

Wonderware OI Servers

Resetting Market Expectations for Device Integration

Presented by: Alvaro Martinez

Agenda

- 1 **Subscribe**
- 2 **Architecture**
- 3 **Licensing**
- 4 **Recent Release**
- 5 **IOT Strategy**
- 6 **What's New**
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- 8

Wonderware HMI SCADA

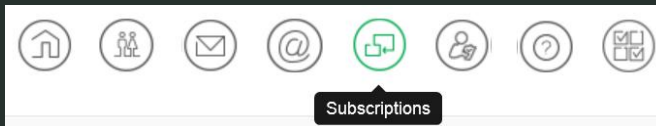
YouTube



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<http://www.youtube.com/user/wonderwarehmi>

Wonderware Product Hub



Subscriptions

<http://softwaresupport.schneider-electric.com/>

Wonderware Industrial Internet of Things
Leveraging MQTT Publishing to a Broker 6:04

Industrial Internet of Things - Wonderware OI Gateway
203 views • 4 weeks ago

Wonderware Industrial Internet of Things
Leveraging MQTT... Geolocation / Mapping
JSON Syntax Support 5:42

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Wonderware Industrial Internet of Things
Leveraging MQTT... Connecting to edge... 4:11

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Wonderware SIDirect OI Server - Awesomeness! Release G-1.1
5:13

Wonderware SIDirect OI Server - Awesomeness! Release G-1.1
1,577 views • 11 months ago

What is new in InTouch Machine Edition 8.0
4:26

What is new in InTouch Machine Edition 8.0
946 views • 1 year ago

Wonderware Operations Integration Servers - Installation
18:08

Wonderware Operations Integration Servers - Installation
3,187 views • 1 year ago

InTouch 2014 R2 Patch 01
10:30

InTouch 2014 R2 P01 New Features
435 views • 1 year ago

Panel PC HMI IPC Premium Standard Series D
4:28

Panel PC HMI IPC Premium Standard Series D
1,217 views • 1 year ago

Situational Awareness Actionable Alarming Revisited
9:01

Situational Awareness Actionable Alarming Revisited
2,090 views • 1 year ago

Subscription-Downloads

Title: Wonderware-Downloads

Only send me alerts when: **New items are added**

When to send alerts: Send notification immediately

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Increase Scalability / Reduce Cost

Improve Robustness

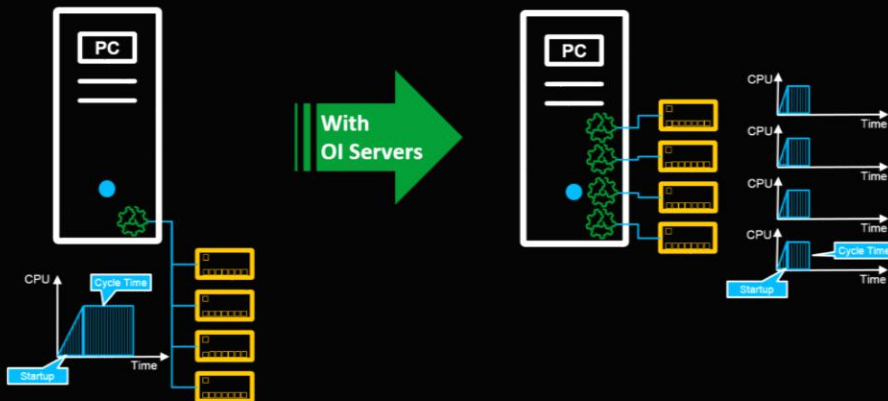
Reduce Downtime

Migration Friendly

Improve Performance

Increase Throughput and Reduce Cycle Time

With OI Servers



OI Server Benefits

<https://youtu.be/jjLEkgkE4VE>



Promoting OI Servers - Editions



	On a Single Node	Standard	Professional
	Server Types	Supervisory	Supervisory
	Drivers Supported	All Supervisory	All Supervisory
	I/O per Instance	Device Specific	Device Specific
	Network Redundancy	✓	✓
	Read-Only Option	✓	✓
	Secured Connectivity	✓	✓
	Hardware Consolidation		✓
	Reduce Architecture Costs		✓
	Single Node Scalability		✓
	Load Distribution		✓
	Increased Throughput		✓
	Maximize Uptime		✓
	Single Protocol Multi-Version		✓
	Auto-Build		✓

