Set Attributes ----
- InAlarmUnackedCount
- InAlarmAckedCount
- NormalUnackedCount
- SuppressedCount
- ShelvedCount
- DisabledCount
- HasUnackedAlarm
- HighestSeverity
- HighestSeverityAlarmName
- HighestSeverityAlarmType

Initially must be manually entered into FactoryTalk applications, tag browsing of members is planned in future

FactoryTalk[®] Linx OPC UA Extensions



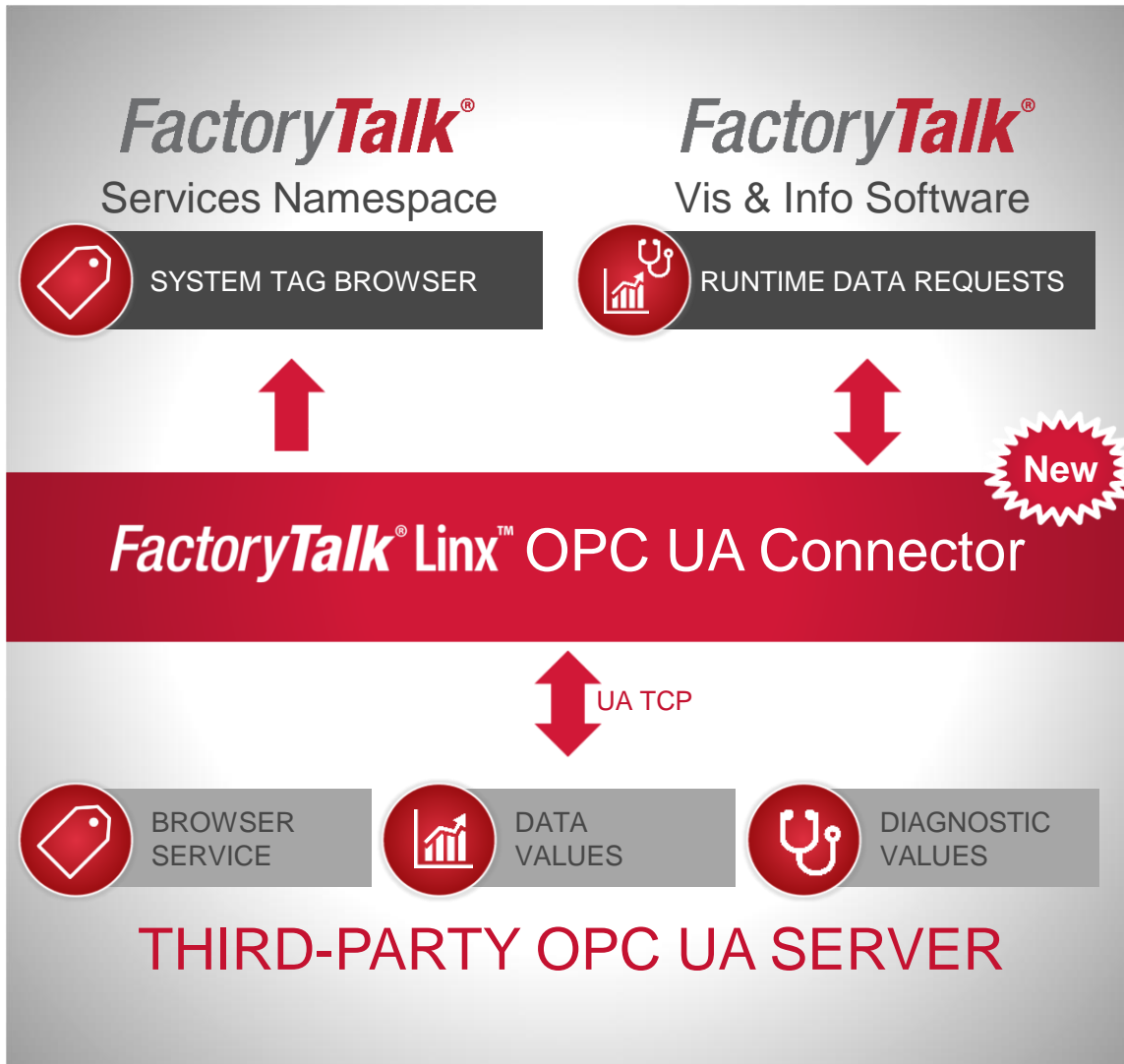
Capability

- New FactoryTalk[®] Linx OPC[®] UA Client Connector Included with FactoryTalk[®] Service Platform (no charge)
- FactoryTalk[®] Linx Gateway adds OPC[®] UA Server capabilities
 - Purchased new as 9355-LNXGWxxx
 - Previous users in support, obtain through version upgrade
- OPC UA Specification v1.03 Data Access

Benefit

- Enables FactoryTalk[®] software to interface with third-party systems
- Data is universally accessible across the FactoryTalk[®] system

FactoryTalk[®] Linx OPC UA Connector



Overview

- New connector adds OPC UA communications for FactoryTalk[®] software
- OPC UA data definitions merged into FactoryTalk[®] namespace with other controller definitions
- OPC UA TCP data exchange vs OPC DA DCOM
- Released January 2018 with FTSP v3.00

Benefits

- Nothing new to buy, simply update FactoryTalk[®] Linx to version 6.00
- Permits FactoryTalk[®] Software to interface with third-party data servers
- More productive system namespace browsing

