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# What is New and Advanced Features for AVEVA Edge

June 2020

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# AVEVA Edge 2020 V20.0

June 2020



# AVEVA Edge 2020

New name, broader scope

AVEVA™ Edge

Version 2020

[aveva.com](https://www.aveva.com)

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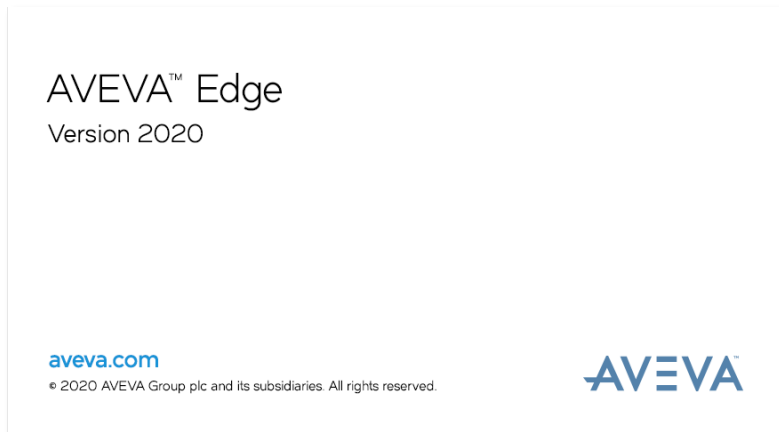
AVEVA™

AVEVA™

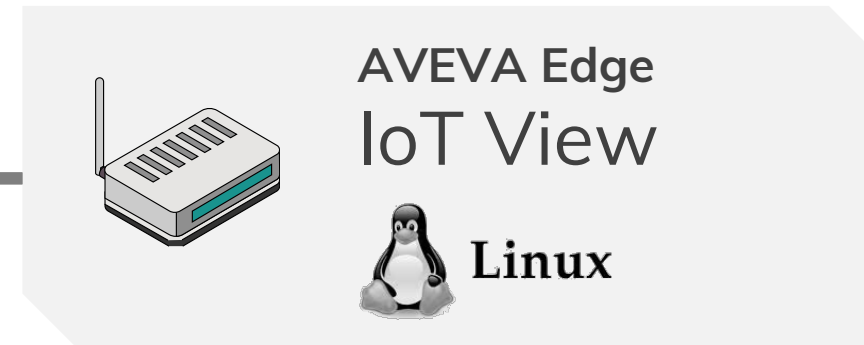
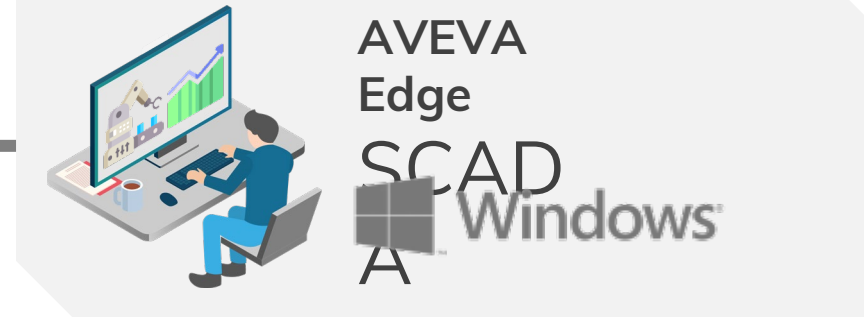
# AVEVA Edge 2020

Portability – Develop once, deploy anywhere

- New “Component” names



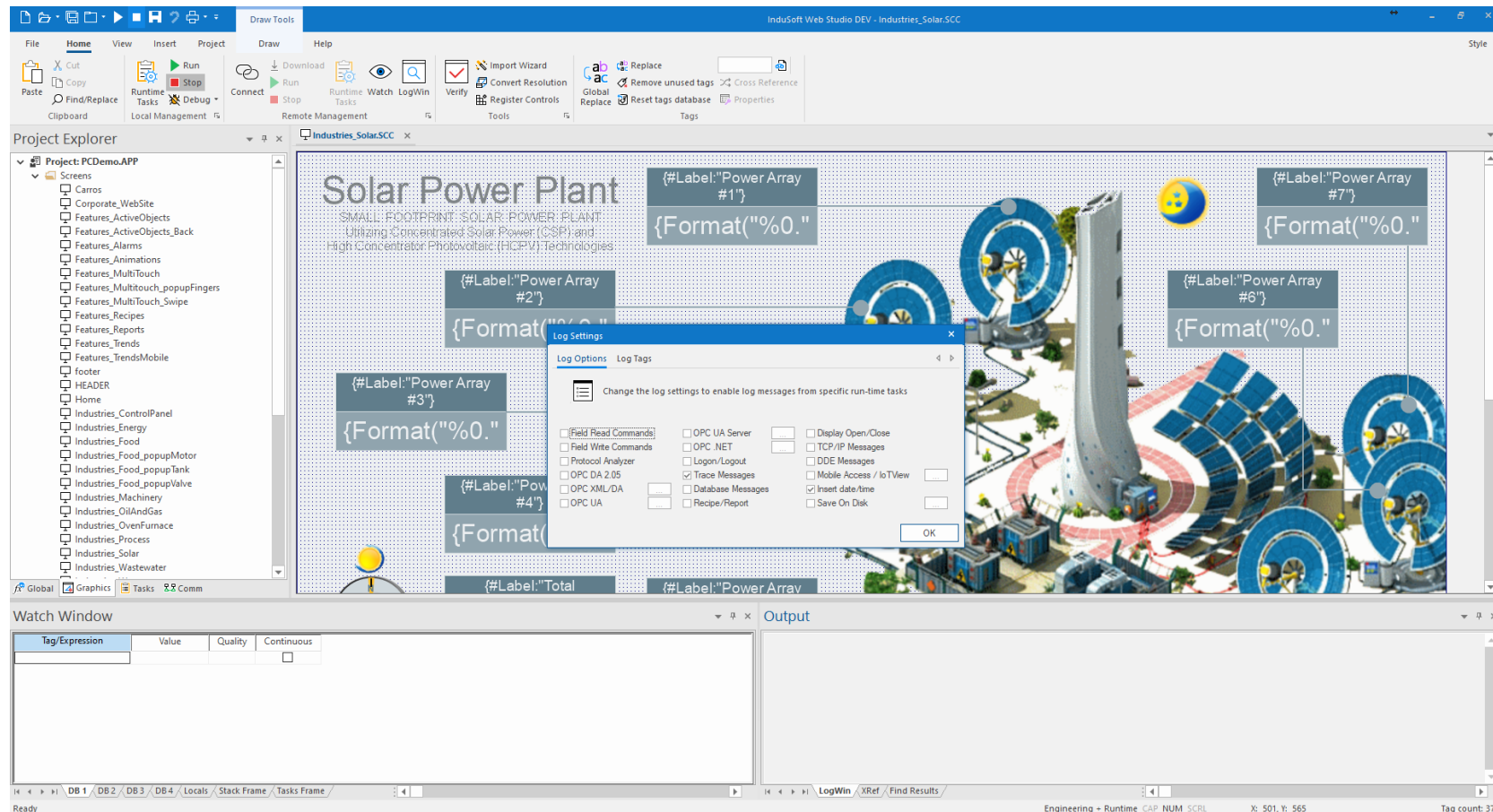
## DEVELOPMENT (IDE)



RUNTIME EDITIONS

# New Development Environment

Modern Look and Feel – More Intuitive – Even higher productivity

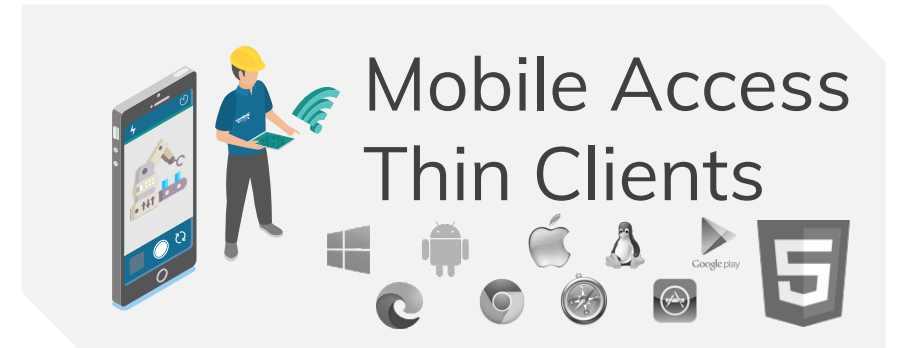
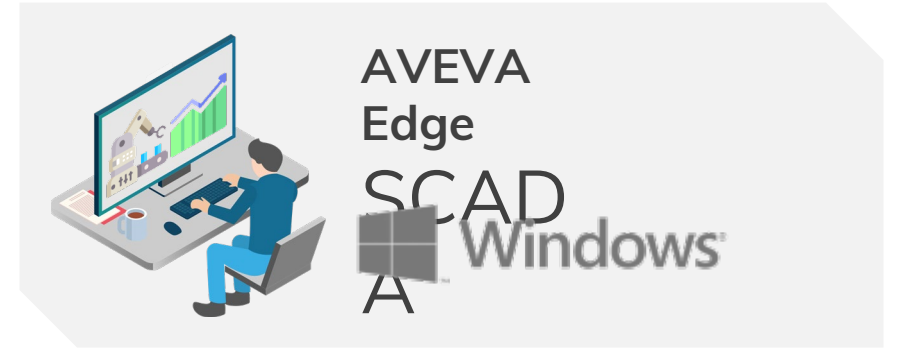


- Custom themes
- Modern iconography
- Intuitive adherence to standards
- Shortcuts and popup options for higher productivity
- Full compatibility with projects created in previous versions
- Co-existence with previous versions installed on the same computer

# Industrial Graphics

Consistency across the portfolio

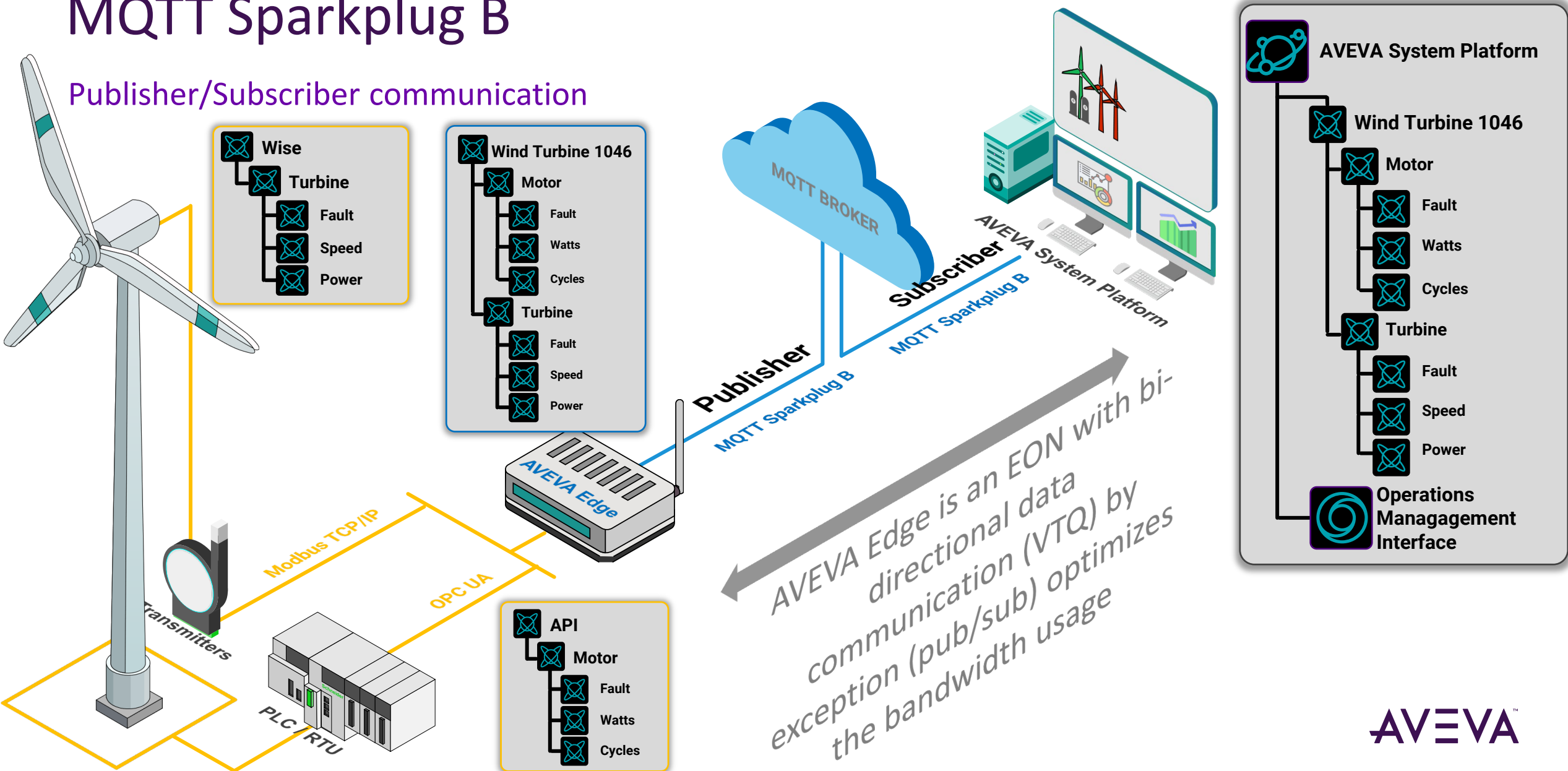
- Extensive Animations
- Local Namespace
- Client Business Logic/Scripts
- Quality Indication
- Status Indication
- Security Handling
- Anchor Points
- Connector Points
- Change Propagation
- Symbol Embedding
- Data Redirection
- Situational Awareness
- Element Styles
- Content Navigation
- .NET Framework Access
- Language Switching
- Graphic Wizards
- Alarm Handling
- Numeric Formatting
- More...



