



OPO9 - RSOPC Gateway

Track – Operate

Introduction, Session Agenda

RSOPC™ Gateway™

Enterprise OPC Connectivity



RSLinx® Enterprise™

Take Communications to the Next Level



- Presentation and Demo
 - Understand what RSOPC Gateway provides
 - Understand what advantages RSLinx Enterprise brings and when to use it
 - Understand how to setup a FactoryTalk application containing RSOPC Gateway and RSLinx Enterprise
- Lab



Where does RSOPC Gateway Fit?

RSOPC™ Gateway™

Enterprise OPC Connectivity



RSLinx® Enterprise™

Take Communications to the Next Level



- RSLinx Enterprise provides Premier Connectivity to Integrated Architecture and NetLinx (includes ControlLogix)
- RSLinx Enterprise connects to RSView SE/ME and RSBizWare via FactoryTalk Live Data
- RSOPC Gateway is an OPC DA 2.05 server that enables OPC clients to collect direct reference data from RSLinx Enterprise and RSView SE servers. (FactoryTalk Live Data servers)
- Additionally, RSView SE alarm data tag values and derived tags can be served via OPC



Premiere connectivity to OPC

OPC Clients

OPC

RSOPC™ Gateway™

Enterprise OPC Connectivity

FT Live Data

RSLinx® Enterprise™

Take Communications to the Next Level

RSview™ Supervisory Edition™

Enterprise Series
Distributed HMI for Enterprise Solutions

Premiere connectivity



When do I use RSLinx Enterprise?

- **Data collection from ControlLogix**
- **ViewAnywhere Applications**
 - RSVIEW SE - RSVIEW SE Station includes RSLinx Enterprise
 - RSVIEW ME – RSLinx Enterprise is included and can be used with PanelView Plus, VersaView or Desktop versions of RSVIEW ME. RSLinx Enterprise supports ControlNet and DeviceNet scheduled I/O for PanelView Plus. RIO and serial for Logix, PLC-5, and MicroLogix based processors is also supported. RSLinx Enterprise is used to download ME projects to PanelView Plus displays.
- **RSBizWare Applications**
 - RSBizWare Batch applications can take advantage of ControlLogix premiere connectivity by using RSOPC Gateway to connect to RSLinx Enterprise.
 - RSSQL can connect directly to RSLinx Enterprise. Online RSSQL edits are supported.
 - RSBizWare Historian and RSBizWare PlantMetrics (via RSSQL)



When do I use RSOPC Gateway?

- **In General**
 - Applications that require improved ControlLogix data collection.
 - Distributed applications – Clients and servers distributed throughout a system.
 - Data server redundancy is supported and RSLinx Enterprise clients automatically switch to the secondary if the primary server goes down
- **Non-ViewAnyWare and applications that do not support FactoryTalk Live Data - RSLinx Enterprise uses RSOPC Gateway for connectivity to OPC Clients.**
- **RSLinx Enterprise Devices supported**
 - Integrated Architecture (Logix based controllers) - ControlLogix, CompactLogix, FlexLogix
 - PLC-5, SLC, and MicroLogix family of processors as long as the communication route is direct to the controller or processor communication module (no network hops)
 - Network support - Ethernet, ControlNet, and serial from RSLinx Enterprise to the device.
 - RSOPC Gateway and RSLinx Enterprise are entirely separate products from RSLinx Classic