FactoryTalk® Software Portfolio

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FactoryTalk® View SE

FactoryTalk® Historian SE

FactoryTalk® ProductionCentre

FactoryTalk® Transaction Manager

FactoryTalk® EnergyMetrix™

FactoryTalk® Metrics

FactoryTalk® VantagePoint®

FactoryTalk® Batch

FactoryTalk® Linx™ Gateway



OTHER THIRD-PARTY
SOFTWARE

ENABLING THE CONNECTED ENTERPRISE

Scalable from single
PC to large distributed
configurations

FactoryTalk® Services

Included free with FactoryTalk® software to deliver
information across the portfolio

Reduced system
impact through tag
value sharing

DATA SOURCES FOR THE CONNECTED ENTERPRISE

FactoryTalk® View SE
HMI TAG SERVER

FactoryTalk® Linx™
High Performance Data Server



Classic
OPC DA
Client

FactoryTalk® Linx™
OPC UA Connector

NEW

**Rockwell
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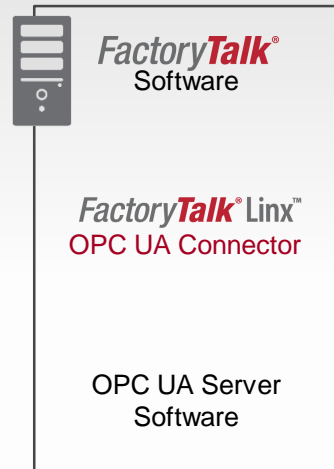
Third-party Software & Hardware

Connecting FactoryTalk[®] Software

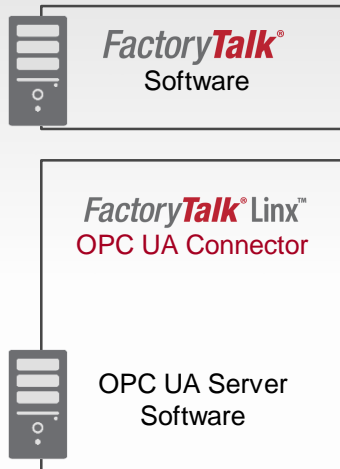
External OPC UA Servers

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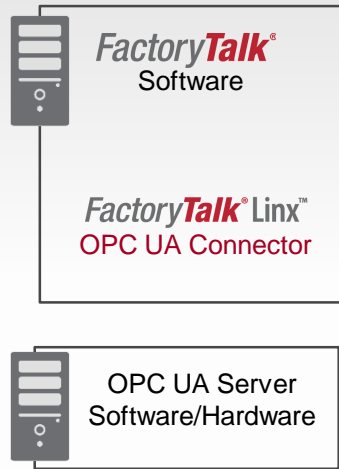
All Software on a
Single PC



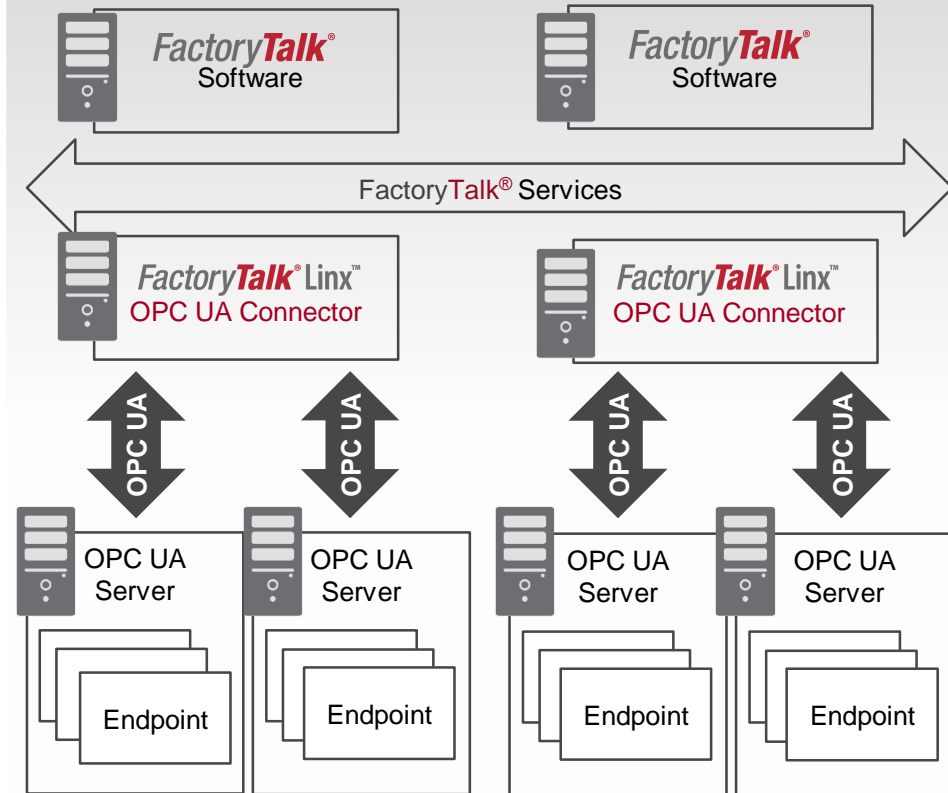
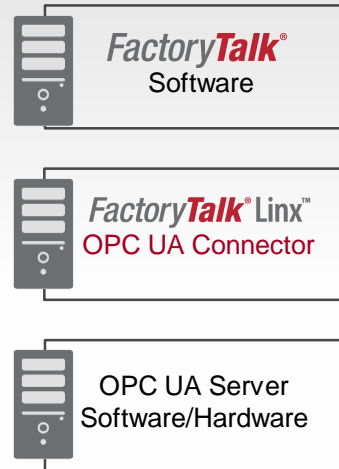
FactoryTalk to
External OPC Server