AVEVA™

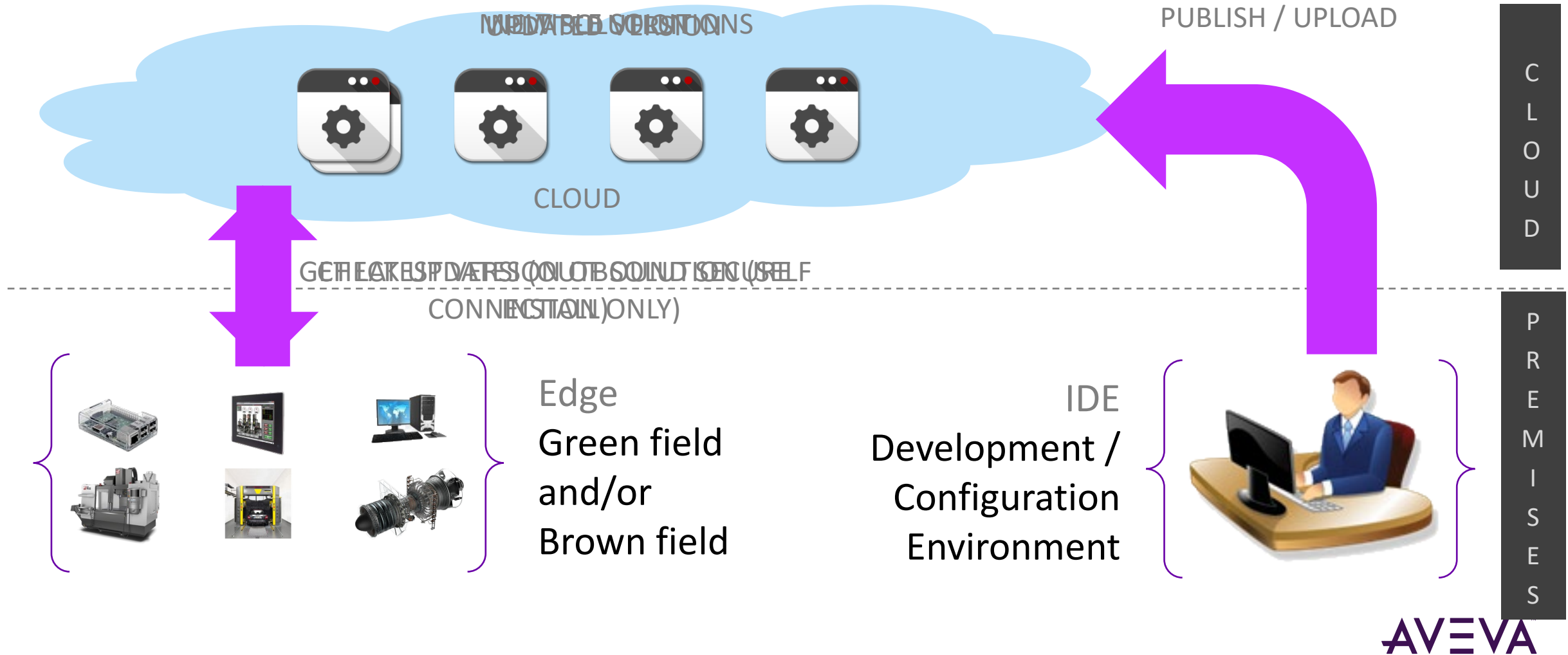
# MQTT Sparkplug B

## Publisher/Subscriber communication



# AVEVA Edge Management

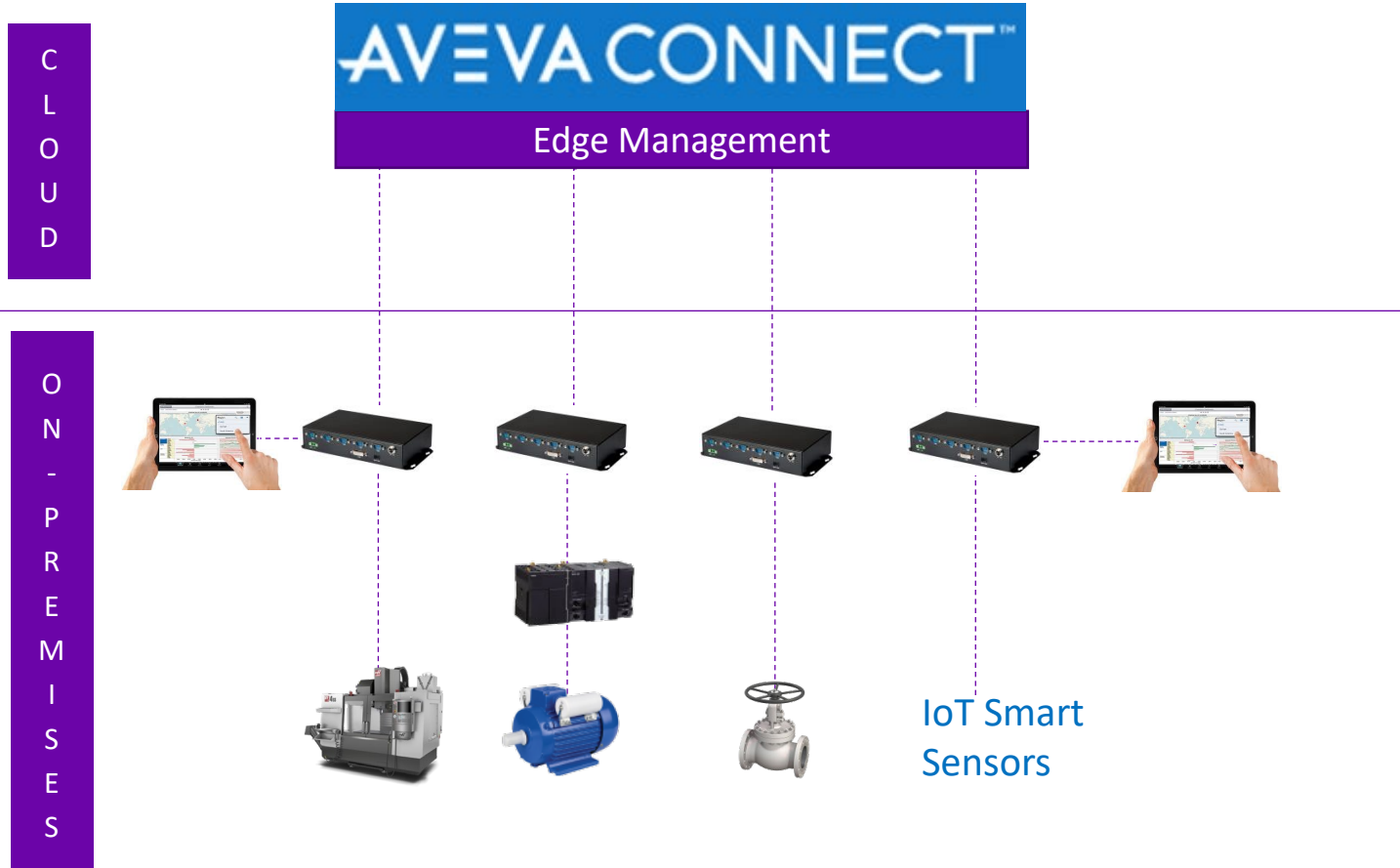
## Work flow



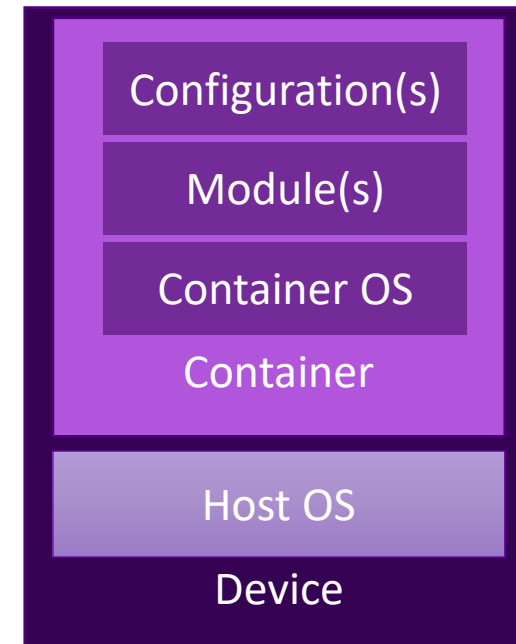


# AVEVA Edge Management

## Containerized solutions



## What's on the Edge Device



- Configuration in the “what” the module will execute
- Module is the executable or runtime that AVEVA provides
- Container OS is the components of the OS in the container
- Host OS is the OS of the device

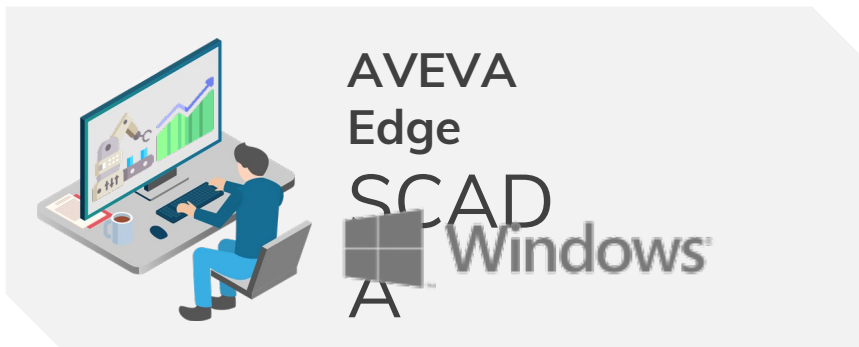
# Edge Management Modules

## AVEVA Edge SCADA and AVEVA Edge IoT View

### AVEVA Edge SCADA

Full runtime of AVEVA Edge SCADA provisioned through the AVEVA Cloud with FLEX subscription credits

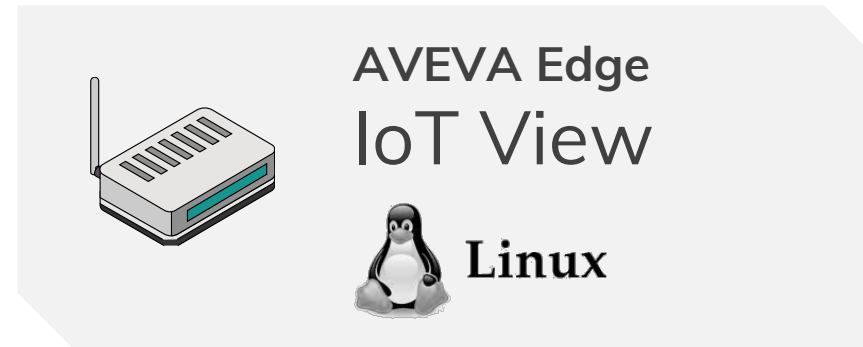
- Use the Edge Management interface to deploy AVEVA Edge SCADA applications to managed edge devices, update applications, or check the health status of remote devices



### AVEVA Edge IoT View

AVEVA Edge runtime for Linux based edge devices

- Manage multiple devices remotely by accessing the AVEVA Edge IoT module in Edge Management to deploy or update applications running on managed edge devices with Linux (x64 or ARM) operating systems.

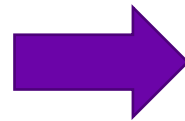


AVEVA™

# New Licensing Tag Levels

Flexibility and competitiveness

InTouch Machine Edition 2014/2017 and InTouch Edge HMI 2017 - LEGACY		
Platform	Runtime	License Levels
Windows	IDE Full Runtime	InTouch Edge HMI Unlimited
		InTouch Edge HMI 60K tags
		InTouch Edge HMI 3K tags
		InTouch Edge HMI 1K tags
		InTouch Edge HMI 500 tags
Embedded	EmbeddedView CEView IoTView	InTouch Edge HMI 3K tags
		InTouch Edge HMI 2K tags
		InTouch Edge HMI 1K tags
		InTouch Edge HMI 500 tags
		InTouch Edge HMI 100 tags



AVEVA Edge 2020		
Platform	Runtime	License Levels
Windows	AVEVA Edge STUDIO AVEVA Edge SCADA	AVEVA Edge Unlimited
		AVEVA Edge 512K tags
		AVEVA Edge 64K tags
		AVEVA Edge 32K tags
		AVEVA Edge 16K tags
		AVEVA Edge 4K tags
		AVEVA Edge 1.5K tags
		AVEVA Edge 300 tags
		AVEVA Edge 150 tags
		Embedded
AVEVA Edge 4K tags		
AVEVA Edge 1.5K tags		
AVEVA Edge 300 tags		
AVEVA Edge 150 tags		

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# InTouch Edge HMI 2017 Update 5 V8.1+SP5

November 2019

# Mobile Access Thin Clients (HTML5) Enhancements

## Support for images on Buttons and additional improvements



### Support for images on Buttons

- Native interface to embed pictures or icons into buttons, enabling intuitive navigation interfaces
- Improvement in HTML5 Mobile Thin Client solution, increasing parity with Windows-based Viewer

### Additional Improvements

- Improved interface with combo-box, translation and Tags from Tag Integration feature
- Added support for Tag Properties (Tags Fields) from indirect Tags on Mobile Access Thin Client.
- Improved Performance, Scalability and Stability

Platforms: Agnostic

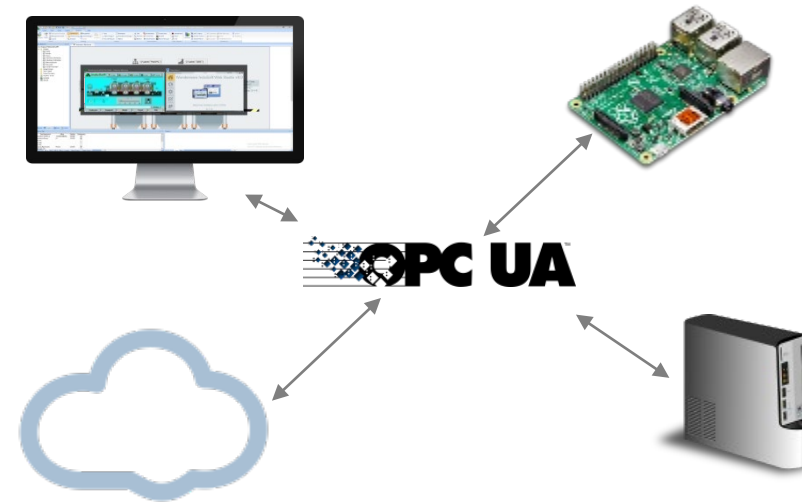
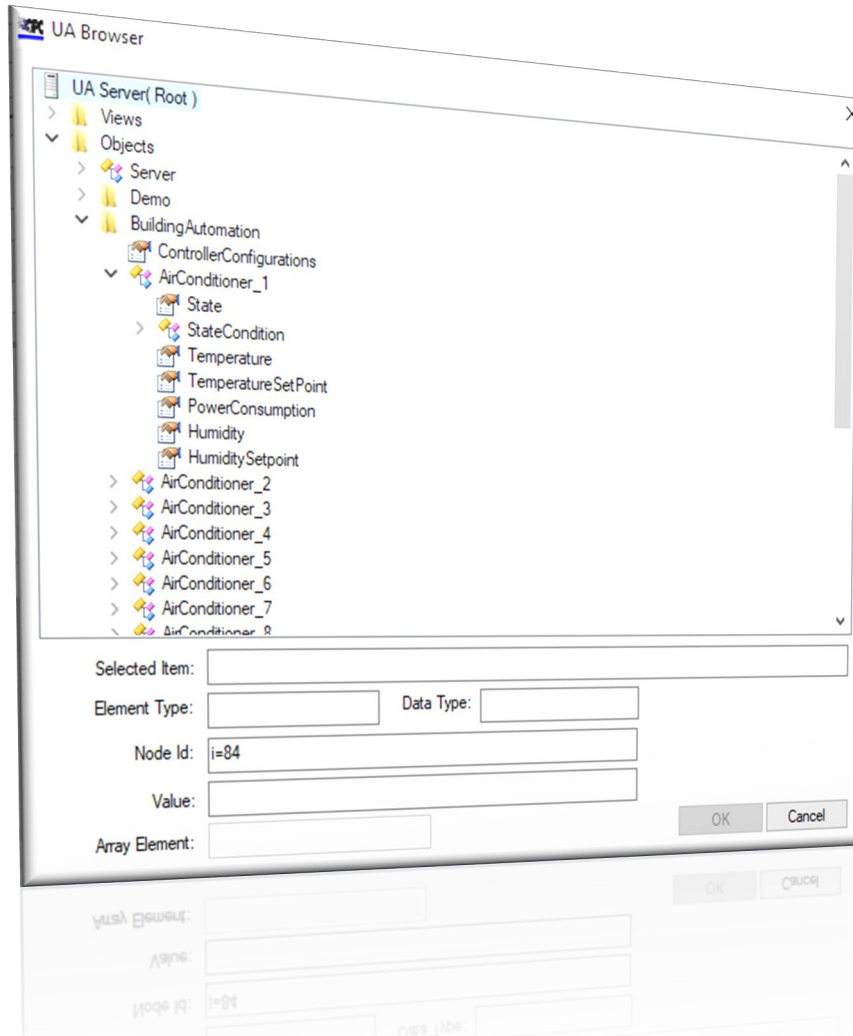
Host: Web Browser agnostic

Technology: HTML5



# Increased scalability and performance for OPC UA communication

## OPC UA Client

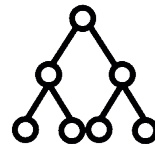
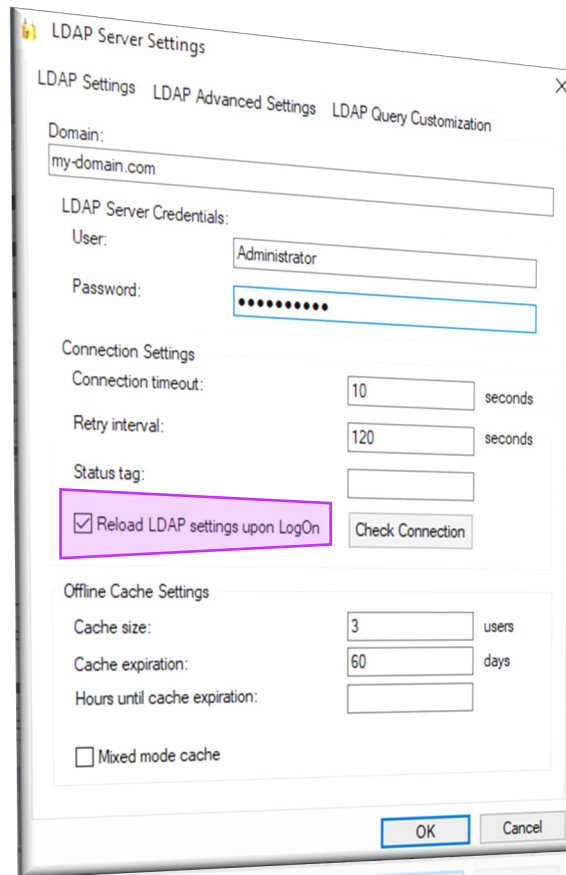


## Reliability and Scalability

- Improved the start up time, stability and reliability of the OPC Communications, especially benefiting larger project with 100K+ tags