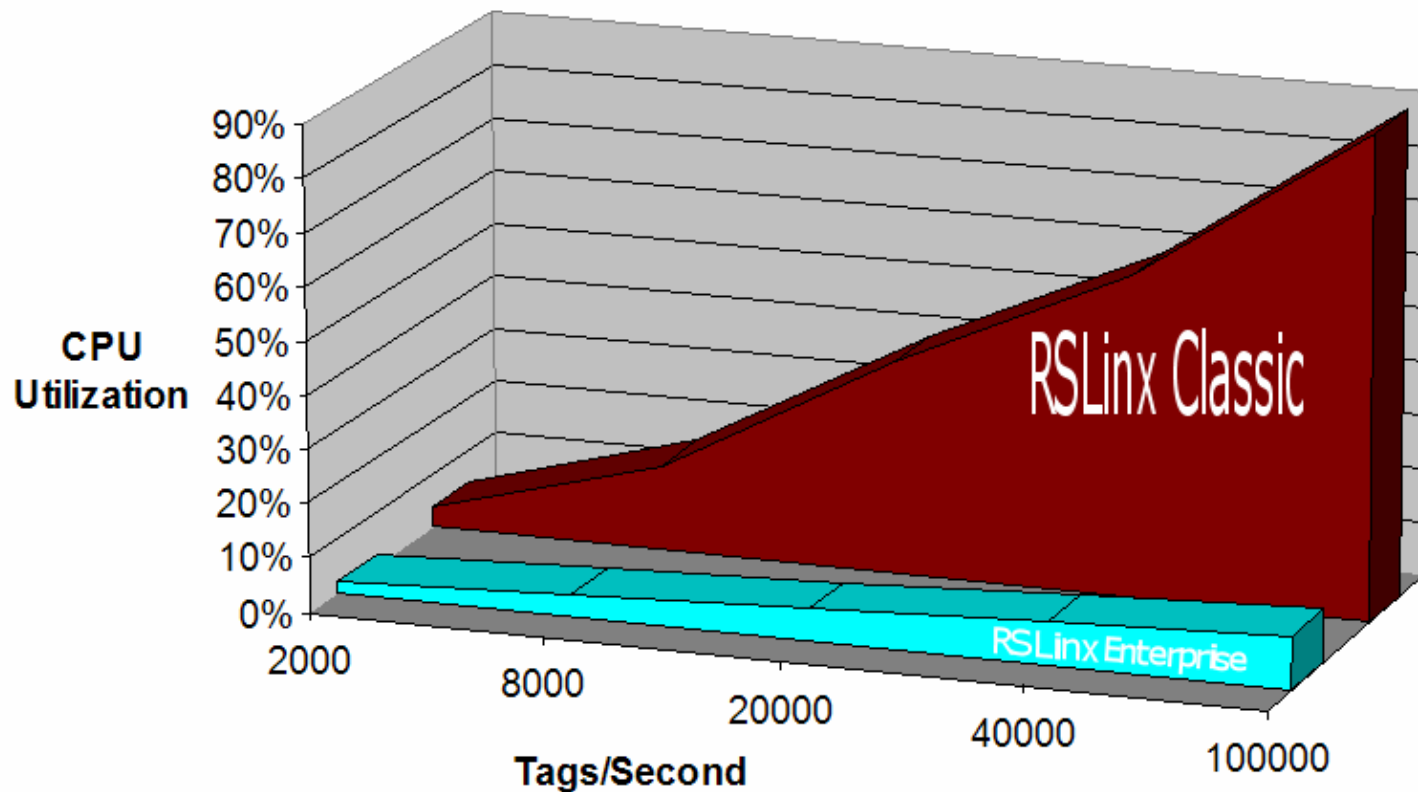
Premier connectivity to ControlLogix

- **Optimized ControlLogix and Logix based data collection.**
 - Less CPU utilization on the data server machine. (10,000 tags per second consume ~8% CPU on a 2.8GHz P4 when using RSOPC Gateway and RSLinx Enterprise)
 - Data Collection starts faster since RSLinx Enterprise puts tags on scan much faster than RSLinx Classic. (milliseconds vs. seconds)
 - Commissioning Support – RSLinx automatically rebuilds optimized packets without any additional RSLinx Enterprise user configurations.



Amazing Performance Enhancements!!

RSLinx Enterprise vs. Classic Performance



Redundancy

- **Redundancy – Protecting Against Service and Computer Failures**
 - Easy to setup within the FactoryTalk Administration Console or within RSView Studio.
 - The RSLinx Enterprise server configuration dialog contains a tab to configure redundancy. Simply enable the option and specify the backup machine name.



Where does RSLinx Classic Fit?

RSLinx[®] Classic[™]