External OPC
Server



Isolated Software
on Different PCs



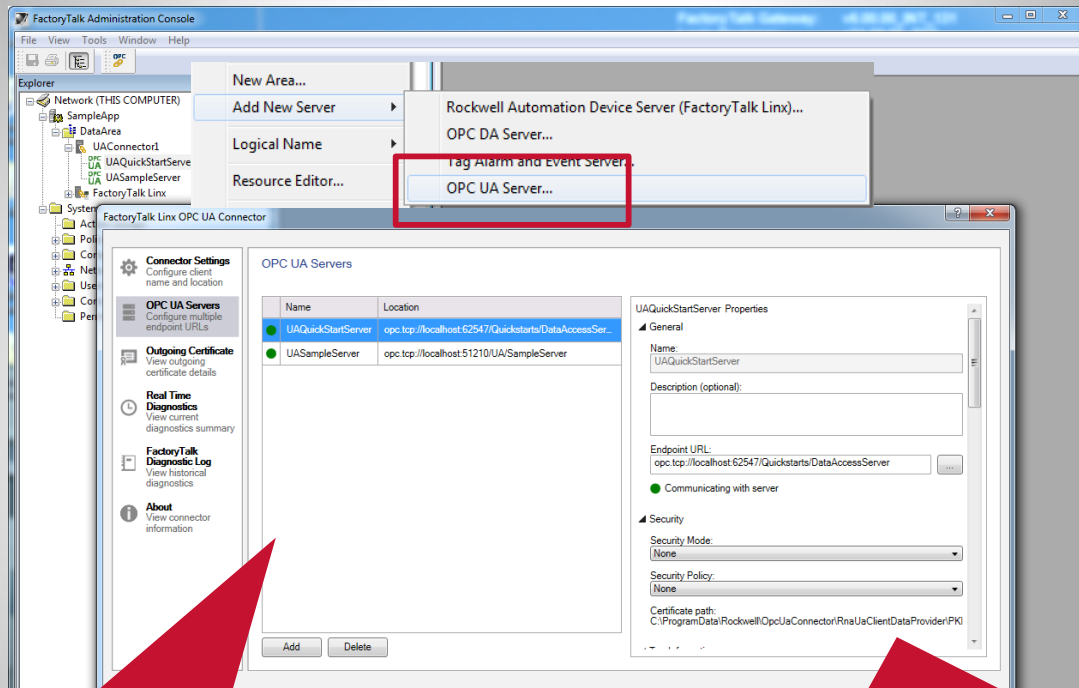
Scalable solution for multiple system configurations

Distribute connectors for larger configurations

FactoryTalk[®] Linx OPC UA Connector

Configuration & Diagnostics

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Configure the FactoryTalk Linx OPC UA Connector to interface with multiple UA Servers

Individual UA Server Endpoint configuration and diagnostic information

Overview

- FactoryTalk[®] Administration Console configures all your data servers in a system
 - FactoryTalk[®] Linx, OPC DA, OPC UA
 - Server(s) located on the same computer or distributed on remote computers
- Add multiple UA Server to a connector
- Comprehensive diagnostic information
 - Predefined diagnostic @tags for servers and connector roll-up
 - Status and select diagnostic values available in user interface
 - Embedded FactoryTalk[®] Diagnostic log viewer