# Security System Enhancements

## Performance Enhancements when using Domain (LDAP) mode



### General improvements

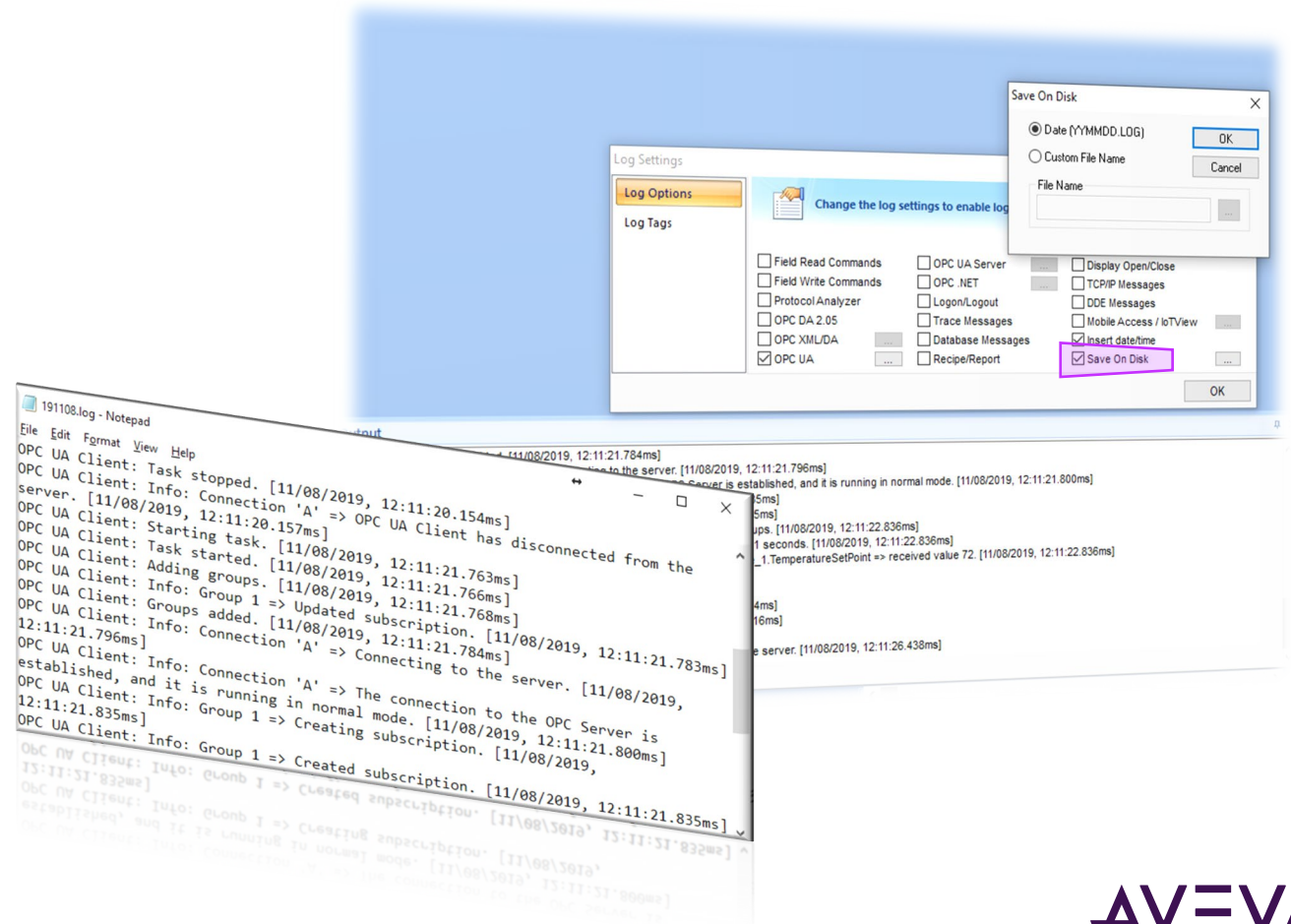
- Performance enhancements, especially benefiting projects with large Active Directory Databases
- New option to disable reloading “LDAP settings” (i.e.: Active Directory settings) upon LogOn, improving substantially the performance when executing authenticating users
- Removed unnecessary additional verifications during operations
- Improved the memory management

# Output Window enhancements

## Ability to Save Messages automatically to file

### General improvements

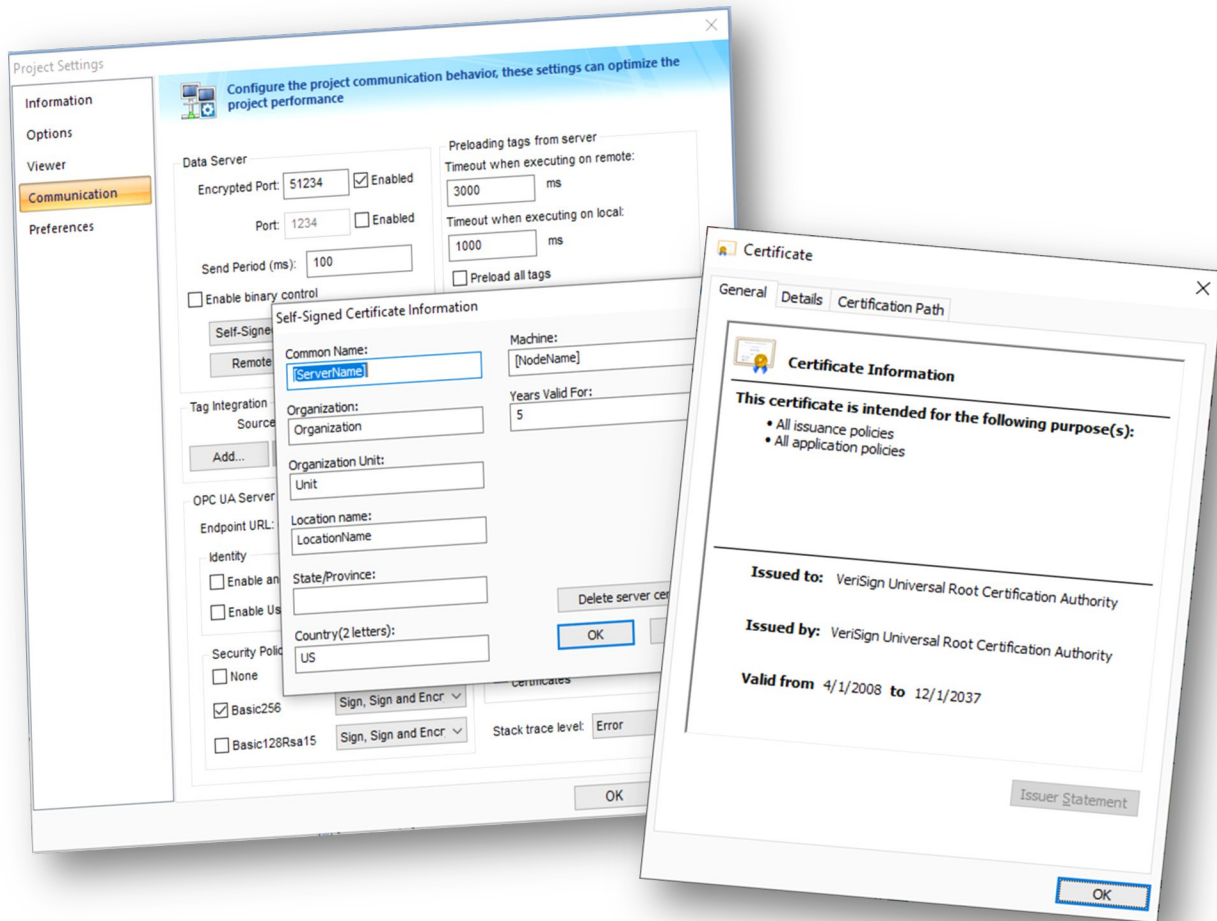
- Added the ability to log the Output Window contents directly to a file
- Now, saving communication information and Verification logs is faster and easier
- Improves productivity by helping to quickly identify issues





# Cybersecurity

## Enhancements on the Encrypted TCP/IP Channel



### General improvements

- Encrypted TCP Communications channel supports cipher lists through TLS 1.3
- Implemented an enhanced Certificate validation to better handle customer-specific CA signatures

### Security hardening

- Upgraded unsecure 3rd-party legacy libraries



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# InTouch Edge HMI 2017 Update 4 V8.1+SP4

May 2019

# Mobile Access Thin Clients (HTML5) Enhancements

## Localization and additional improvements



Platforms: Agnostic

Host: Web Browser agnostic

Technology: HTML5



## Support for Localization on HTML5

- Dynamically switching languages
- Allows more flexibility for projects installed in different areas

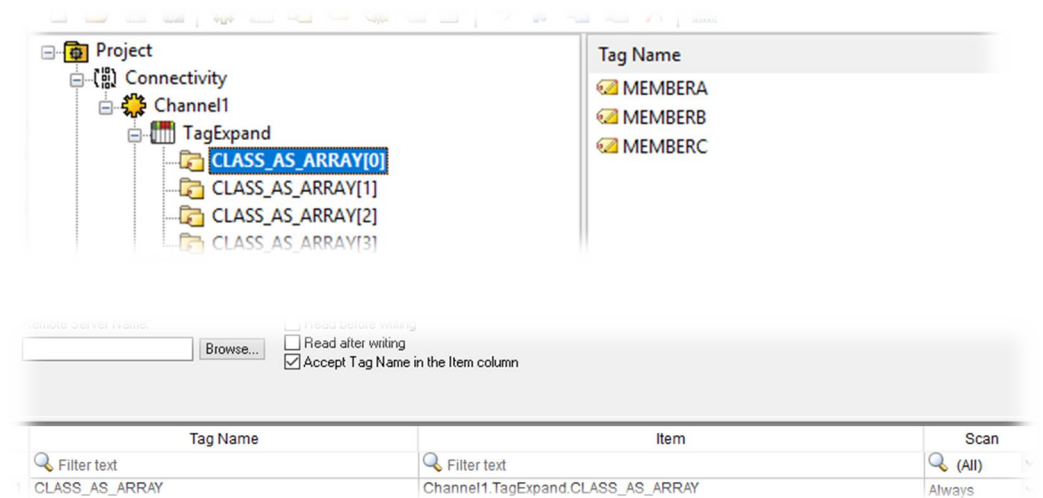
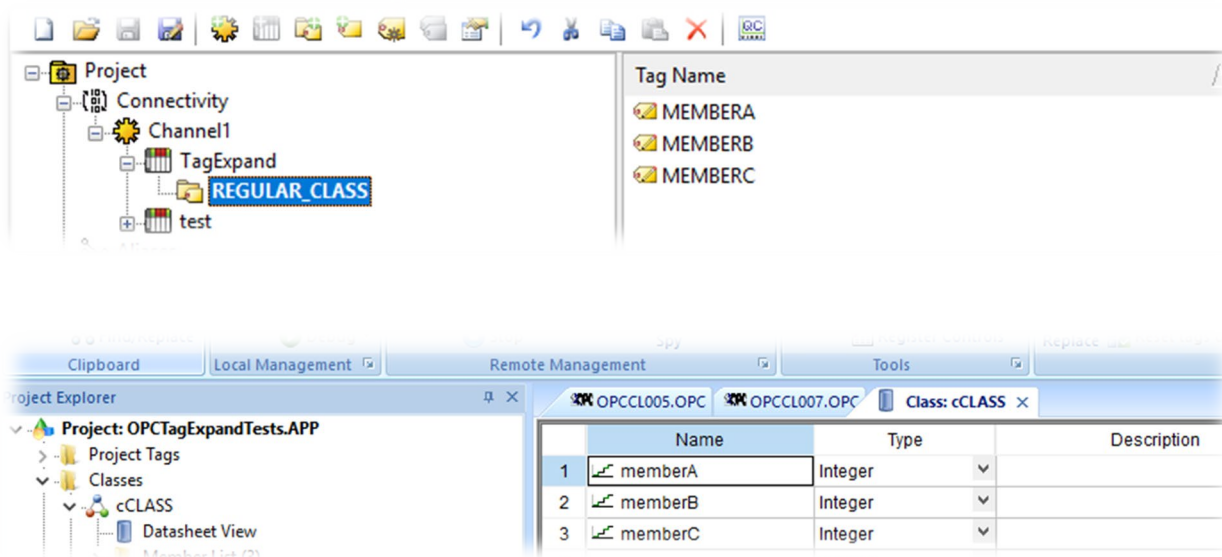


## Additional Improvements:

- Support for Sorting the columns on Alarm Control object
- “Push-like” style on Check-boxes and Radio Buttons
- Improved Performance, Scalability and Stability

# Tag Expansion for OPC Clients

OPC Client UA and OPC Client XML/DA



## High Productivity

Easily associate a Class Tag with a Structure from the third-party OPC Servers, using only one line on the OPC Client worksheets

# Array Distribution for OPC Clients

OPC Client UA and OPC Client XML/DA



Property Editor - Data Type Examples.16 Bit Device.R Registers.DWordArray

Property Groups: General, Scaling

**Identification**

Name	DWordArray
Description	32-Bit unsigned integer array

**Data Properties**

Address	R0550 [4]
Data Type	DWord Array
Client Access	Read/Write
Scan Rate (ms)	100

Tag Name: Filter text

1	R_Registers_DoubleArray_UA[0]	/0:Objects/2:Data Type Examples/2:Data Type Examples.16 Bit Device/2:Data Type Examples.16 Bit Device.R Registers/2:Data Type Examples.16 Bit Device.R Registers.DoubleArray
2	R_Registers_DoubleWordArray_UA[0]	/0:Objects/2:Data Type Examples/2:Data Type Examples.16 Bit Device/2:Data Type Examples.16 Bit Device.R Registers/2:Data Type Examples.16 Bit Device.R Registers.DWordArray

Address

OK Cancel Apply Help

Database Spy

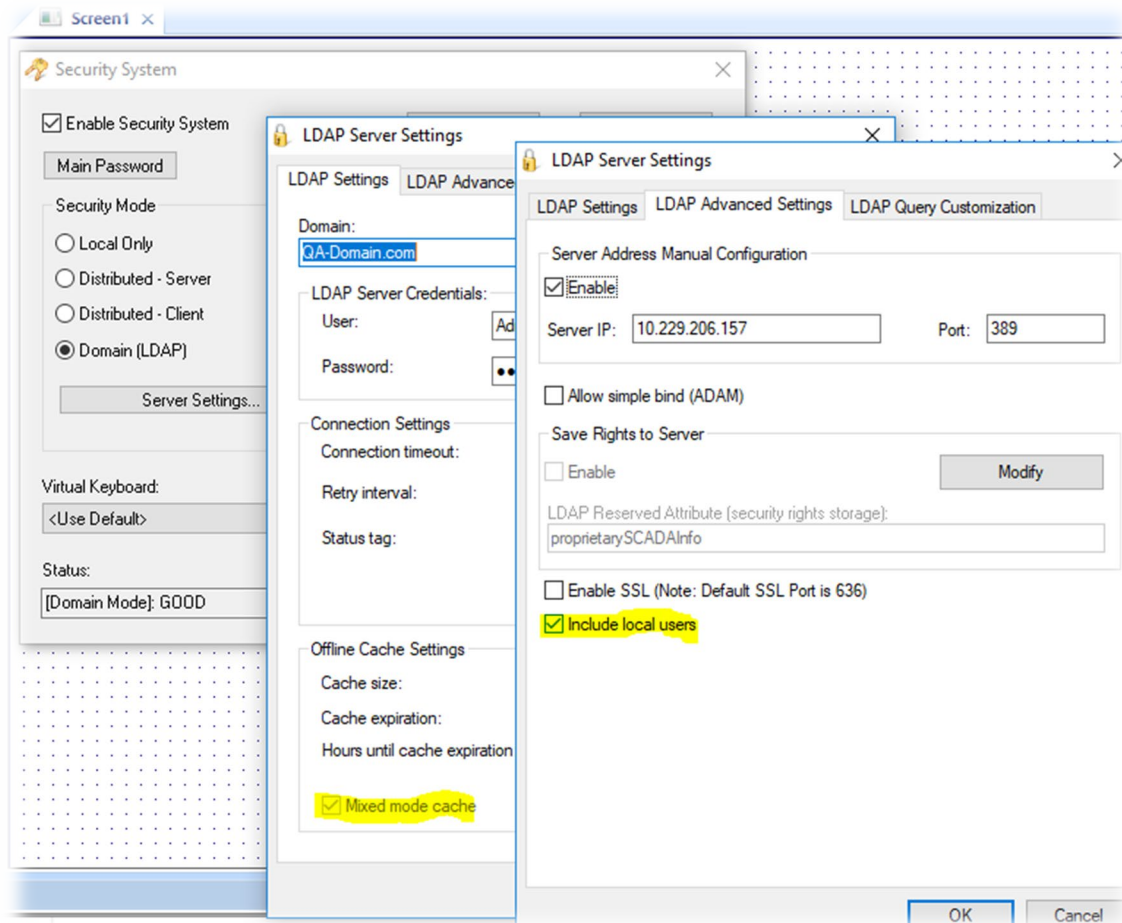
Tag/Expression	Value	Quality	Continuous
R_Registers_DoubleWordArray_UA[0]	4677	GOOD	<input checked="" type="checkbox"/>
R_Registers_DoubleWordArray_UA[1]	4677	GOOD	<input checked="" type="checkbox"/>
R_Registers_DoubleWordArray_UA[2]	4677	GOOD	<input checked="" type="checkbox"/>
R_Registers_DoubleWordArray_UA[3]	4677	GOOD	<input checked="" type="checkbox"/>