- Allen-Bradley
- Automation Direct
- Bosch
- Beckhoff
- Eaton
- GE
- InTouch Mach. Ed.
- MQTT
- Mitsubishi
- OPC-UA
- Omron
- Opto22
- Modbus / Modicon
- Siemens
- SNMP
- TI
- Wago
- Wonderware

Licensing



X System Platform

X

X

2012 R2

2014

2014 R2 / 2017

You want:
OI Server
Standard
Functionality

2012 R2 License No I/O
 +
 OI Server Standard Full
 =

2014 License No I/O
 +
 OI Server Standard Full
 =

2014 R2 / 2017 License No I/O
 +
 OI Server Standard Full
 =

2012 R2 License With I/O
 +
 OI Server Standard Upgrade
 =

2014 License With I/O
 +
 OI Server Standard Upgrade
 =

2014 R2 License With I/O
 +

 Standard is included with products that have I/O feature line

You want:
OI Server
Professional
Functionality

2012 R2 License No I/O
 +
 OI Server Professional Full
 =

2012 R2 License No I/O
 +
 OI Server Professional Full
 =

2012 R2 / 2017 License No I/O
 +
 OI Server Professional Full
 =

2012 R2 License With I/O
 +
 OI Server Professional Upgrade
 =

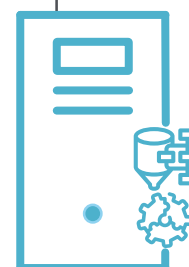
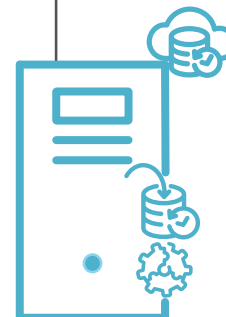
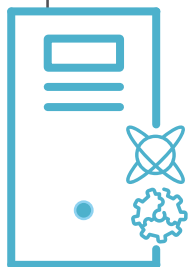
2012 R2 License With I/O
 +
 OI Server Professional Upgrade
 =

2012 R2 / 2017 License With I/O
 +
 OI Server Professional Upgrade
 =

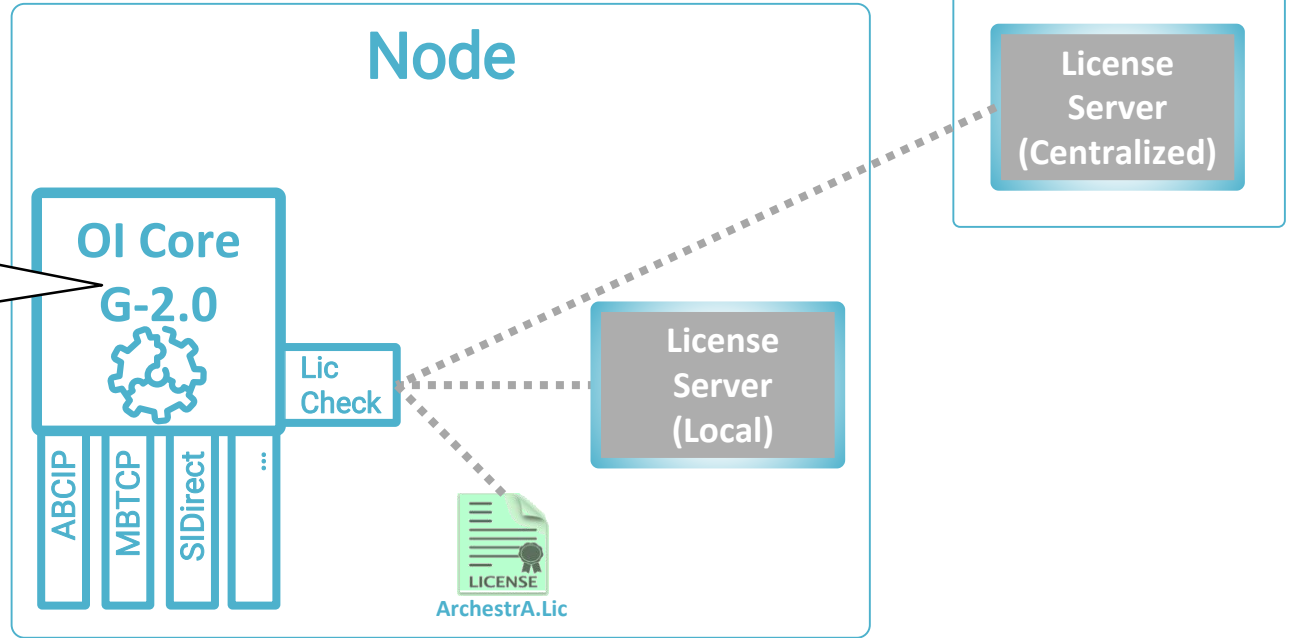
Licensing

With WSP 2017

- Centralized Licensing Support
- Activation Based Licensing
- OI Core 2.0 supports both
 - File-Based (ArchestrA.lic)
 - Activation-Based