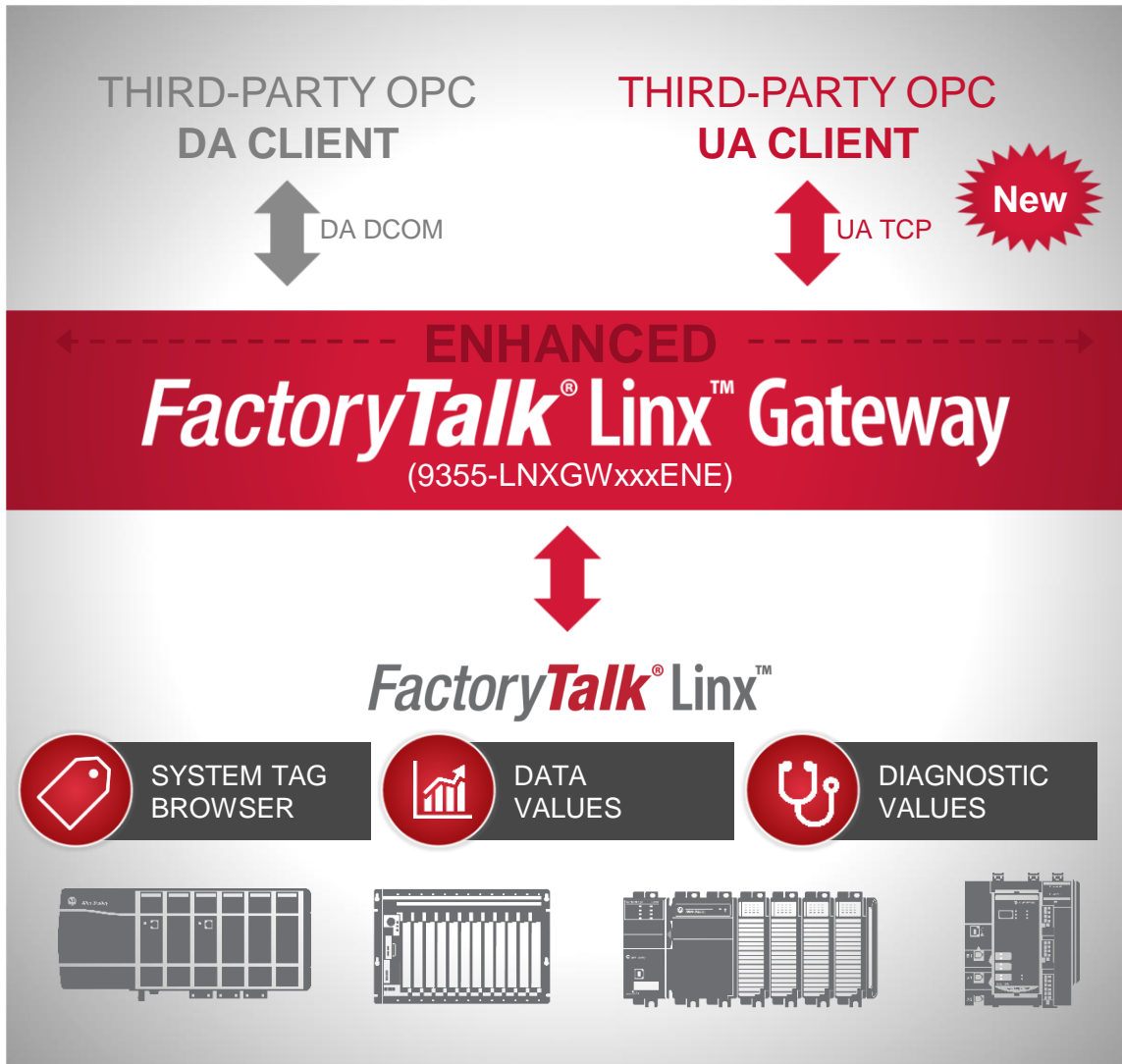
Benefits

- Access all servers from anywhere in system
- Scalable solution meets diverse system needs
- Utilize diagnostic information on HMI displays and trigger alarms to reduce downtime

FactoryTalk[®] Linx Gateway v6.00

OPC UA Support

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Overview

- FactoryTalk[®] Linx Gateway adds ability to server data to OPC UA clients
- Uses FactoryTalk[®] Linx high performance station and distributed server capabilities
- Browse service to deliver controller data definitions to external OPC Clients
- OPC UA uses TCP vs DCOM from OPC DA
- New catalog numbers and activations targeted release: April 2018

Benefits

- Existing users of FactoryTalk[®] Gateway will also be able to access OPC UA services with software update
- Scalable from single station to multi-server systems
- Provides third-party software access to Allen-Bradley[®] controllers and equipment
- TCP enhances capacity and stability

FactoryTalk® Linx Gateway v6.00

New Catalog Numbers and Activations

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FactoryTalk® Linx Gateway Product	OPC Tag Quantity	FactoryTalk® Directory / Linx	FactoryTalk® Linx Data Bridge
Basic 9355-LNXGWBASENE LINXGW.BASIC	DA 1,000 UA 1,000	Local / Single	Not Available
Standard 9355-LNXGWBASENM LINXGW.STANDARD	DA 5,000 UA 5,000	Local / Single	Not Available
Distributed 9355-LNXGWBASENM LINXGW.DISTRIBUTED	DA 32,000 UA 32,000	Networked / Multiple Distributed & Redundant	Not Available
Professional 9355-LNXGWBASENM LINXGW.PROFESSIONAL	No Fixed Limit	Networked / Multiple Distributed & Redundant	Included

Overview

- Four new scalable product offerings
 - Small standalone to large distributed and redundant
 - FactoryTalk® Linx Data Bridge and future features
- Previous FactoryTalk® Gateway catalog numbers discontinued
 - Existing activations continue to be supported at their current tag levels for both OPC DA and UA
- Step-Forward upgrade from older or smaller products at a reduced price

Benefits

- Purchase just enough capability for the application
- No need to purchase a new license to access OPC UA tag data (simply update to v6.00 if in support)

Serving Data to External OPC Clients

FactoryTalk® Linx Gateway

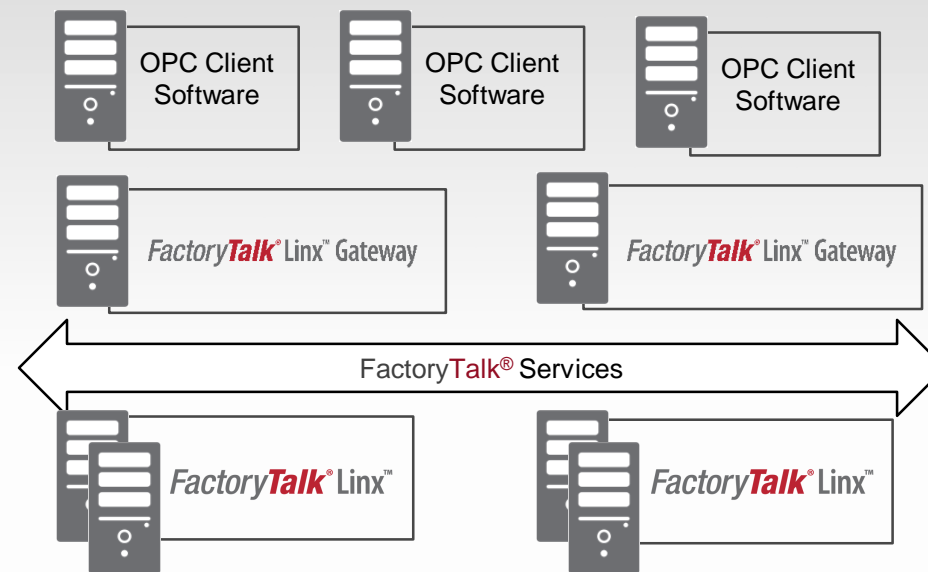
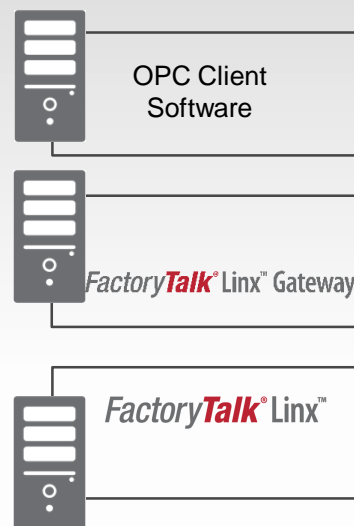
All Software on
a Single PC