## High Productivity

Easily associate an Array Tag with an Array Item from the third-party OPC Servers, using only one line on the OPC Client worksheets

# Enhanced Security System enabling Mixed Mode for Domain (LDAP) and Local modes

## Flexibility and Extensibility

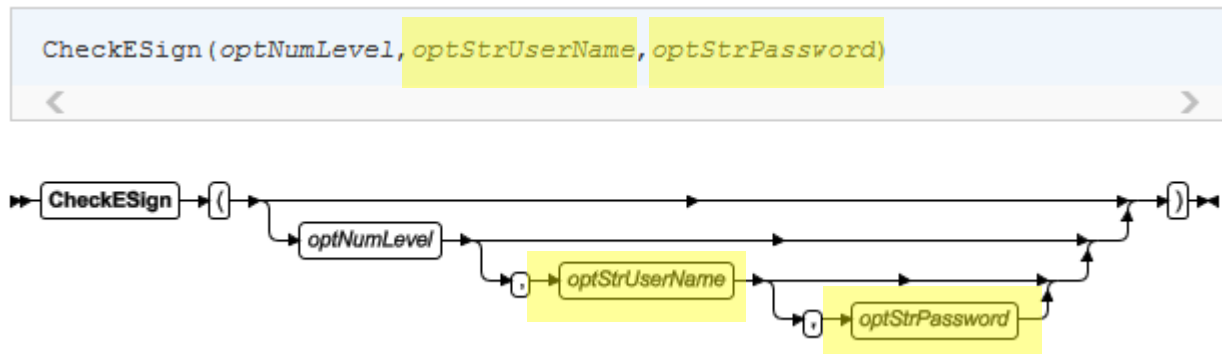


**Users created using Local Mode can be used when the Security Mode is Domain (LDAP), even when connection with the Active Directory is available**

- Enhancement on existing Mixed Mode feature with the option to Include local users.
- Flexibility on OEM projects
- Flexibility for Generic Templates

# Enhanced CheckESign() built-in function

Custom authentication and verification



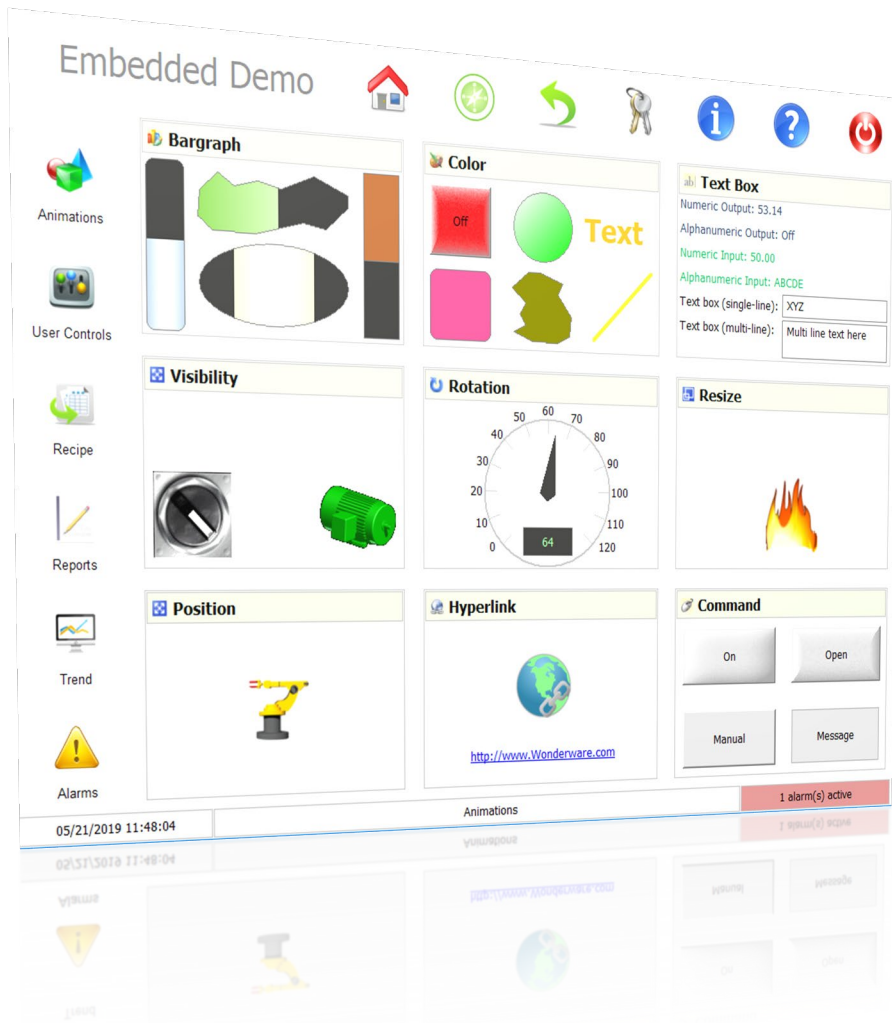
## New Optional Parameters for optUserName and optPassword

- Script level check
- Verification control for sophisticated specifications, including FDA 21 CFR Part 11
- Enable custom authentication (e.g.: double authentication)



# Additional Demo Projects

## Embedded Demo and IoT Demo



Windows IoT

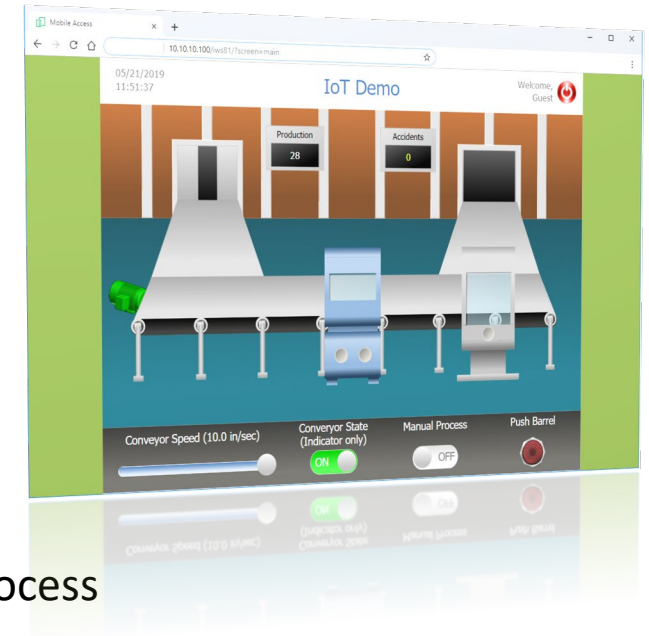
Windows Embedded 8 Standard

Windows Embedded Standard 7

Windows Embedded Compact

### New demo Projects

- Installed as part of the Setup process
- Same folder as the traditional PC Demo (C:\Users\Public\Public Documents\- Allows demonstrations for EmbeddedView, CEView and IoTView





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# InTouch Edge HMI 2017 Update 3 V8.1+SP3

January 2019

# HTML5 Remote Database Spy



The HTML5-based Remote Database Spy allows the user to monitor/set tags, execute expressions to troubleshoot projects remotely

- Support for Full Runtime, EmbeddedView, and IoTView
- Set/Monitor tags remotely
- Execute expressions remotely
- Access Database Spy from any HTML5-compatible browser from PCs, Tablets, or Smart Phones (plug-in free)
- Secure (TLS) connection with the server (firewall friendly) and built-in authentication

## Database Spy

Tagname/Expression				+	≡x	📄	📌
::::	second	49	GOOD				
::::	minute	7	GOOD				
::::	hour	17	GOOD				
::::	time	17:07:49	GOOD				

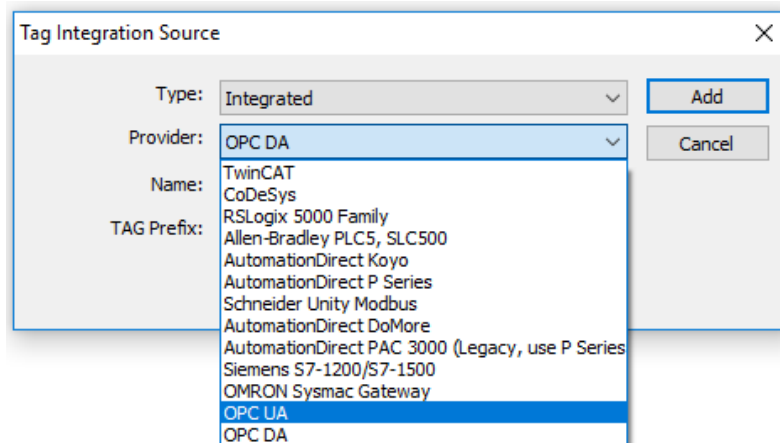
# Tag Integration for third-party OPC UA Servers and OPC DA Servers



Tag Integration drastically improves productivity and prevents typing errors allowing the user to browse remote tags instead of typing them when configuring the screens and other application tasks



- Browse items from external OPC UA Servers while designing project interfaces
- Automatically set up tag communications in the background
- No need to open up worksheet and manually set tag communications
- Includes tag integration for Schneider-Electric OPC Factory Server (OFS), which supports tag-based PLCs.



# Enhanced support for Animations on Mobile Access Thin Clients (HTML5)



Continuous improvements in the HTML5 graphical interface (Mobile Access Thin Clients) provides a high level of portability and mobility to InTouch Edge HMI users

- Support for suitable Animations (e.g.: Visibility/Position, Resize) on the following objects: Alarm/Event Control, Grid Control, Trend Control, Push-button, List-Box, Smart Message.
- Support for rotated linked pictures.
- Support for button styles (Standard, 3D Sharp, 3D Soft), in addition to the OS Like style.

## Studio Mobile Access (SMA) Thin Clients

Platforms: Agnostic

Host: Web Browser agnostic

Technology: HTML5



# Included MELSE driver for IoTView (Linux)

## IoT Edge Solution: IoTView



## Increased interoperability with portability

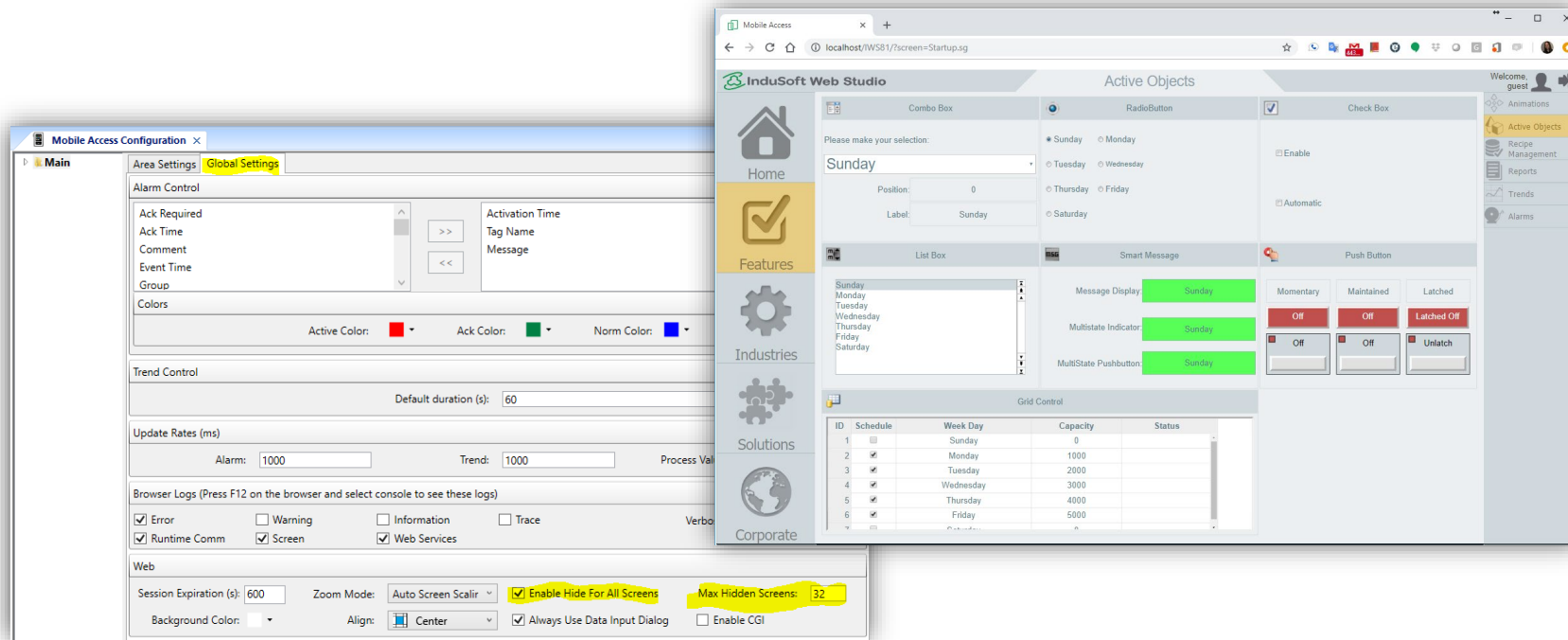
- Migration of the MELSE driver to Linux (IoTView runtime edition), implementing the MELSEC protocol, supported by most Mitsubishi PLCs
- Expanded support for Mitsubishi PLCs, not only on Full Runtime, EmbeddedView, and CEView, but on IoTView (Linux) as well.

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# InTouch Edge HMI 2017 Update 2 V8.1+SP2

October 2018

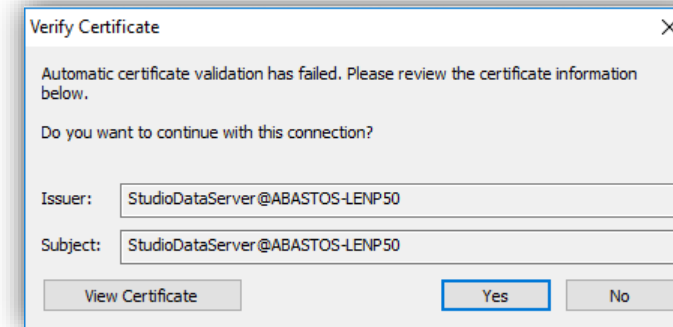
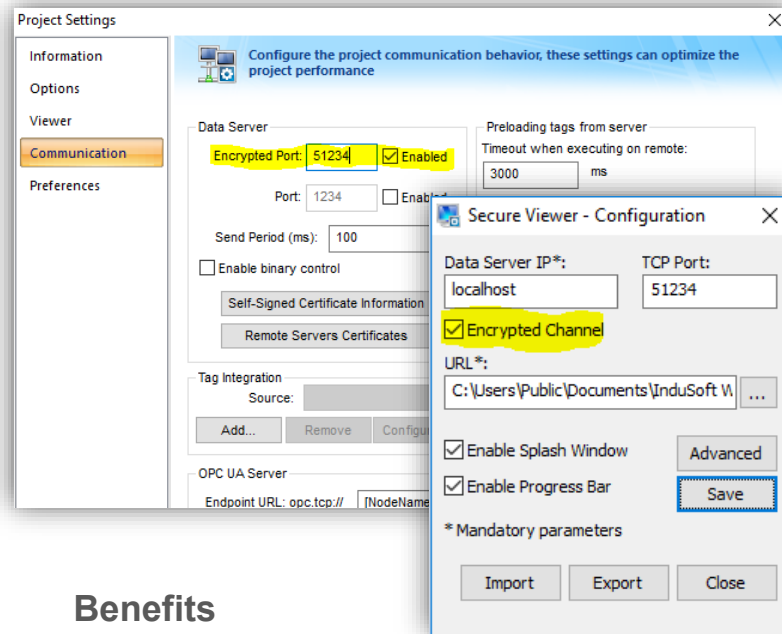
# Mobile Access – substantial performance enhancement



## Benefits

- The new “Hide screen” feature allows a faster switch among screens

# Enhanced Cybersecurity – Encrypted TLS 1.2 TCP Port



## Benefits

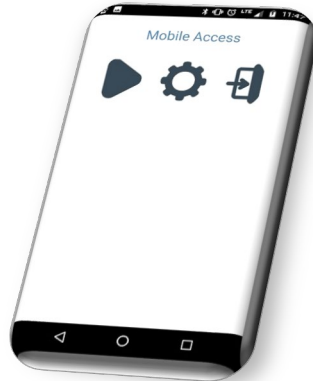
- All messages are encrypted using TLS 1.2
- Certificate management help the decision making process on which clients can connect to the Servers
- Easy to configure, yet powerful protection