Licensing – Legacy Support

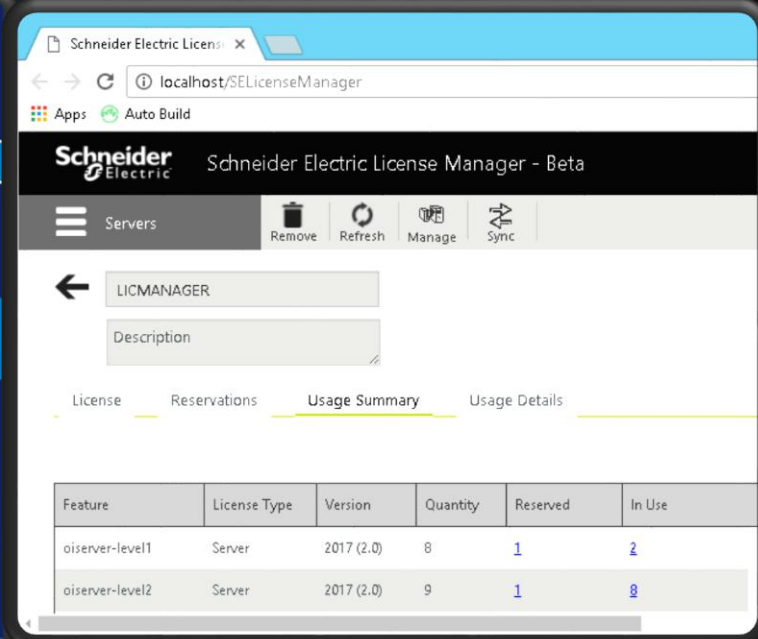
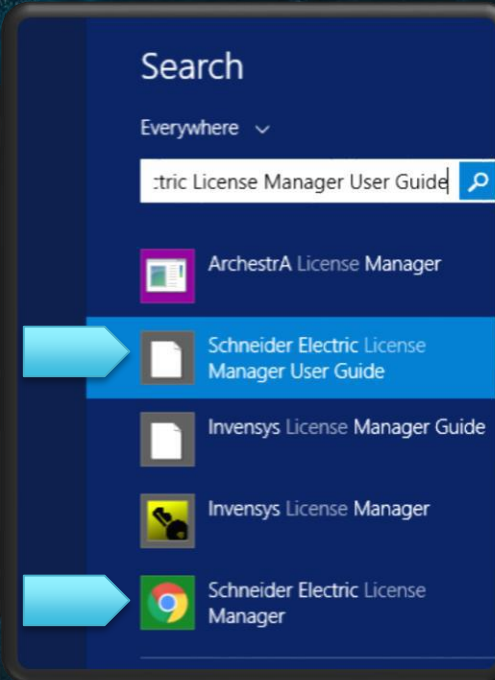
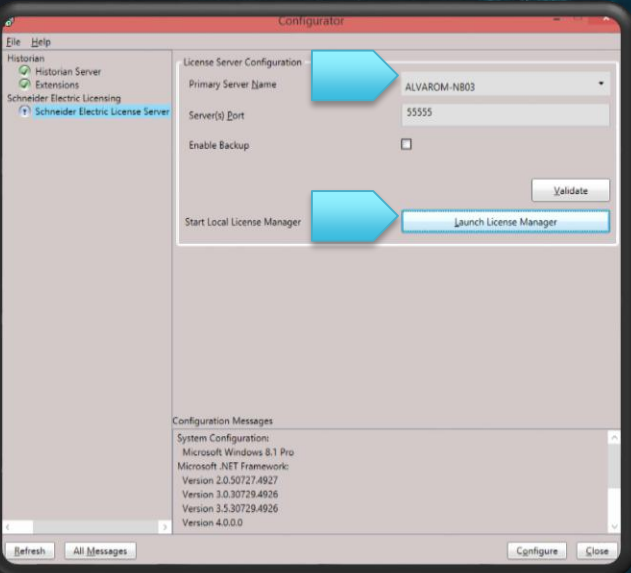