For Rockwell Automation
Networks and Devices



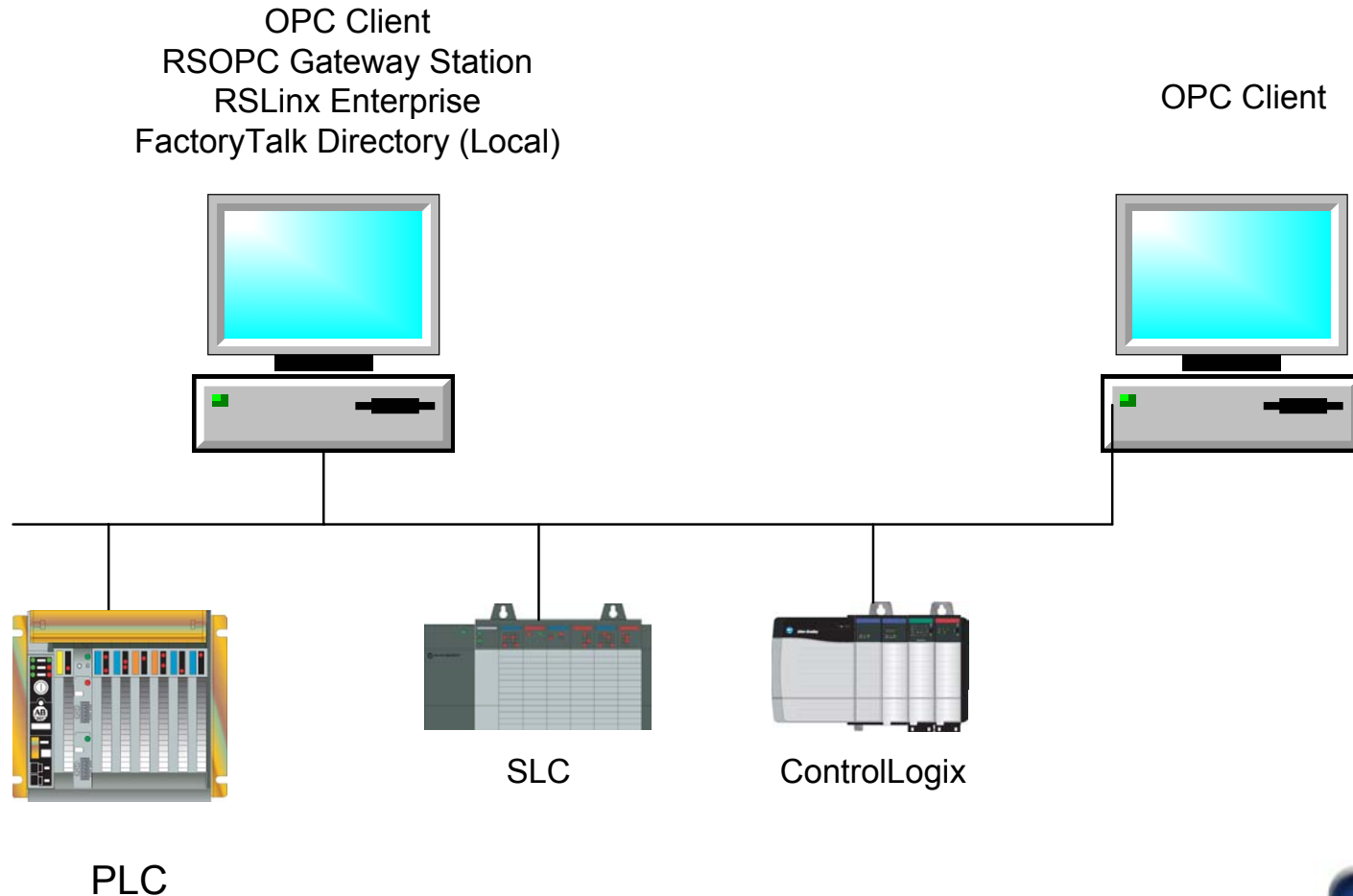
- Positioning RSLinx Classic

- RSView 32 or 3rd party applications that collect data from non-Integrated Architecture devices such as PLC-5, SLC, or MicroLogix family of controllers
- When complex communication routes are needed. For example, PLC-5 on DH+ to a ControlLogix chassis to Ethernet
- Larger ControlLogix based applications will have best performance with RSLinx Enterprise and RSOPC Gateway