# Native Mobile Apps for iOS (Apple Store) and Android (Google Play)



Mobile Access  
Thin Client APP



Google play

# Intouch Edge HMI UNLIMITED

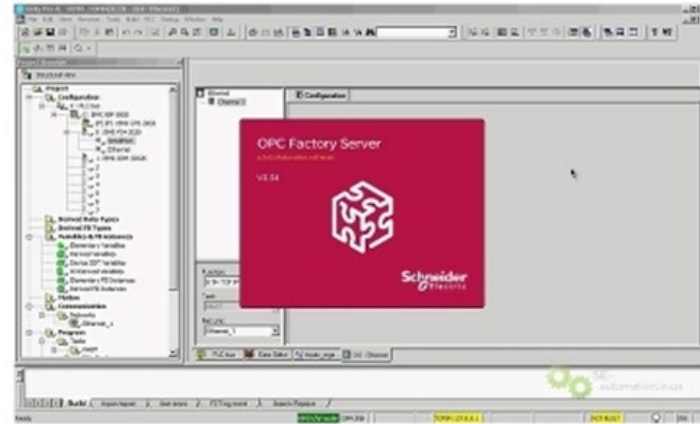


UNLIMITED Tags  
UNLIMITED Thin Clients  
DEV+RT  
All features included  
Simplex or Redundant



DESCRIPTION	PART NUMBER
ITME 2017 IDE + Full RT UNLIMITED	ITMEDR-11-N-17
ITME 2017 IDE + Full RT UNLIMITED, Redundant	ITMEDR-12-N-17

# Native Integration with Schneider-Electric OFS



## Benefits

- Ability to communicate with Tag-based Schneider-Electric PLCs through the OFS (OPC Factory Server)

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# InTouch Edge HMI 2017 Update 1 V8.1+SP1

March, 2018

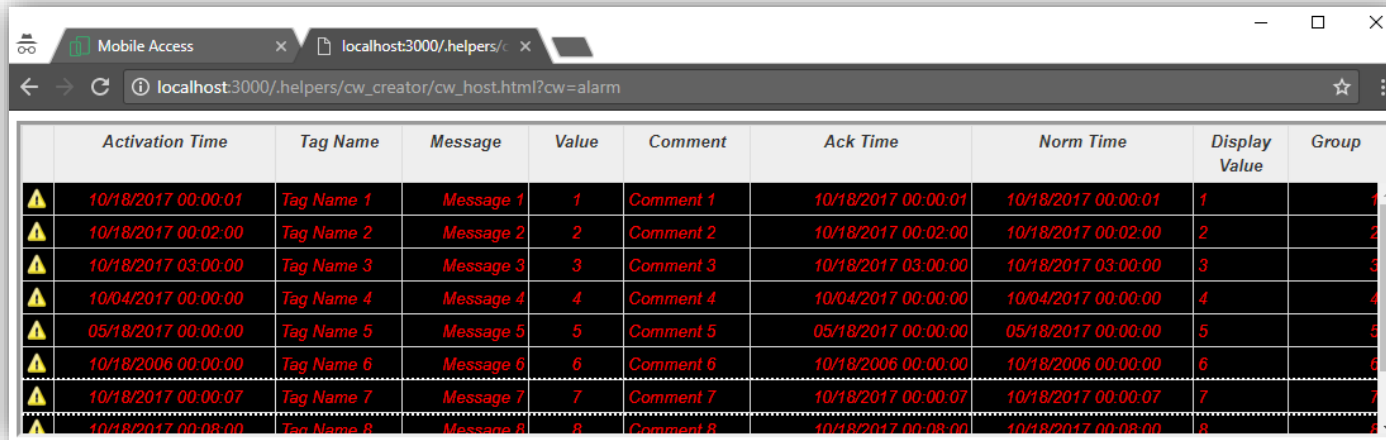
# IoTView interface to AVEVA Insight



## Benefits

- Capability of pushing data from devices such as RaspberryPi into the cloud-based AVEVA Insight Historian
- No gateways needed: directly from the Device to the Cloud

# Mobile Access: Alarm and Events improvements



The screenshot shows a mobile browser interface with a table of alarm and event data. The table has the following columns: Activation Time, Tag Name, Message, Value, Comment, Ack Time, Norm Time, Display Value, and Group. The data is presented in a list format with yellow warning icons in the first column of each row.

	Activation Time	Tag Name	Message	Value	Comment	Ack Time	Norm Time	Display Value	Group
⚠	10/18/2017 00:00:01	Tag Name 1	Message 1	1	Comment 1	10/18/2017 00:00:01	10/18/2017 00:00:01	1	1
⚠	10/18/2017 00:02:00	Tag Name 2	Message 2	2	Comment 2	10/18/2017 00:02:00	10/18/2017 00:02:00	2	2
⚠	10/18/2017 03:00:00	Tag Name 3	Message 3	3	Comment 3	10/18/2017 03:00:00	10/18/2017 03:00:00	3	3
⚠	10/04/2017 00:00:00	Tag Name 4	Message 4	4	Comment 4	10/04/2017 00:00:00	10/04/2017 00:00:00	4	4
⚠	05/18/2017 00:00:00	Tag Name 5	Message 5	5	Comment 5	05/18/2017 00:00:00	05/18/2017 00:00:00	5	5
⚠	10/18/2006 00:00:00	Tag Name 6	Message 6	6	Comment 6	10/18/2006 00:00:00	10/18/2006 00:00:00	6	6
⚠	10/18/2017 00:00:07	Tag Name 7	Message 7	7	Comment 7	10/18/2017 00:00:07	10/18/2017 00:00:07	7	7
⚠	10/18/2017 00:08:00	Tag Name 8	Message 8	8	Comment 8	10/18/2017 00:08:00	10/18/2017 00:08:00	8	8

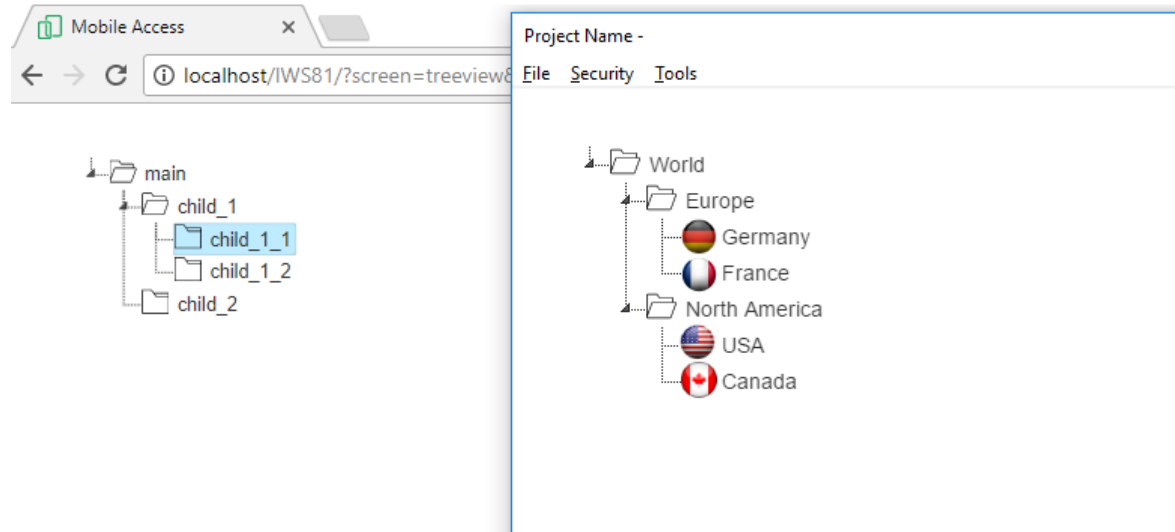
## Benefits

Support for Proprietary Database format allows the user to not need an external relational database when saving Alarm and Event history and displaying it on Mobile Access

Enhanced filtering capabilities, allows user to have a better visibility of the issues and events that are being presented

# New Library of Custom Widgets

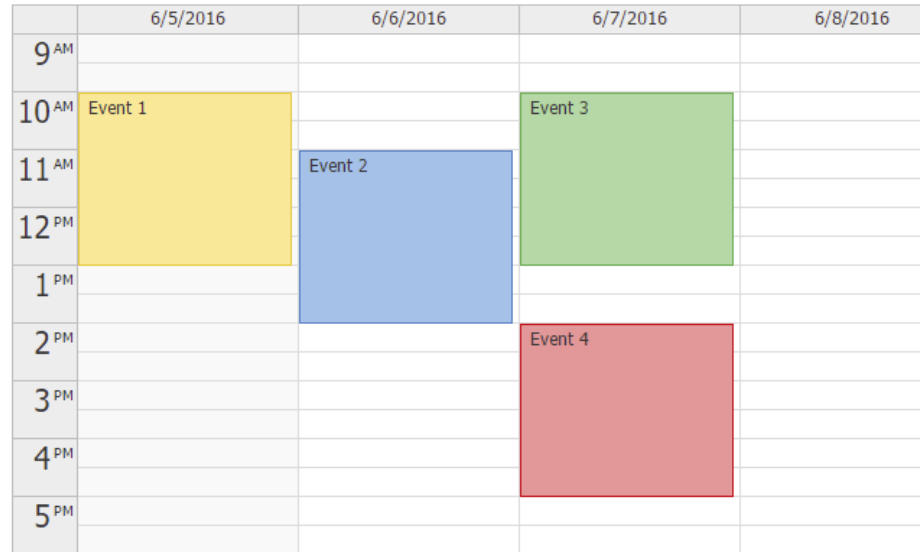
## TreeView



The TreeView custom widget allows the user to build and manipulate different nodes through a hierarchical graphical interface, with full support for both Viewer and Mobile Access

# New Library of Custom Widgets

## Full Calendar



	6/5/2016	6/6/2016	6/7/2016	6/8/2016
9 <sup>AM</sup>				
10 <sup>AM</sup>	Event 1		Event 3	
11 <sup>AM</sup>		Event 2		
12 <sup>PM</sup>				
1 <sup>PM</sup>				
2 <sup>PM</sup>			Event 4	
3 <sup>PM</sup>				
4 <sup>PM</sup>				
5 <sup>PM</sup>				

The Calendar custom widget allows the user to build and manipulate events on a calendar with the precision of minutes



# New Library of Custom Widgets

## Web Browser

- The WebBrowser is a simple Custom Widget that allows the user to host external content inside of their applications.
- It can be used to load
  - webpages,
  - pdf files,
  - MP4 videos
  - and any other content supported by the web browsers.

The image shows two side-by-side screenshots. The left screenshot is a machine performance dashboard with various metrics and charts. The right screenshot is a Wikipedia article page for 'Automation'.

**Machine Performance Dashboard Data:**

Machine Selection	Period Selection	Current Shift (2)	Current Day (Monday)	Current Week (14)	Current Month (April)	Current Year (2018)
Availability	Performance	Quality	OEE	Six Big Losses		
86.59 %	56.77 %	90.47 %	44.47 %	Operation Time		
			Target 60.00 %	Non-Loss Time		
				BreakDowns		
				Long Stops		
				Speed Loss		
				Short Stops		
				Startup Rejects		
				Production Stops		
<b>Time</b>						
Idle Time	16:00:00	66.67 %	Idle Time			
Operation Time	08:00:00	33.33 %	Operation Time			
Total Time	24:00:00	100.00 %				
<b>Speed</b>						
Missed Speed	53 units/min	44.11 %	Missed Speed			
Actual Speed	67 units/min	55.89 %	Actual Speed			
Maximum Speed	120 units/min	100.00 %				
<b>Production</b>						
Bad Units	1508 units	5.56 %	Bad Units			
Good Units	25616 units	94.44 %	Good Units			
Total Units	27124 units	100.00 %				

**Wikipedia Article: Automation**

From Wikipedia, the free encyclopedia

It has been suggested that *automatic control* be merged into this article. (Discuss) Proposed since March 2018.

For a hierarchical presentation of automation topics, see *Outline of automation*. For other uses, see *Automation (disambiguation)*. Not to be confused with *automaton*.

**Automation** can be defined as the technology by which a process or procedure is performed without human assistance.<sup>[1]</sup>

In other words, **Automation**<sup>[2]</sup> or **automatic control**, is the use of various **control systems** for operating equipment such as machinery, processes in factories, boilers and heat treating ovens, switchi... tworks, steering an... if ships, use of...

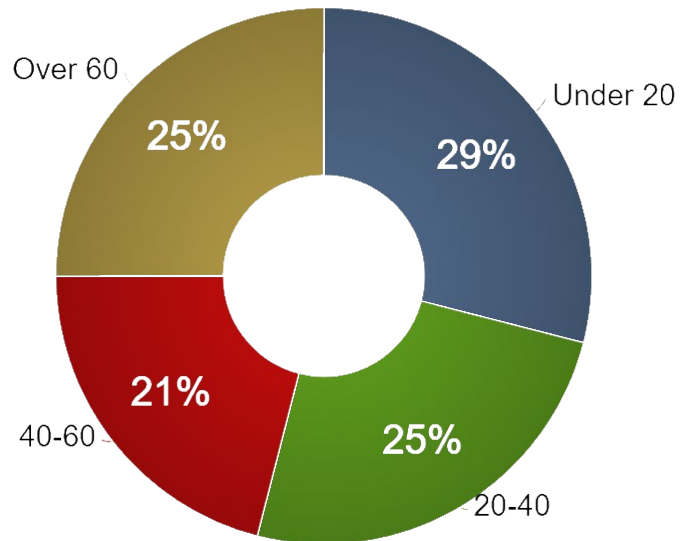
Part of a series on **Automation**

Robotics · Cybernetics

Trade shows  
ASP-DAC · DAC · DATE · ICCAD

# New Library of Custom Widgets

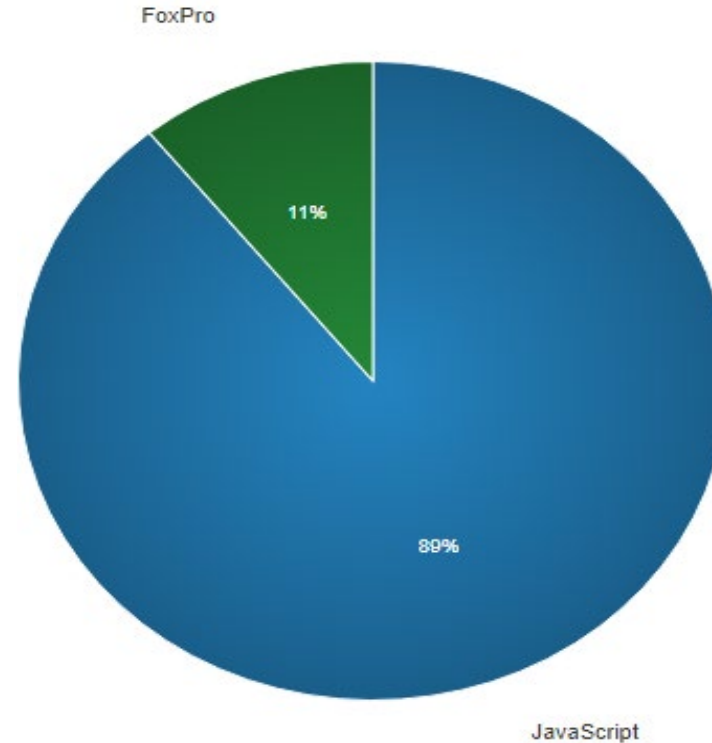
## Pie Chart



Allows users to show their data in a Pie Chart or Donut charts.

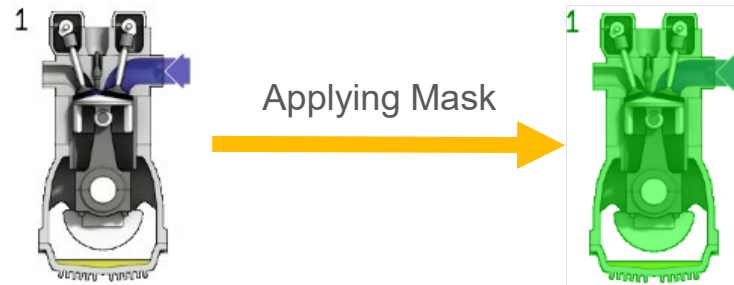
## Lots of Programming Languages

A full pie chart to show off label collision detection and resolution.



# New Library of Custom Widgets

## Image List



Allows users to display a images from different formats, including animated GIFs, animated PNGs, SVG, among many others.

Allows the user to set a list of images and control the frequency used to switch them, creating advanced animations and effects.