OI Core supports both:

- Existing ArchestrA.Lic
- New Activation-based entitlements



Licensing



Recent Releases

Prior



- Allen-Bradley
- GE
- Modbus
- Siemens

2015-Q3



- Allen-Bradley
- Automation Direct
- Bacnet
- Beckhoff
- Bosch Rexroth
- Eaton
- GE
- Mitsubishi
- Modbus
- Opto22
- Wago

2016-Q1



- Allen-Bradley
- Siemens

2016-Q2



- Automation Direct
- BACnet (Update)
- Beckhoff (Update)
- Mitsubishi (Update)
- InTouch Machine Edition
- MQTT (Internet of Things)
- Modbus
- Omron
- OPC-UA Client
- SNMP
- Texas Instruments
- Wonderware OI Gateway

2017-Q1



- **ABCIP (w Auto-Build)**
- ****Licensing: New centralized license support**

Cloud

Devices

Time
Zones

People

Industrial Internet of Things

Locations

Industry

Networks

Global

Prior



- Allen-Bradley
- GE
- Modbus
- Siemens

2015-Q3



- Allen-Bradley
- Automation Direct
- Bacnet
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2016-Q1



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2017-Q1

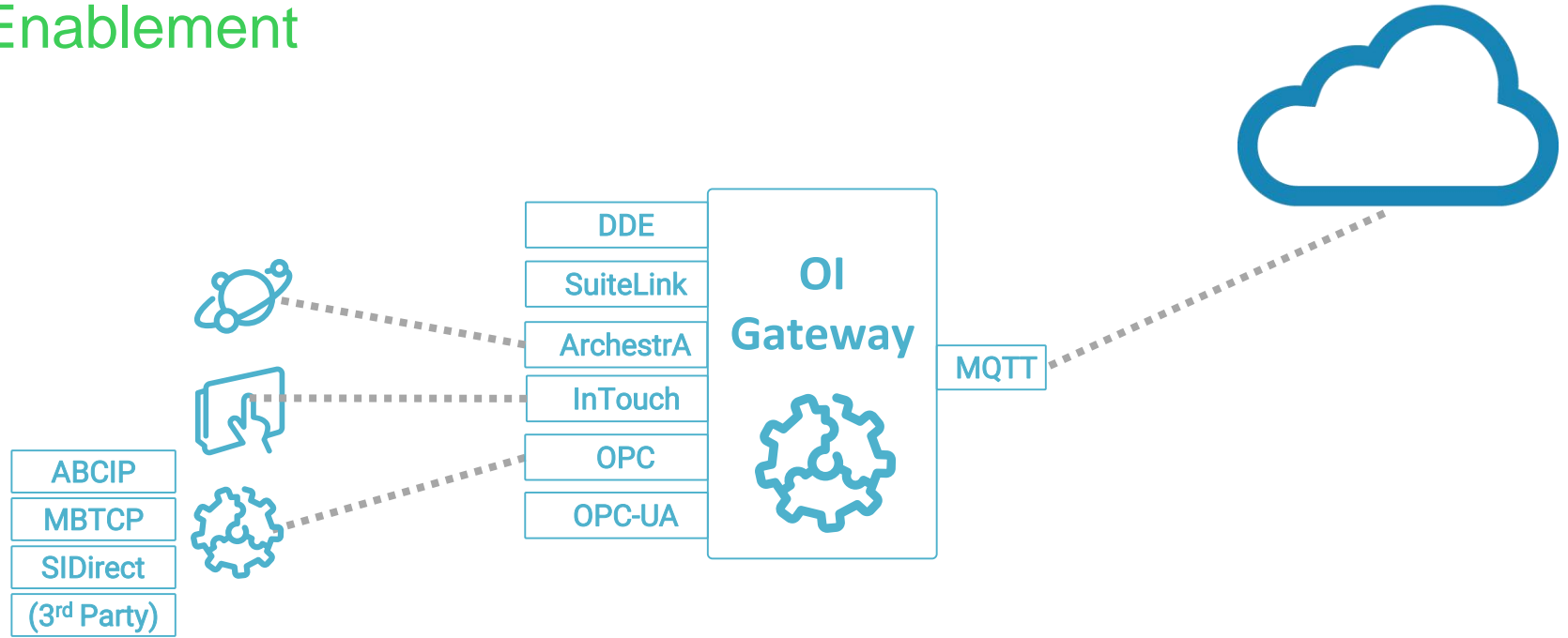


- **ABCIP (w Auto-Build)**
- ****Licensing: New centralized license support**



Our OI Servers are IOT ready!