External OPC
Client

Isolated Linx
Data Server

Isolated Software
on Different PCs

Distribute and redundant Solution for
larger configurations



← Basic or Standard →

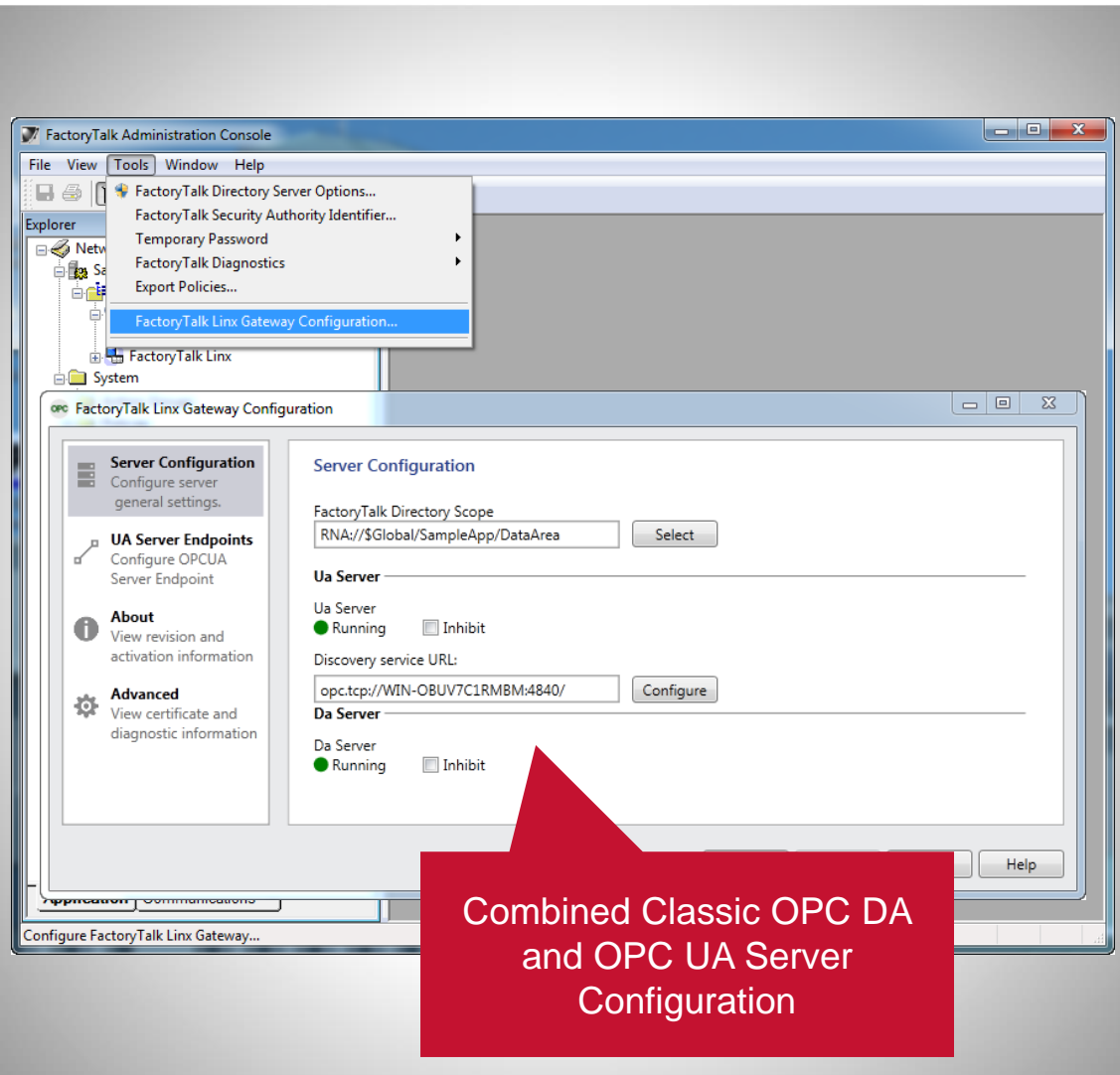
← Distributed or Professional →

Scalable solution for multiple system configurations

FactoryTalk[®] Linx Gateway

Configuration & Diagnostics

**Rockwell
Automation**



Overview

- FactoryTalk[®] Administration Console configures all your data servers in a system
 - FactoryTalk[®] Linx, OPC DA, OPC UA
 - Server(s) located on the same computer or distributed on remote computers
- Add multiple UA Server to a connector
- Comprehensive diagnostic information
 - Predefined diagnostic @tags for servers and connector roll-up
 - Status and select diagnostic values available in user interface
 - Embedded FactoryTalk[®] Diagnostic log viewer