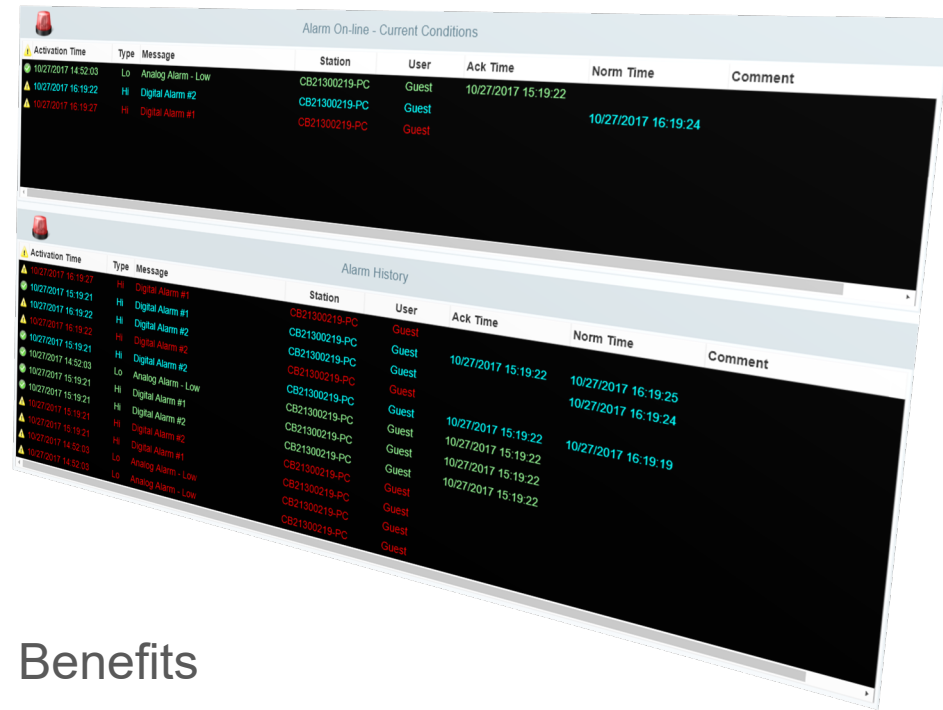
Allows creating color masks that will be applied dynamically on top of the original image.

---

# InTouch Edge HMI 2017 V8.1

October, 2017

# Alarm/Event Control on SMA Thin Clients (HTML5)



The screenshot displays two tables from the SMA Thin Client interface. The top table, titled "Alarm On-line - Current Conditions", shows active alarms. The bottom table, titled "Alarm History", shows a log of past alarm events.

Activation Time	Type	Message	Station	User	Ack Time	Norm Time	Comment
10/27/2017 14:52:03	Lo	Analog Alarm - Low	CB21300219-PC	Guest	10/27/2017 15:19:22		
10/27/2017 16:19:22	Hi	Digital Alarm #2	CB21300219-PC	Guest			
10/27/2017 16:19:21	Hi	Digital Alarm #1	CB21300219-PC	Guest		10/27/2017 16:19:24	

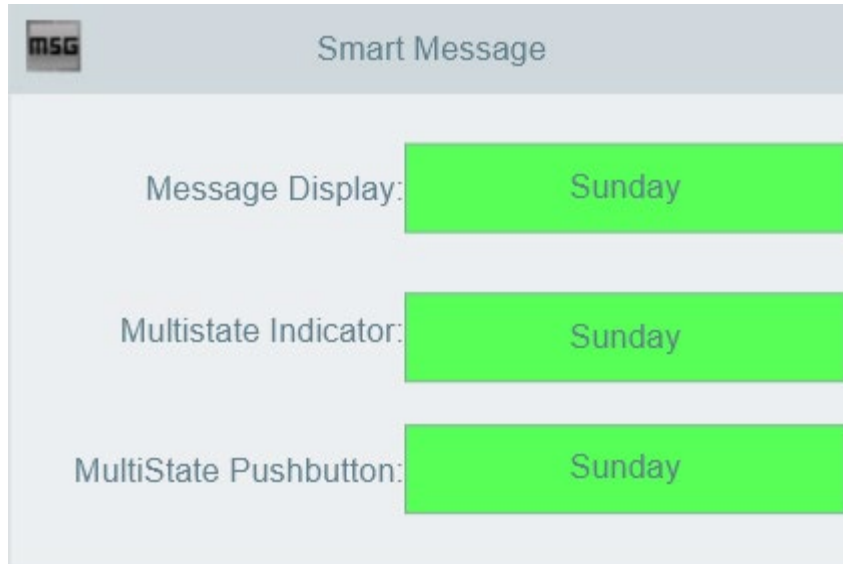
Activation Time	Type	Message	Station	User	Ack Time	Norm Time	Comment
10/27/2017 16:19:21	Hi	Digital Alarm #1	CB21300219-PC	Guest			
10/27/2017 16:19:21	Hi	Digital Alarm #2	CB21300219-PC	Guest			
10/27/2017 16:19:22	Hi	Digital Alarm #2	CB21300219-PC	Guest			
10/27/2017 16:19:25	Hi	Digital Alarm #2	CB21300219-PC	Guest			
10/27/2017 14:52:03	Lo	Analog Alarm - Low	CB21300219-PC	Guest	10/27/2017 15:19:22	10/27/2017 16:19:25	
10/27/2017 15:19:21	Hi	Digital Alarm #1	CB21300219-PC	Guest		10/27/2017 16:19:24	
10/27/2017 15:19:21	Hi	Digital Alarm #2	CB21300219-PC	Guest			
10/27/2017 15:19:21	Hi	Digital Alarm #2	CB21300219-PC	Guest	10/27/2017 15:19:22	10/27/2017 16:19:19	
10/27/2017 15:19:21	Hi	Digital Alarm #1	CB21300219-PC	Guest	10/27/2017 15:19:22		
10/27/2017 14:52:03	Lo	Analog Alarm - Low	CB21300219-PC	Guest	10/27/2017 15:19:22		
10/27/2017 14:52:03	Lo	Analog Alarm - Low	CB21300219-PC	Guest	10/27/2017 15:19:22		



## Benefits

- Ability to visualize and interact (e.g.: acknowledge, filter, etc) with online and history alarms from devices based on different platforms and web browsers (HTML5), using a modern and intuitive user interface.

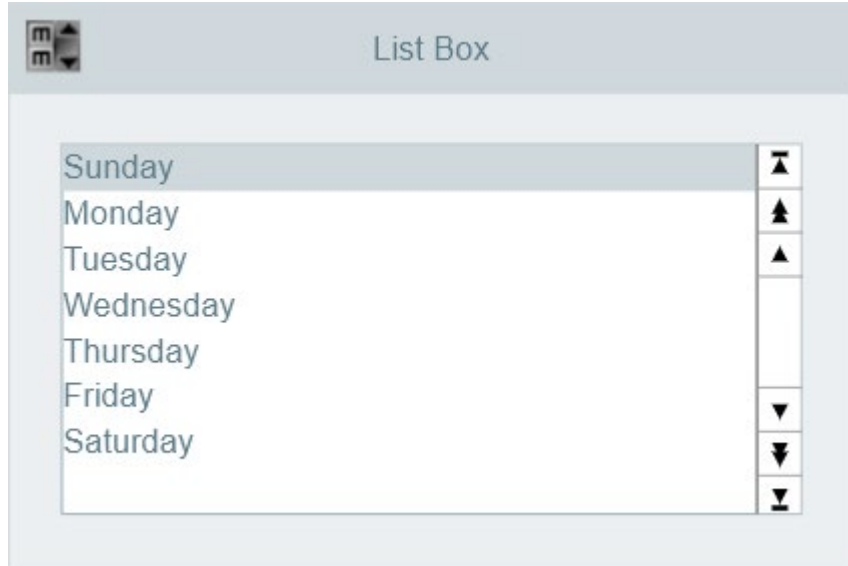
# Smart Message on SMA Thin Clients (HTML5)



## Benefits

- Ability to visualize and interact with the Smart Message native object from Studio Mobile Access (SMA) Thin Client stations (HTML5).

# List Box on SMA Thin Clients (HTML5)



## Benefits

- Ability to visualize and interact with the List Box native object from Studio Mobile Access (SMA) Thin Client stations (HTML5).

# Push Button on SMA Thin Clients (HTML5)

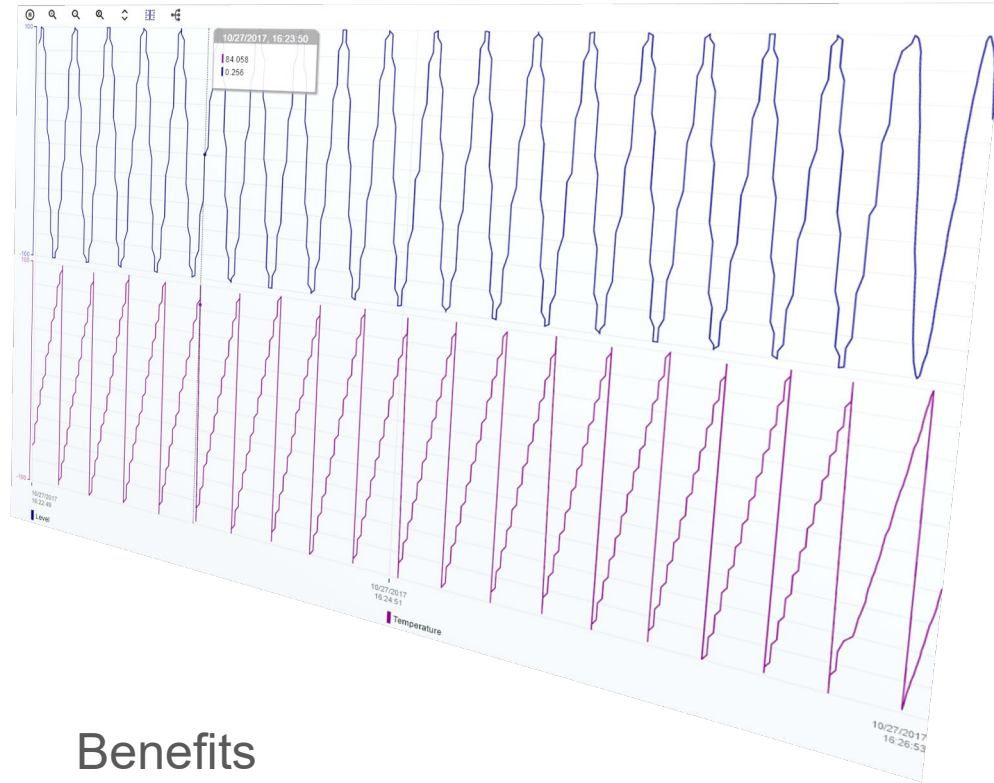


## Benefits

- Ability to visualize and interact with the Push Button native object from Studio Mobile Access (SMA) Thin Client stations (HTML5).



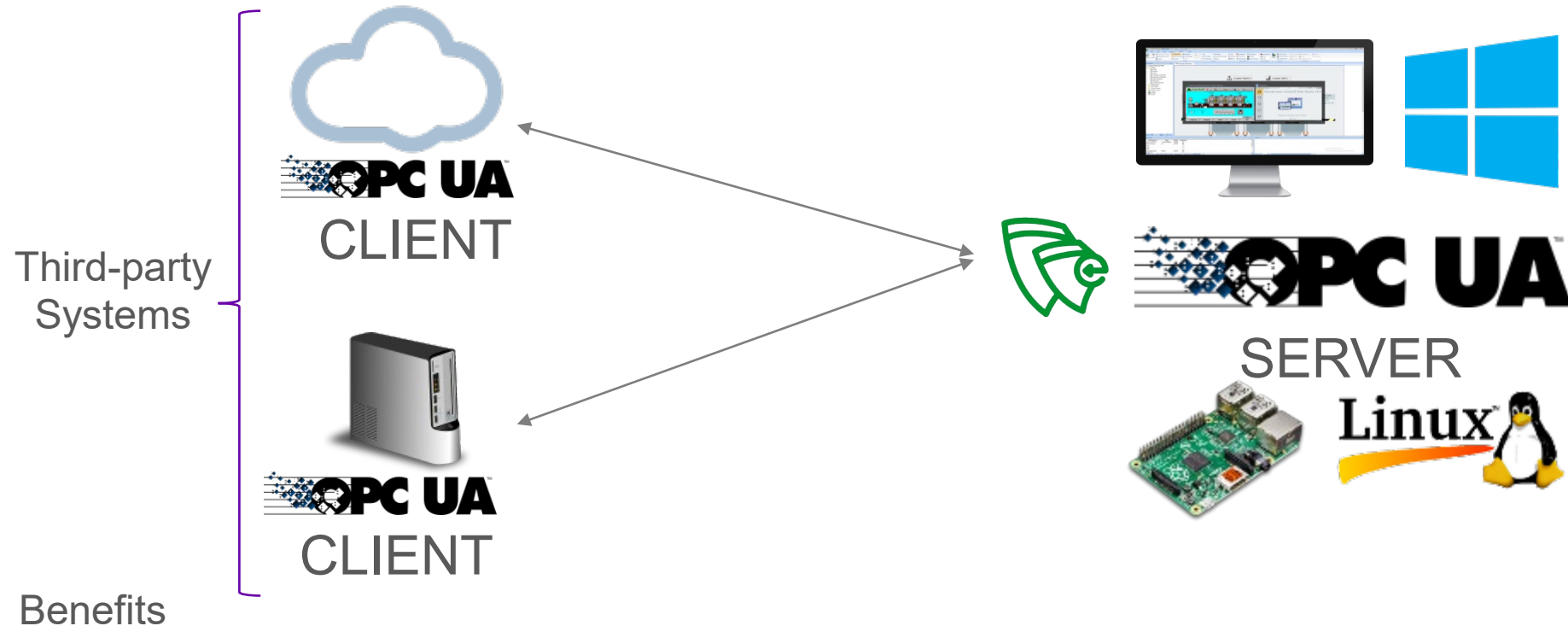
# Multiple Sections for Trend on SMA Thin Clients (HTML5)



## Benefits

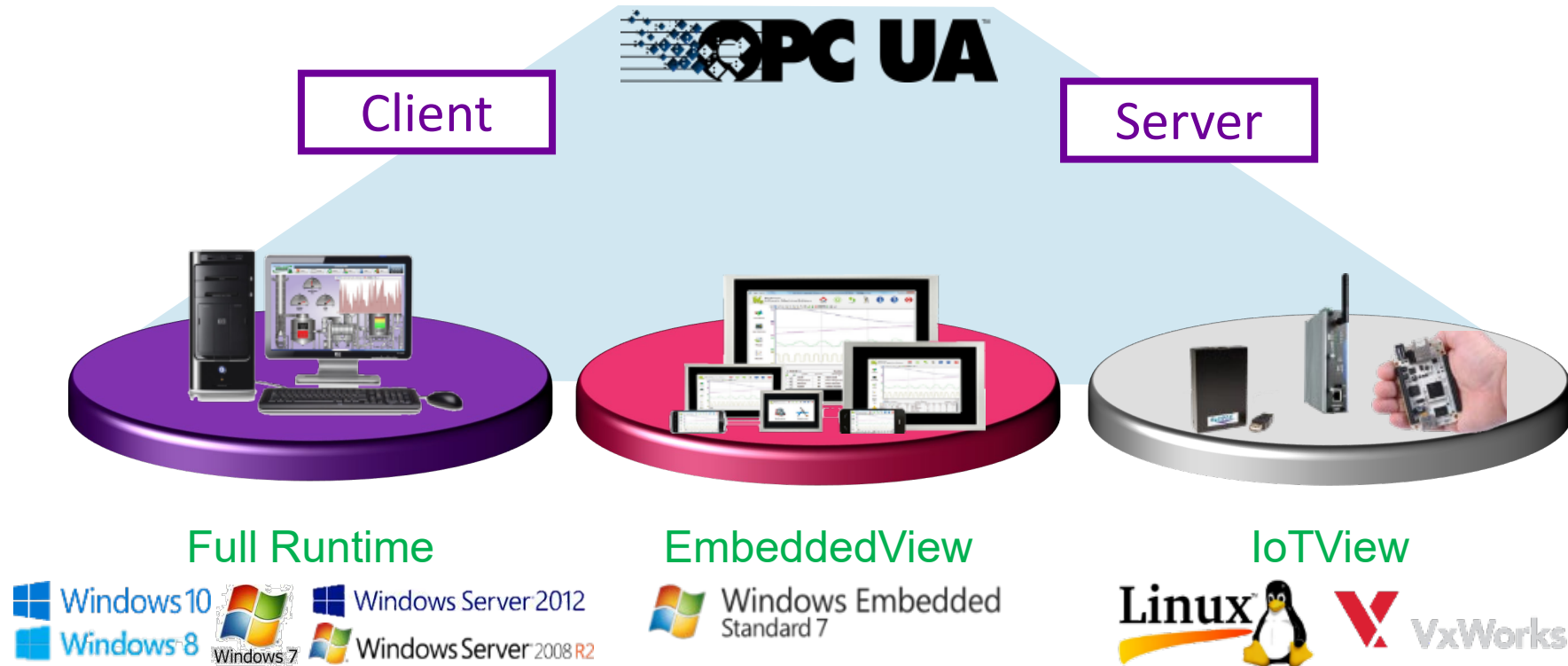
- Ability to enable or disable dynamically multiple sections to stack the pens automatically in independent Y axis.