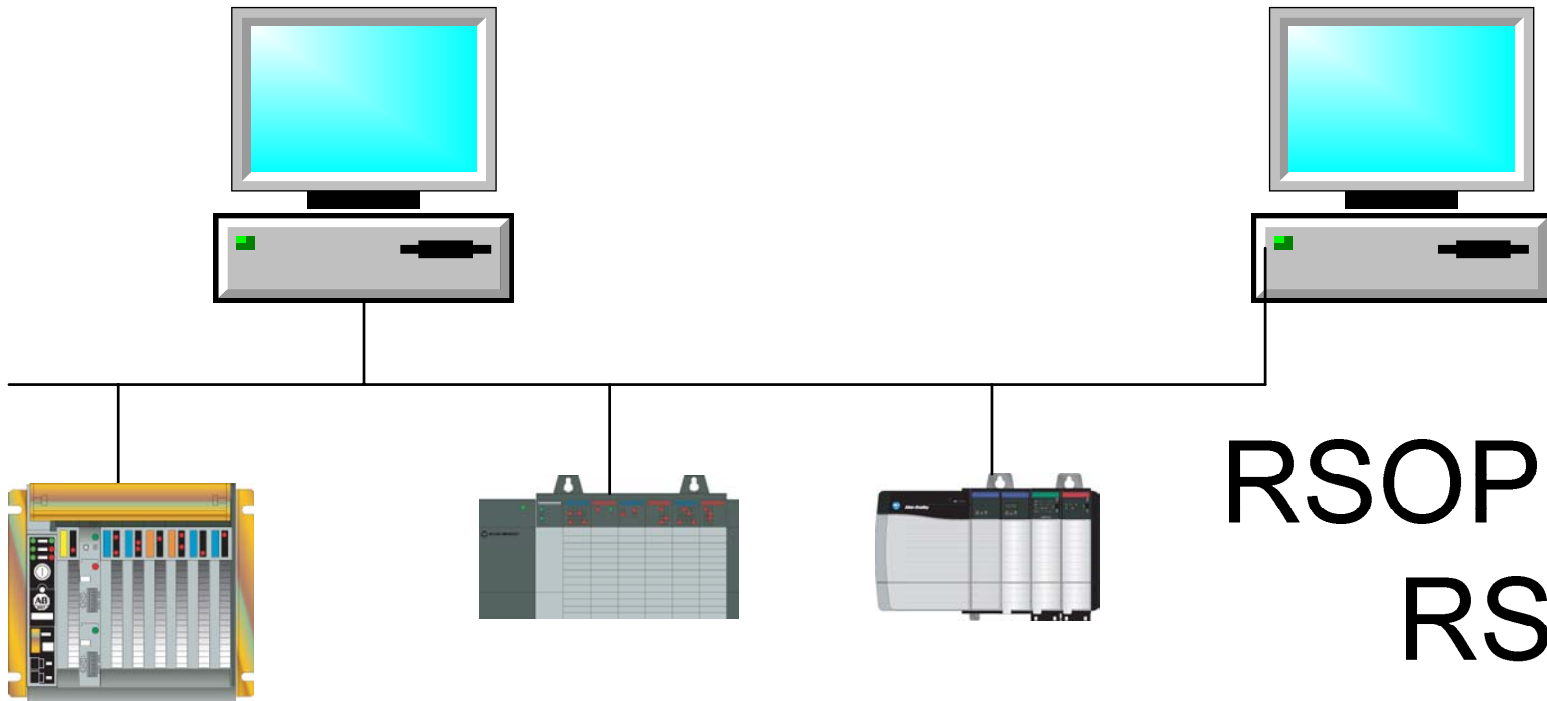


RSOPC Gateway Station

- RSLinx Enterprise and RSOPC Gateway on one box
- Remote and Local OPC supported