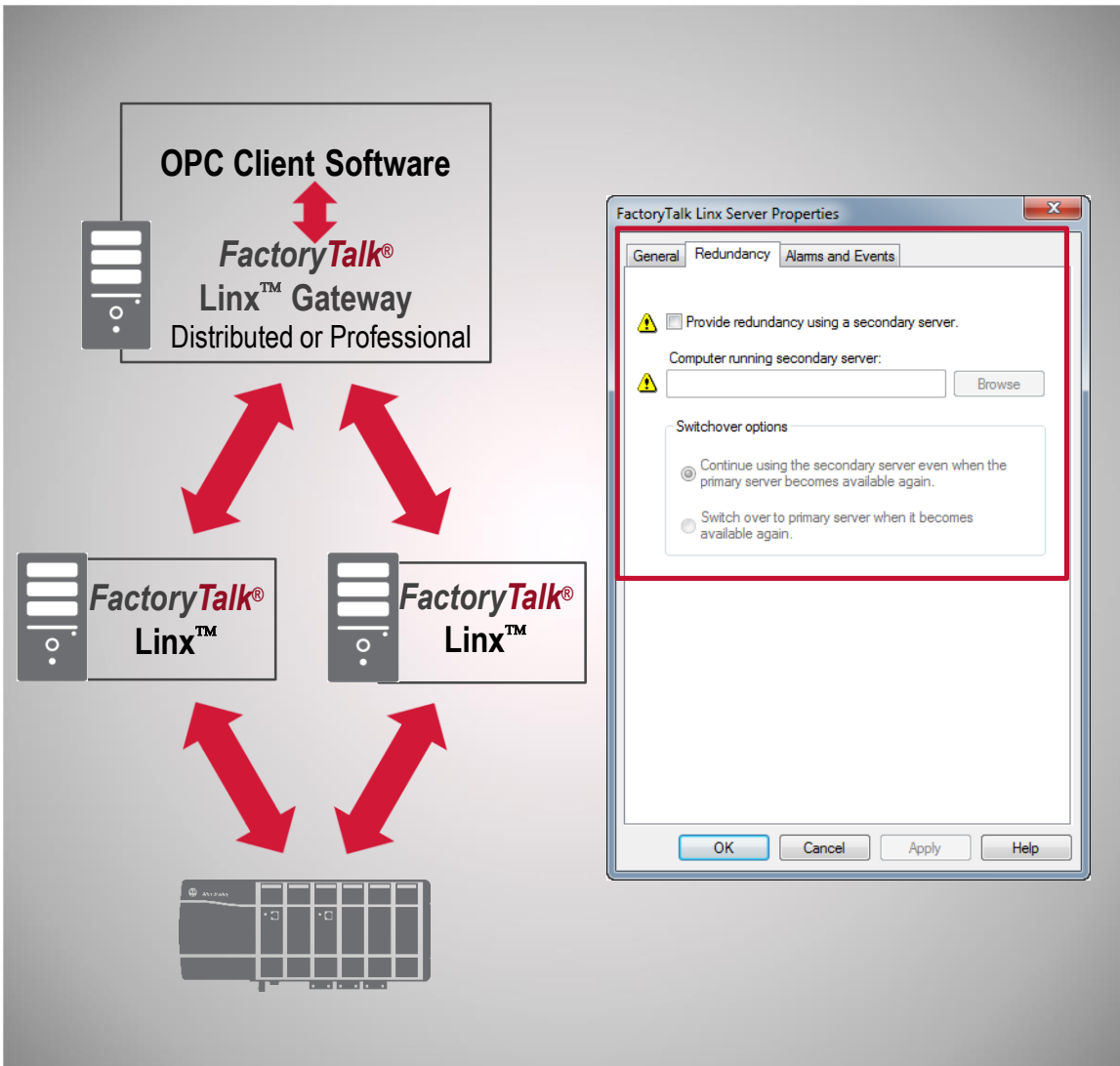
Benefits

- Access all servers from anywhere in system
- Scalable solution meets diverse system needs
- Utilize diagnostic information on HMI displays and trigger alarms to reduce downtime

FactoryTalk[®] Linx[™] Gateway v6.00

High Availability Support with Redundant FactoryTalk[®] Linx Data Servers

**Rockwell
Automation**



Overview

- Install FactoryTalk[®] Linx Gateway on the OPC Client workstation to utilize FactoryTalk[®] Linx redundant servers
- The FactoryTalk Linx[®] Gateway will make simultaneous requests to both FactoryTalk[®] Linx servers
 - Each data server establishes a connection to the controller(s)
 - When the acting primary fails, the secondary starts delivering data
- Option to switch back to primary when available
- Perform PC and operating system updates one server at a time while maintaining the other
- Similar to OPC UA Part 4 – 6.6.2.3 Transparent Redundancy

Benefits

- Deliver data for critical systems that cannot shut down
- Redundancy is transparent to the OPC Client
- Eliminates the data server as a single point of failure

Phased Addition of OPC UA

FactoryTalk[®] Linx[™] Gateway



FactoryTalk[®] Linx[™]
OPC UA Connector

Starting with a base functionality

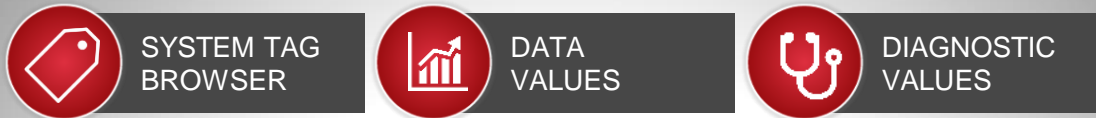
- OPC UA specification revision v1.03
- Tag value access; read, write and subscribe
- TCP / Binary open / non-secured / non-redundant transport
- With or without initial certificate exchange