# Native OPC UA Server for Windows and Linux



- Native OPC UA Server allows Full Runtime, EmbeddedView, and IoTView to exchange data directly with external systems, such as ERPs, third-party HMI/SCADA systems, or Cloud-based systems, which provide a native OPC UA Client.

# Native communication across platforms through OPC UA



# Simplified Licensing Model

Higher Productivity



Higher Competitiveness

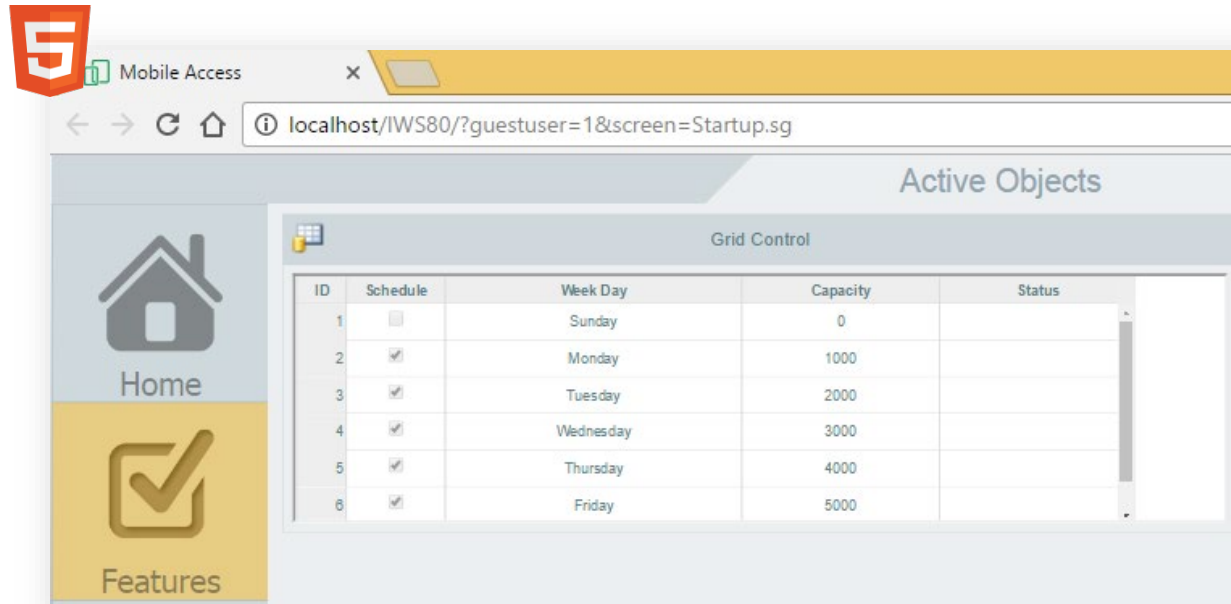
- ✓ All licenses support unlimited number of concurrent communication drivers (limited by physical constraints)
- ✓ Native communication drivers for the electrical protocols (DNP/IEC) available for all licenses (Full Runtime, Embedded) – no longer an add-on.
- ✓ All Import Wizards (PanelBuilder™, PanelMate™, and FactoryTalk™) are enabled in the same add-on.
- ✓ License no longer restricts the type of Thin Clients, nor pre-defined packages of Thin Clients. The user can define the exact number of maximum Thin Clients that should be concurrently supported by the license.

---

# InTouch Edge HMI 2014R2 V8.0+SP2

April, 2017

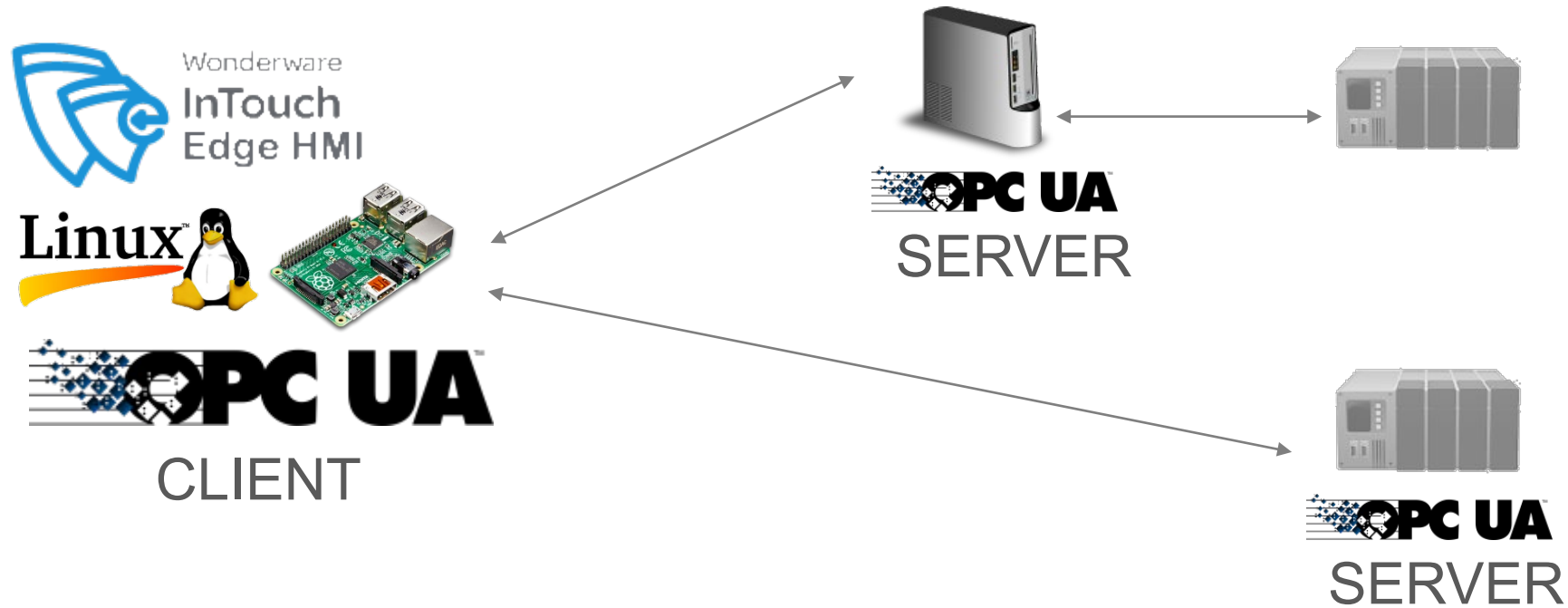
# Grid Control on SMA Thin Clients on HTML5



## Benefits

- Display information from any SQL Relational database using Studio Mobile Access (SMA) Thin Clients, hosted on web browsers that support HTML5
- Easily create dynamic web-based report using the native Grid control
- Publish screens from applications designed in previous version of the product and visualize the Grid control on SMA Thin Clients.

# OPC UA Client for IoTView



## Benefits

- Embedded OPC UA Client allows IoTView to exchange data with external systems or devices through a third-party OPC UA Server.
- Improve interoperability natively provided by IoTView, enabling embedded devices running Linux to be used as an Edge device (“IoT Gateway”).

# EmbeddedView Platform Support



EmbeddedView



Windows Embedded  
Standard 7



Windows IoT



Windows  
Embedded 8  
Standard

## Benefits

- In addition to Windows Embedded Standard 7, EmbeddedView licensing model was improved to support Windows Embedded Standard 8 (including Windows 8.1 Embedded Industry Pro), and Windows 10 IoT Enterprise as well.
- Enhances portability of EmbeddedView runtime across multiple platforms.



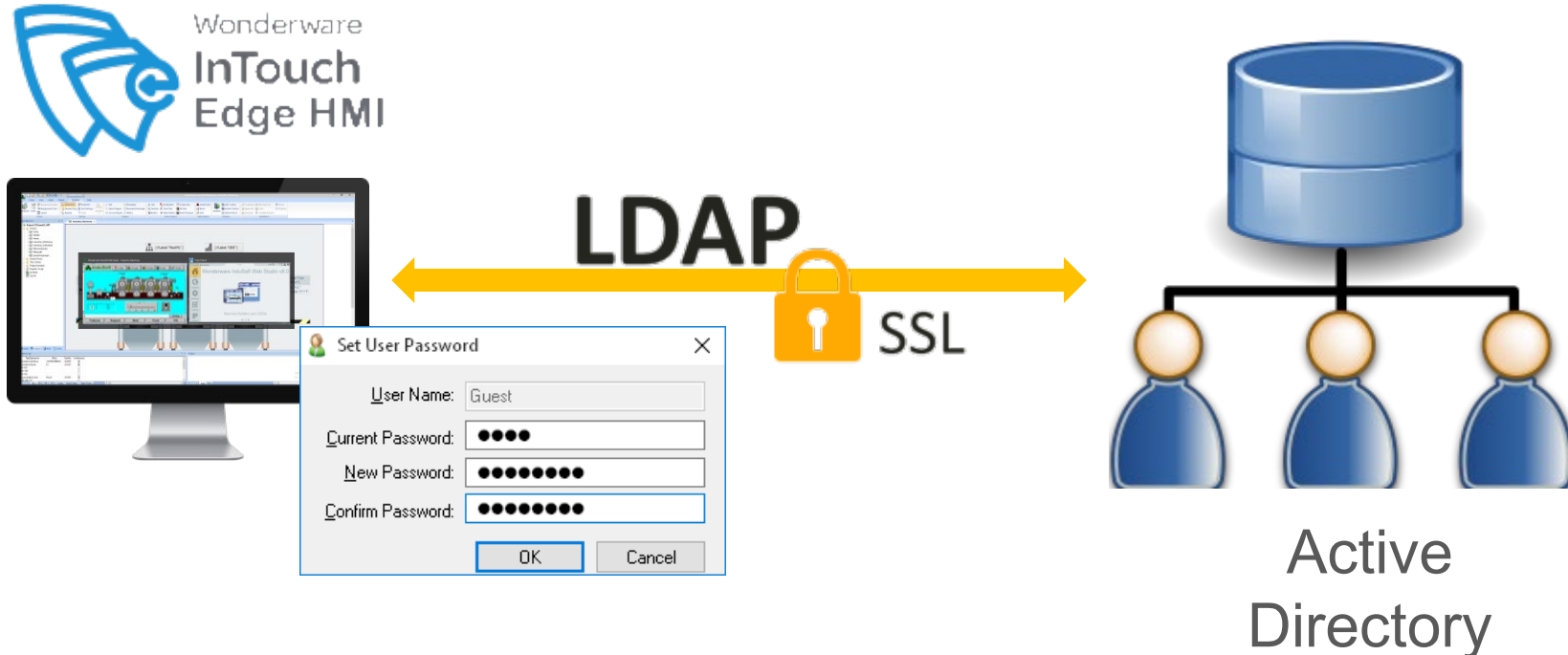
# MQTT driver Encryption and Authentication



## Benefits

- Layer to support encryption (SSL) and Authentication (User Name and Password) for native communication drivers that implement protocols where these interfaces are applicable, such as MQTT.
- Provides an easy configuration interface to improve the security of communication interfaces implemented by the product.

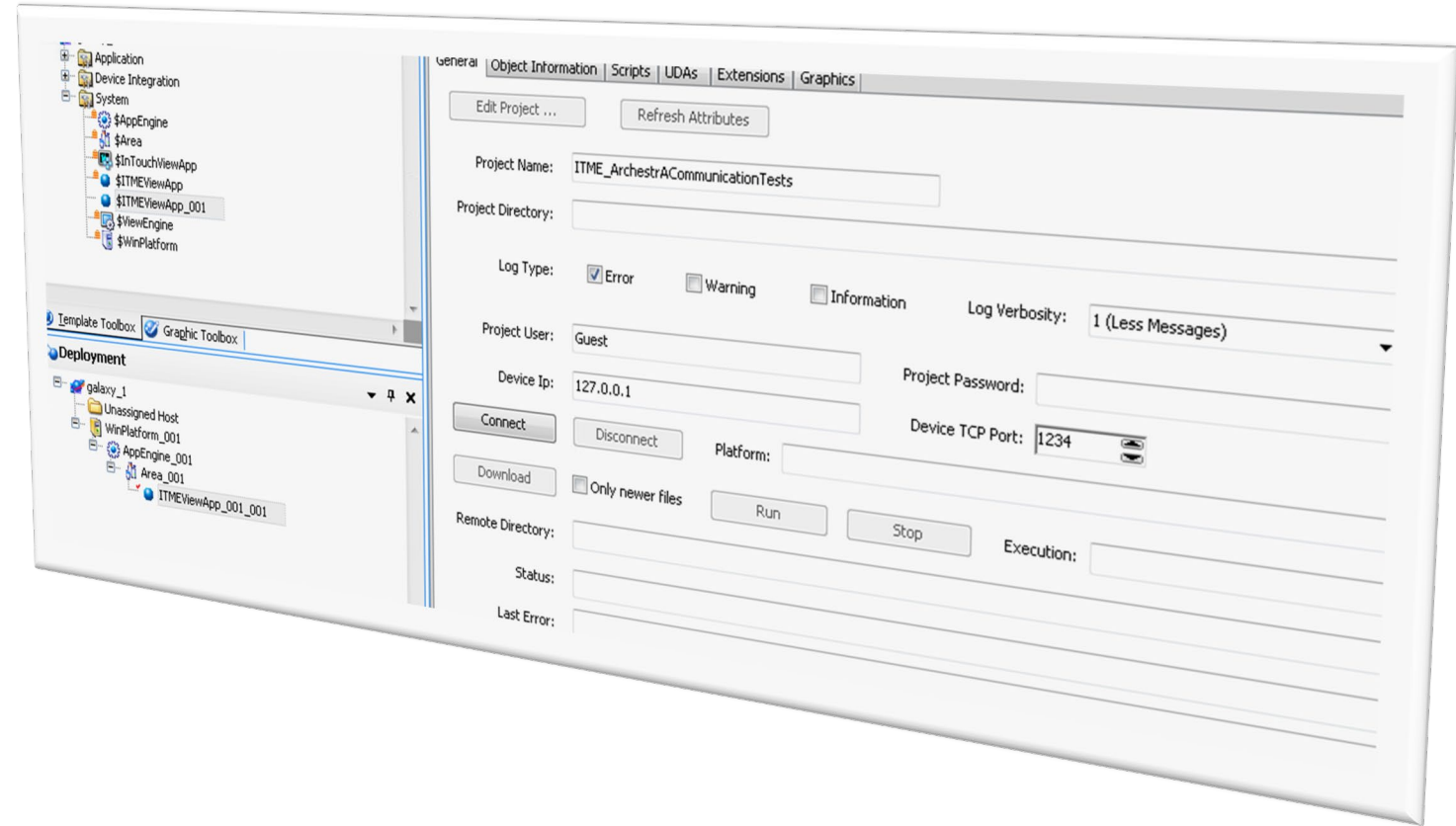
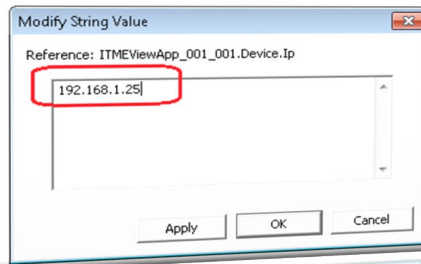
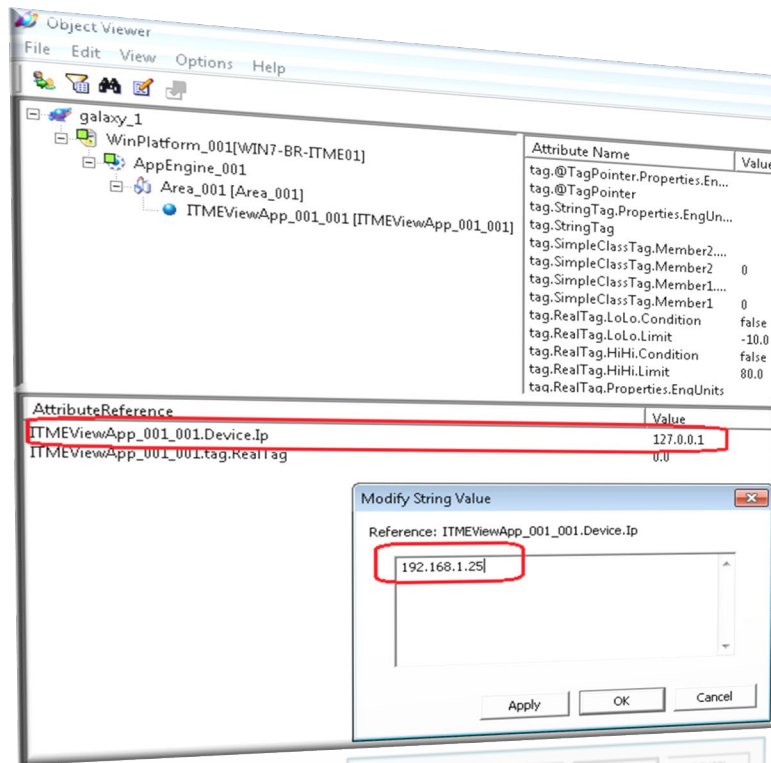
# Password change through LDAP



## Benefits

- Support to set/change the Active Directory's users passwords from the application, during the runtime, using the built-in function `$SetPassword()`.
- Support the Password Aging policy configured on Active Directory, prompting the user to change the password during the runtime.
- Improved integration with Active Directory through the native LDAP interface.