RSOPC Gateway Station

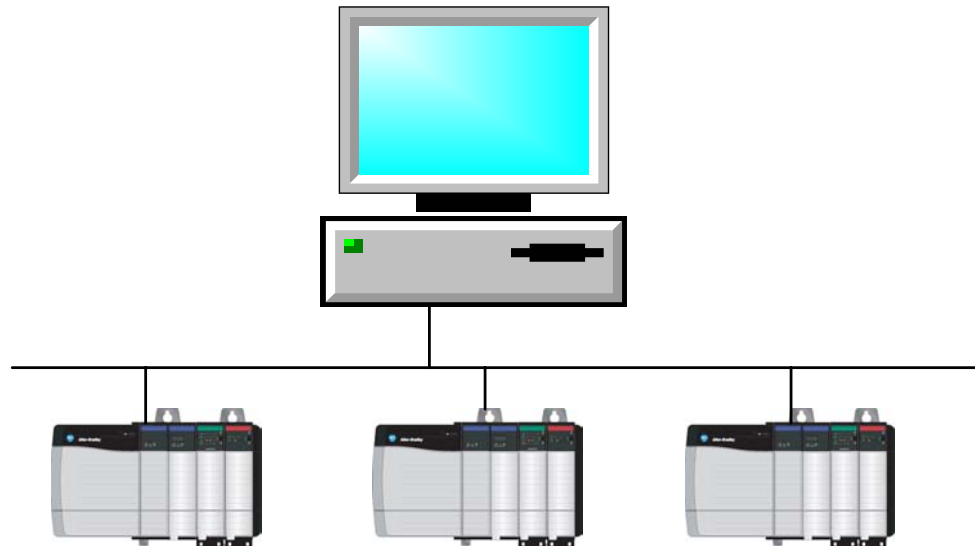


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RSLinx
RSView
FactoryTalk



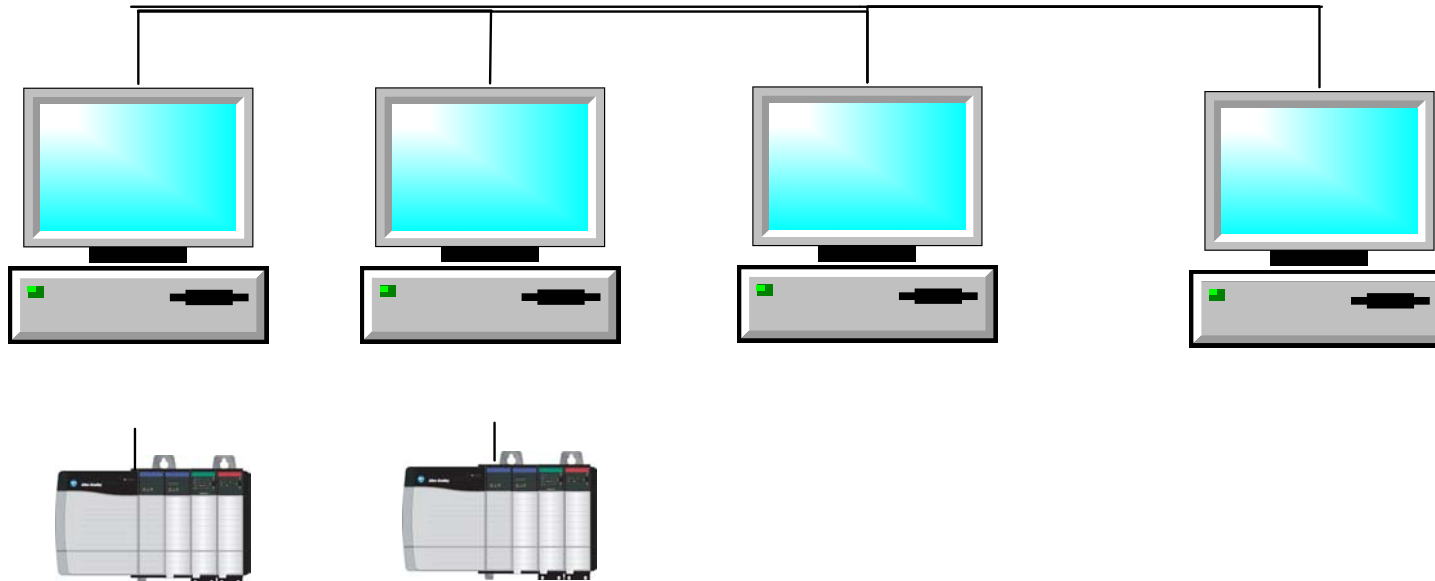
RSBizWare Batch

- Special Catalog number/Activation for RSBizWare Batch users



RSOPC Gateway Distributed

- RSLinx Enterprise has data sever redundancy built-in – FT Live Data directly to all computers
- For OPC redundancy put RSOPC Gateway Distributed on each client
- ..Or use RSOPC Gateway Distributed for access to distributed and/or multiple RSLinx Enterprise/RSView SE servers



Packaging – RSLinx Enterprise

- Bundling option with RSOPC Gateway – Same CD and install for easy installation
- Included with RSView SE Station, RSView ME
- Bundling option with RSView SE Distributed
- Also sold separately - One package of RSLinx Enterprise for all communications



Packaging – RSOPC Gateway

- By Tag Count – unique data points consumed by OPC client(s)
- By FactoryTalk Application Type
 - RSOPC Gateway Station – “Everything on one box” – RSLinx Enterprise and RSOPC Gateway on one machine. Local and Remote OPC supported
 - RSOPC Gateway Distributed – RSLinx Enterprise and RSOPC Gateway can be distributed, redundancy is supported, RSOPC Gateway can communicate to many RSLinx Enterprise servers
- Packages
 - RSOPC Gateway Station 5000
 - RSOPC Gateway Distributed 1500
 - RSOPC Gateway Distributed 5000
 - RSOPC Gateway Distributed 32000



What's in the Lab?

- Get SoftLogix data to an OPC client via RSOPC Gateway and RSLinx Enterprise
 - Create a FactoryTalk Application containing an RSLinx Enterprise
 - Configure RSLinx Enterprise to communicate to SoftLogix
 - Configure RSOPC Gateway
 - Test the OPC connection
 - Look at performance





Questions?



Thank you for participating!