Future Extensions planned

- Security user mode and encryption
- OPC Foundation Conformance
- Enhanced data access
 - Arrays access for the FactoryTalk[®] Linx OPC UA Connector
 - Access to meta data, other pre-defined and custom types
- Add other capabilities (example: Methods, Alarms, Redundancy, etc.)
- Work with OPC Foundation to enhance the standard
- Adopt new functionality added to the standard

FactoryTalk[®] Linx Data Bridge v1.00

**Rockwell
Automation**



New

FactoryTalk[®] Linx[™] Data Bridge



Overview

- FactoryTalk[®] Linx Data Bridge delivers data from one FactoryTalk[®] source to another
 - Logix Controller via FactoryTalk[®] Linx
 - OPC UA Servers via FactoryTalk[®] Linx OPC UA Connector
- Tag Pairs - Subscribes to tags from one source and delivers data and diagnostic status to a different source
- Manual configuration via user interface or import/export of configuration to manipulate with desktop software
- Shares a new FactoryTalk[®] Linx Gateway Professional activation
- Target release: April 2018

Benefits

- Enables Logix 5000[™] controllers to indirectly interface with OPC UA Servers
- Included with FactoryTalk[®] Linx Gateway Professional

FactoryTalk[®] Linx Data Bridge Operation

Source	Destination
UASrv1:TagZ	Lgx1:TagA

FactoryTalk[®] Linx[™]
Data Bridge 

FactoryTalk[®] Services

FactoryTalk[®] Linx[™]

FactoryTalk[®] Linx[™]
UA Connector

CIP

UA



Lgx1:TagA

Third-party
OPC UA Server

UASrv1:TagZ

- Windows Application delivered and licensed with FactoryTalk[®] Linx Gateway (specifics TBD)
 - Operate on single PC or distributed
 - Can share a local activation with FactoryTalk[®] Linx Gateway Professional
- Utilizes any FactoryTalk[®] Source
 - Logix controllers via FactoryTalk[®] Linx
 - OPC UA Servers
 - OPC DA Servers
- User configured tag pairs
 - Subscription to data source based on user selected rate
 - Source data delivered to the Data Bridge is forwarded to destination
 - Optional quality and timestamp values delivered to both source and destination
- Configuration import / export to backup the settings or streamline the setup process

FactoryTalk[®] Linx Gateway

ODVA CIP Energy Object Support

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FTL => V5.80, FTLGW=> v6.00

VIF Display	
My PM500	
PWR	E
VOLTAG (VOLTS)	CURRENT (AMPS)
L1-L2: 481.27	L1: 5.50
L2-L3: 482.42	L2: 5.90
L3-L1: 482.73	L3: 5.37
AVG L-L: 482.47	AVG: 5.59
% ERR: 1.0	
L1-F: 270.75	FREQUENCY (HZ)
L2-F: 262.00	
L3-F: 262.55	50.02
AVG L-F: 264.16	

Shows voltage, current, and frequency status.



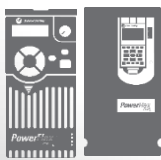
FactoryTalk[®] VantagePoint[®] FactoryTalk[®] Historian **New**
FactoryTalk[®] View FactoryTalk[®] Linx[™] Gateway

FactoryTalk[®] Linx[™]

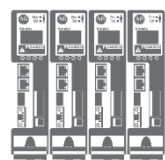
Energy Usage, Voltage, Current and Frequency



E300[™]
Electronic
Overload Relay



PowerFlex[®]
755 & 755HIP
>= v10.001



Kinetix[®] 5500



PowerMonitor[™]
5000



PowerMonitor[™]
1000

Overview

- FactoryTalk[®] Linx v5.80 enabled connectivity to CIP Energy information directly from select control and power monitor devices for FactoryTalk software
 - Create Faceplates and Dashboards to monitor status and usage
- FactoryTalk[®] Linx Gateway v6.00 permits access for third-party software