IOT Enablement



Our OI Servers are IOT ready!

OI Gateway + MQTT



System Platform InTouch Historian InBatch Information Server Intelligence Mobile

Control Room



Industrial Control



Geo Distant



Smart Cities



Mobile Assets



Remote Site



Mobile Users





Tiny Application Support



System Platform InTouch Historian InBatch Information Server Intelligence Mobile

Control Room



Industrial Control

- **OI-Core G-2.0 will support**
 - 32 or less tags subscribed per server do not require a license
 - License check starts at 33rd tag
- **Support for Wonderware Online**
- **Support for IOT integration**
- **See list for servers supporting it**

Supported:

- ABCIP
- ADPRO
- DOMORE
- KOYO
- BACNET
- Bosch
- Beckhoff
- Eaton
- MQTT
- MELSEC
- OPC-DA
- OPC-UA
- OmronFINS
- Opto22
- SNMP
- TI-500
- Wago

June 2017:

- GESRTP
- ITME
- MBTCP
- MBSerial
- SIDirect





Web Services Integration



System Platform InTouch Historian InBatch Information Server Intelligence Mobile



Control Room



Industrial Control



Regulatory Site



Weather Service

Tracking System



WW Online Historian



MES Skelta...

Web Service OI Server

- In a Web service, Web technology such as [HTTP](#), originally designed for human-to-machine communication, is utilized for machine-to-machine communication.
- ... more specifically for transferring machine readable file formats such as [XML](#) and [JSON](#).

SOAP: Simple Object Access Protocol

REST: Representational State
Transfer

Money



Time



Productivity



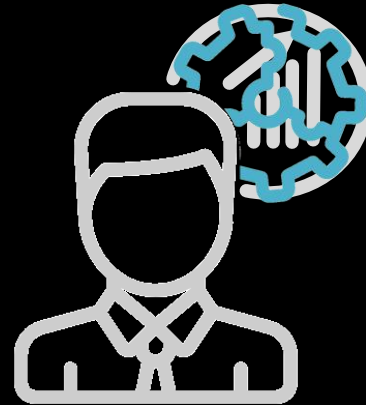
Money



Time



Productivity



Engineering Efficiency

Customers

- Better integration between System Platform and Operations
- Faster Time-to-Runtime
- Shorter Factory Acceptance Testing Cycles
- Faster Ramp-Up

Business

- Sales
 - Boost System Platform adoption
 - Boost OI Server Standard and Professional Value
 - Tremendous value proposition
- Improve Competitiveness