Benefits

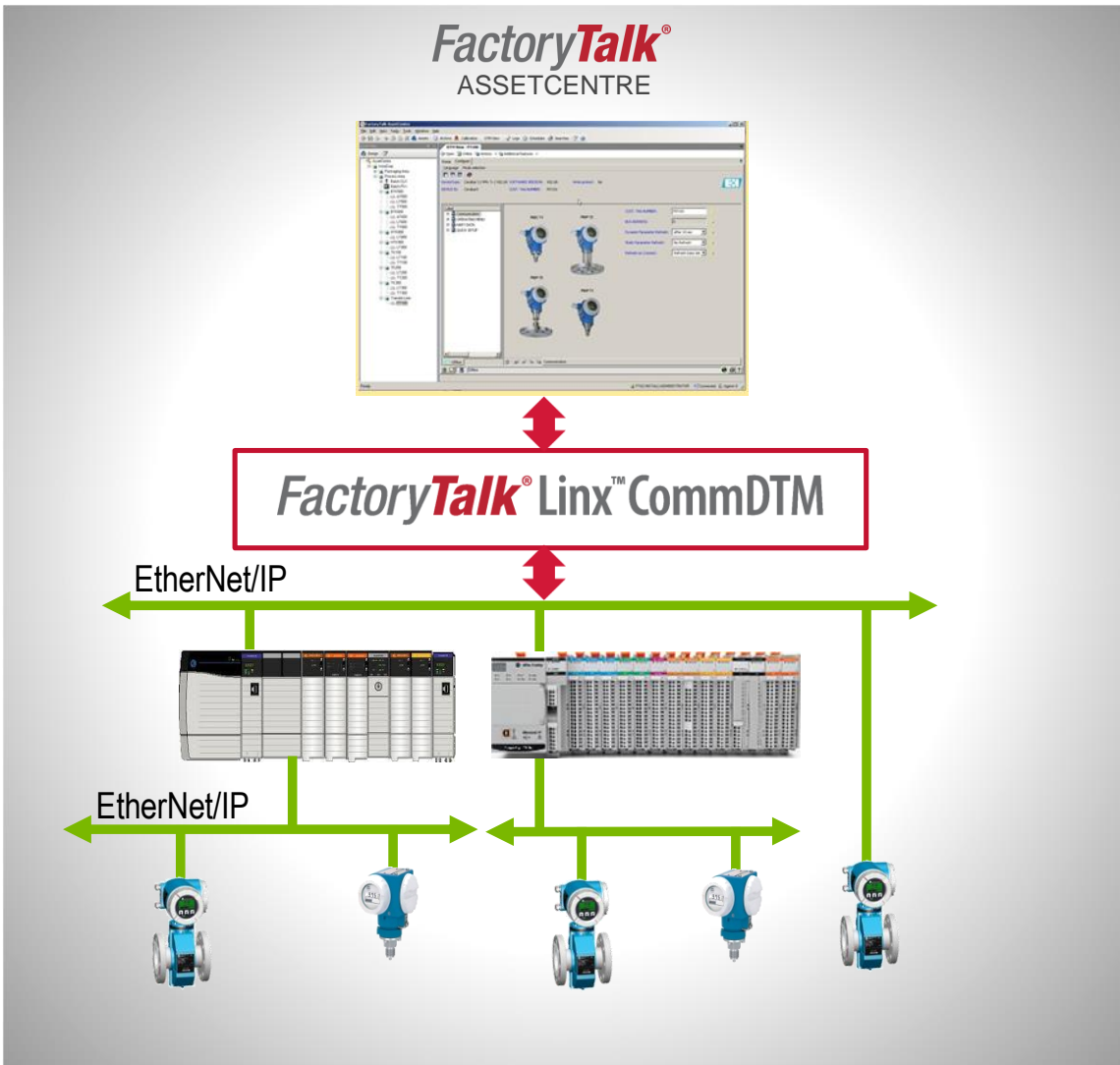
- Monitor your machine, line or plant's energy usage
- Track historical energy usage
- Compare usage across similar lines

FactoryTalk® Linx™ CommDTM

Communication Service for EtherNet/IP Process Devices

**Rockwell
Automation**

FTLCDTM V1.00



Overview

- Communications Device Type Manager (DTM) bridging EtherNet/IP capable process devices to hosting Field Device Tool (FDT) applications
- Compatible with FactoryTalk® AssetCentre and Endress + Hauser FieldCare software products
- Coexists with the existing Rockwell Automation portfolio of modules DTM, which are required for HART, FF and PA process devices
- Leverages Rockwell Automation communications software products
- Users can choose to use RSLinx® Classic or FactoryTalk® Linx
- Free of charge – available now from Rockwell Automation support product download site
- See www.fdtgroup.org for additional information

Benefits

- Delivers a modern, easy-to-use communications solution for customers adopting EtherNet/IP based process instruments
- Improved user experience

KepServer Enterprise 10.0



FactoryTalk® View SE



kepware®



Third-party Devices and Software

Overview

- Adding new drivers for the PC edition (not included in PanelView™ Plus)
 - Beckhoff TwinCAT
 - Mettler Toledo
 - MTConnect Client
 - OPC DA Client
 - OPC UA Client
 - OPC XML Client
 - System Monitor
- Based on Kepware's KepServerEX v5.21

Benefits

- Permits FactoryTalk View SE to connect and interact with additional hardware and software
- Sold and supported by Rockwell Automation
- Expands the reach of The Connected Enterprise

Connectivity Market Drivers & Priorities

MARKET DRIVERS

- Industrial Big Data and Internet of Things (IIoT) applications for historical tracking and post-mortem analysis
- Increased data rates for real-time analytics
- Reduce system setup time and complexity
- Continuous / non-stop operation in high availability systems
- Connectivity between third-party software and hardware via industry standard methods

PRIORITIES

- Add capacity, performance and capabilities for demanding application
- Enable access to Logix extended information to streamline system development
- Unify Rockwell Automation® software with a single communications package
- Extend redundancy and runtime changes
- OPC UA extensions
- Improved security capabilities

Focused on Capacity, Productivity, Availability and Security

Enabling The Connected Enterprise

FactoryTalk® Linx™

Highest capacity and performance
Logix data server
(delivered with FactoryTalk® Service Platform)
(Formerly RSLinx® Enterprise)

FactoryTalk® Linx™

OPC UA CONNECTOR

Provides connectivity to third-party OPC UA Servers for FactoryTalk Software
(delivered with FactoryTalk® Service Platform)

FactoryTalk® Linx™ Gateway

Delivers data from FactoryTalk® Linx to third-party software via OPC DA and UA
(Formerly FactoryTalk® Gateway)

FactoryTalk® Linx™ CommDTM

Communications service for asset management of EtherNet/IP process devices

RSLinx® CLASSIC

Provides OPC DA access for third-party software, with best support for legacy control equipment

KepServer Enterprise

Enables FactoryTalk® View software to access data from third-party control equipment

LISTEN.
THINK.
SOLVE.®

Thank You!



PUBLIC



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Automation**