ABCIP and Auto-Build

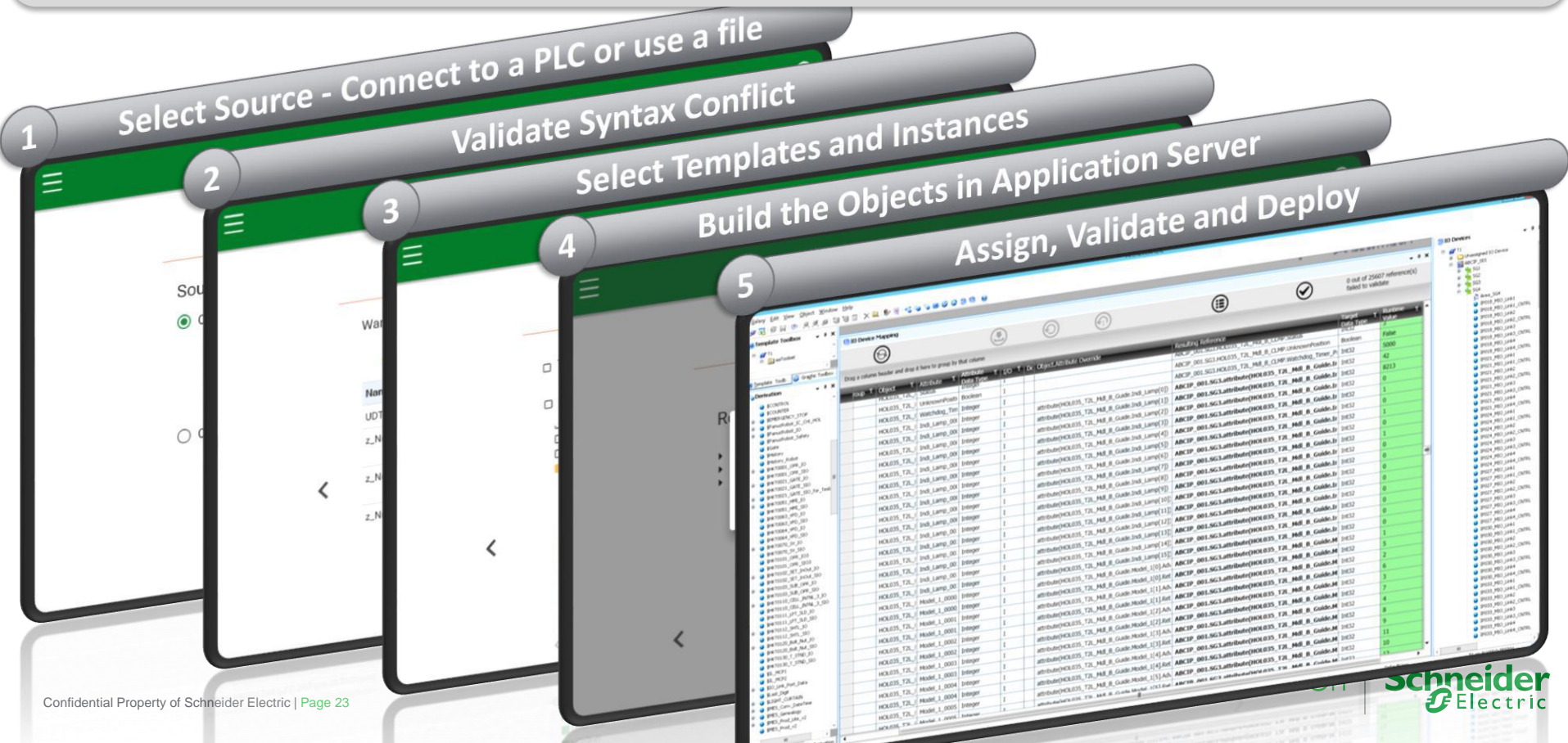
What is Auto-Build

The screenshot displays the Schneider Electric software interface, specifically the 'Derivation' tool. A large green gear icon is overlaid on the central part of the screen. The interface shows a 'Derivation' tree on the left, a central workspace with a 'CommandState' object, and a table at the bottom listing device attributes and their values.

Device	ScanGroup	T	Object	T	Attribute	T	I/O	Device.ScanGroup Override	Object.Attribute Override	Resulting Reference	Runtime Value	T
noODES1_001	Normal		ABLT130021		Ack_Fal		I			aaODES1_001.Nomral.ABLT130021.Ack		
noODES1_001	Normal		ABLT130021		Ack_Ph		I			aaODES1_001.Nomral.ABLT130021.Ack		
noODES1_001	Normal		ABLT130021		Ack_Ph9		I			aaODES1_001.Nomral.ABLT130021.Ack		
noODES1_001	Normal		ABLT130021		Ack_Lo		I			aaODES1_001.Nomral.ABLT130021.Ack		
noODES1_001	Normal		ABLT130021		Ack_LoLo		I			aaODES1_001.Nomral.ABLT130021.Ack		
noODES1_001	Normal		ABLT130021		Alarm_Fal		I			aaODES1_001.Nomral.ABLT130021.Ack		
noODES1_001	Normal		ABLT130021		Alarm_n		I			aaODES1_001.Nomral.ABLT130021.Ack		
noODES1_001	Normal		ABLT130021		Alarm_Ph		I			aaODES1_001.Nomral.ABLT130021.Ack		
noODES1_001	Normal		ABLT130021		Alarm_Lo		I			aaODES1_001.Nomral.ABLT130021.Ack		
noODES1_001	Normal		ABLT130021		Alarm_LoLo		I			aaODES1_001.Nomral.ABLT130021.Ack		
noODES1_001	Normal		ABLT130021		Ch2_FalNoShr		I			aaODES1_001.Nomral.ABLT130021.Ck		
noODES1_001	Normal		ABLT130021		Ch2_FalDi		I			aaODES1_001.Nomral.ABLT130021.Ck		
noODES1_001	Normal		ABLT130021		Ch2_FalNoCm		I			aaODES1_001.Nomral.ABLT130021.Ck		

Demo

Auto-Build... A few simple steps



Life Is On

Schneider
Electric