# Dynamic Device IP on ITMEViewApp object for WSP



## Benefits

- Exposes the Device IP property of the ITMEViewApp object for Wonderware System Platform (WSP), allowing the user to get or set its value dynamically through ArchestrA scripts.
- Enables the configuration of redundancy, by changing the Device IP dynamically.

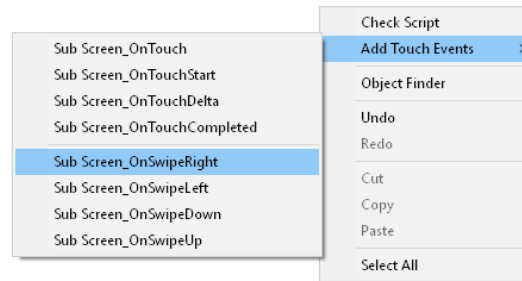
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# InTouch Edge HMI 2014R2 V8.0+SP1+Patch1

January, 2017

# Screen Gestures Swiping

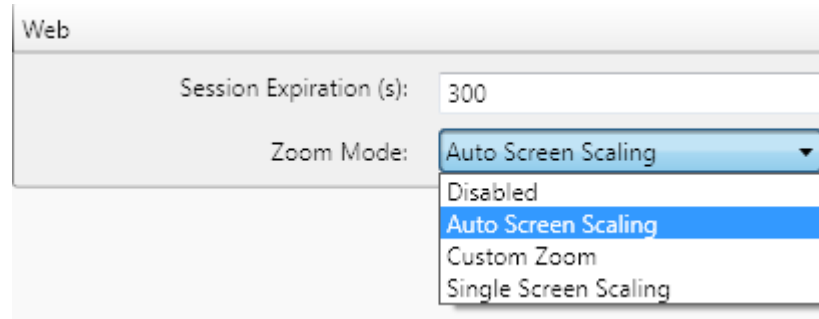
```
1 Variables available on this screen can be declared and initialized here.
2
3
4 Procedures available on this screen can be implemented here
5
6
7 This procedure is executed just once when this screen is open.
8 Sub Screen_OnOpen()
9
10 End Sub
11
12 This procedure is executed continuously while this screen is open.
13 Sub Screen_WhileOpen()
14
15 End Sub
16 |
17 This procedure is executed just once when this screen is closed.
18 Sub Screen_OnClose()
19
20 End Sub
21
22 This procedure is executed when swipe right on screen.
23 Sub Screen_OnSwipeRight()
24   $Open("Screen2")
25 End Sub
26
27 This procedure is executed when swipe left on screen.
28 Sub Screen_OnSwipeLeft()
29   $OpenPrevious()
30 End Sub
```



## Benefits

- Easily identify swiping gestures on the screen and trigger actions accordingly. For example, navigate through screens swiping on the touch screen interface.

# SMA Thin Client (HTML5) Zoom Modes



## Benefits

- Allow the user to select the zoom mode that best fits the project on different platforms and devices. Single Screen Scaling option provides backward compatibility to behavior available in previous version 7.1.

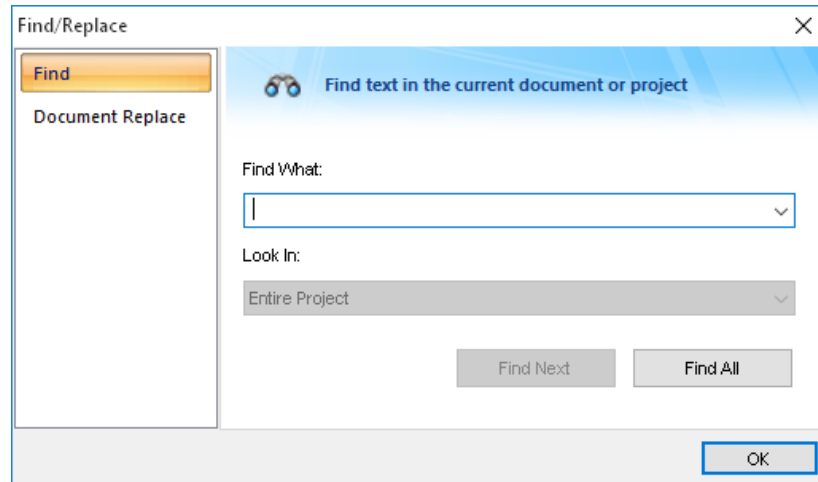
---

# InTouch Edge HMI 2014R2 V8.0+SP1

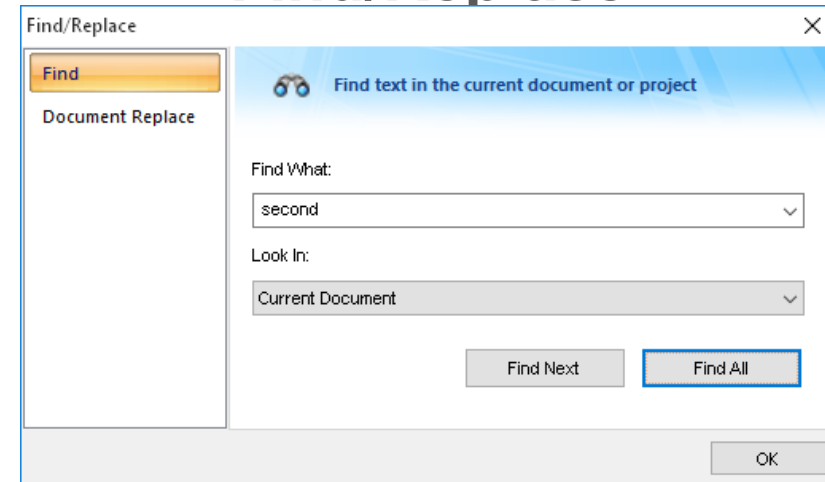
October, 2016

# Text-based Find/Replace for IDE Productivity

## Global Text-Based



## Document Text-Based Find/Replace

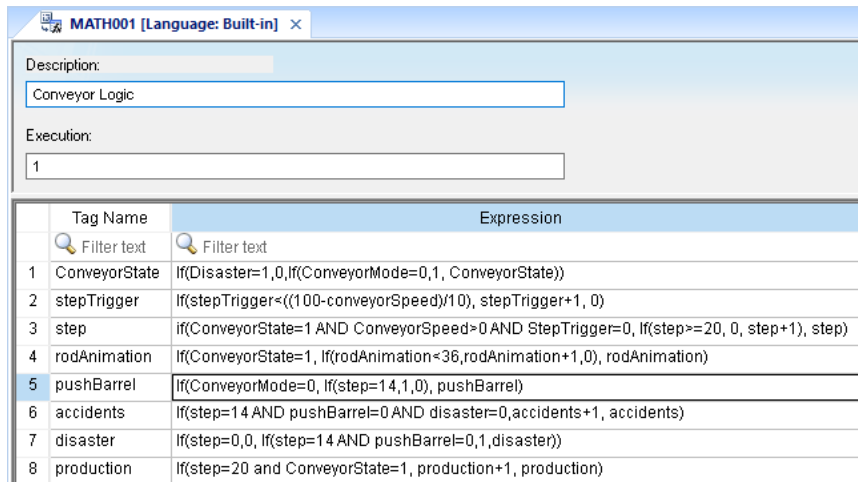


## Benefits

- High performance when developing, maintaining, and troubleshooting applications. Results displayed immediately, even in large projects.
- Ability to look for any references throughout the project and replace terms efficiently and reliably.



# Support MATH Task on IoTView for Portability



Tag Name	Expression
1 ConveyorState	If(Disaster=1,0,If(ConveyorMode=0,1, ConveyorState))
2 stepTrigger	If(stepTrigger<((100-conveyorSpeed)/10), stepTrigger+1, 0)
3 step	if(ConveyorState=1 AND ConveyorSpeed>0 AND StepTrigger=0, If(step>=20, 0, step+1), step)
4 rodAnimation	If(ConveyorState=1, If(rodAnimation<36,rodAnimation+1,0), rodAnimation)
5 pushBarrel	If(ConveyorMode=0, If(step=14,1,0), pushBarrel)
6 accidents	If(step=14 AND pushBarrel=0 AND disaster=0,accidents+1, accidents)
7 disaster	If(step=0,0, If(step=14 AND pushBarrel=0,1,disaster))
8 production	If(step=20 and ConveyorState=1, production+1, production)



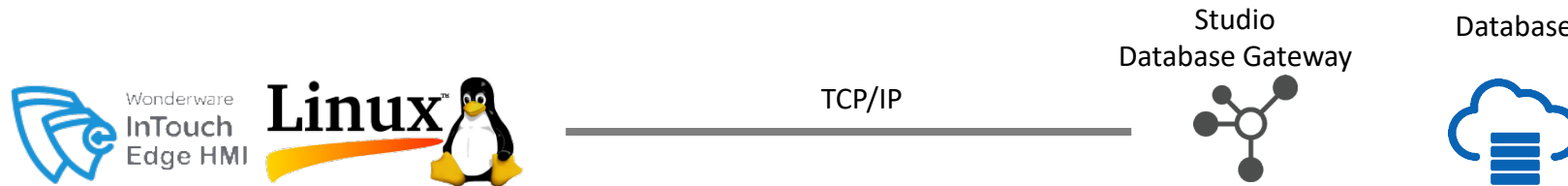
- Log Messages
- Arithmetic
- Statistical
- Logarithmic
- Logic
- String
- Date and Time
- Trigonometric
- Opening and Closing windows

- Security System
- Module activation
- File
- Graphics and printing
- Multimedia
- System Information
- Loops
- DB/ERP

## Benefits

- Ability to execute custom logic to manipulate data in background, with execution control.
- Support for hundreds of built-in functions to transform data into meaningful information before presenting it.

# Support DB/ERO Built-in functions on IoTView for Portability

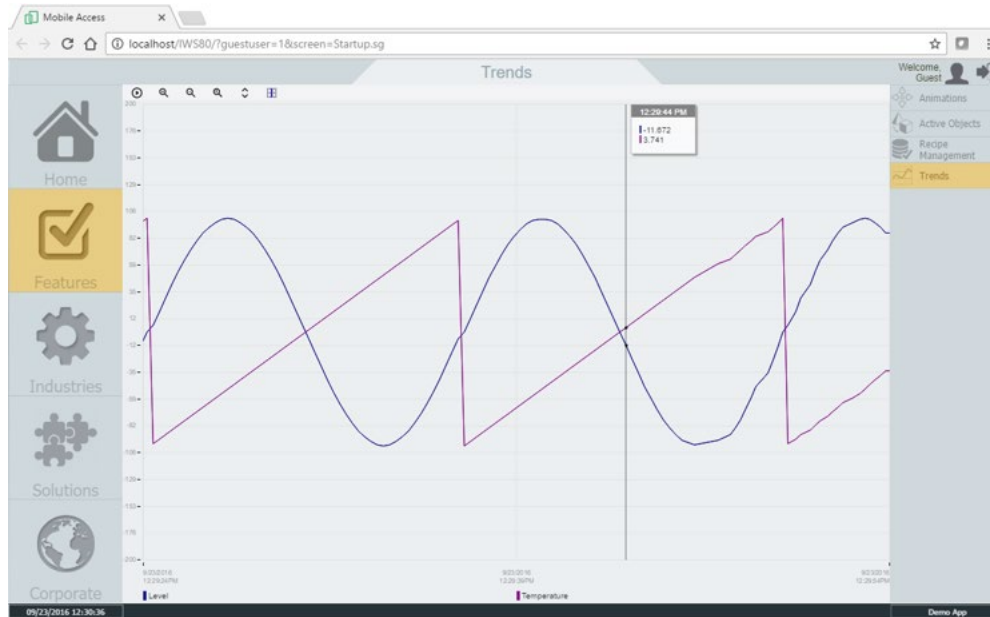


<code>DBExecute( strDBConn, strSQL, optStrTags, optNumMaxRows, "optStrTagError" )</code>	Executes a SQL command
<code>DBCursorOpenSQL( strDBConn, strSQL, optStrTags, "optStrTagError" )</code>	Opens a cursor to a SQL query
<code>DBCursorRowCount( numCur, "optStrTagError" )</code>	Returns the number of rows from a database cursor
<code>DBCursorGetValue( numCur, strColumn, "optStrTagError" )</code>	Gets a value from the current row in a database cursor
<code>DBCursorNext( numCur, "optStrTagError" )</code>	Moves the current row of a cursor to the next position
<code>DBCursorClose( numCur, "optStrTagError" )</code>	Closes a database cursor

## Benefits

- Ability to execute SQL transactions with remote SQL Relational Databases, such as Microsoft SQL Azure, Microsoft SQL Server, Microsoft Access MDB, Microsoft Excel XLS/XLSX, Oracle, MySQL, etc.
- Modify external databases (Insert, Update, Delete, Create, Drop, etc) and get information from external databases (Select).

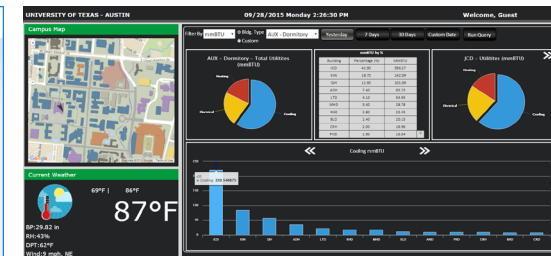
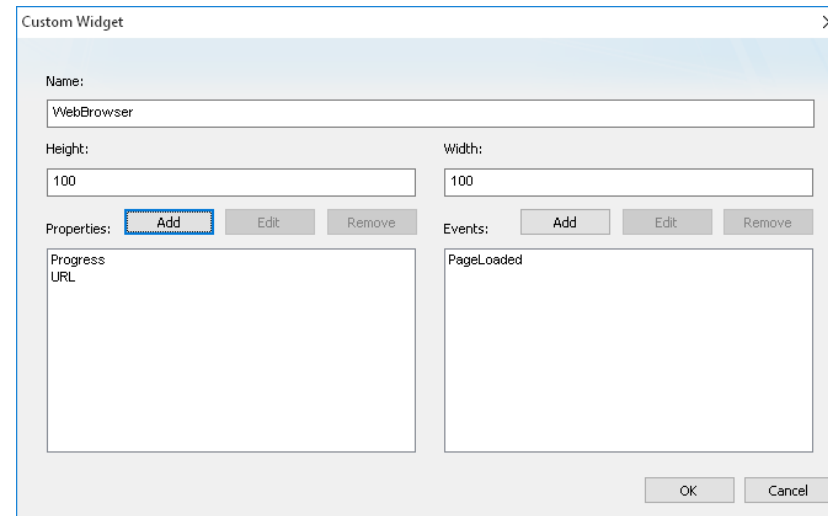
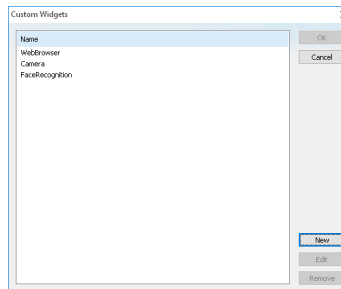
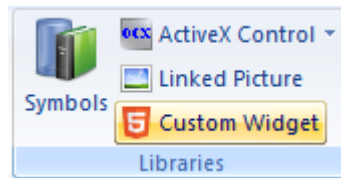
# Support Trend Control on Studio Mobile Access Thin Clients (HTML5)



## Benefits

- Ability to visualize online and history data from tag values on multiple devices based on different platforms and web browsers (HTML5), using a modern and intuitive user interface.

# Support for Custom Widgets for graphical extensibility and mobility



## Benefits

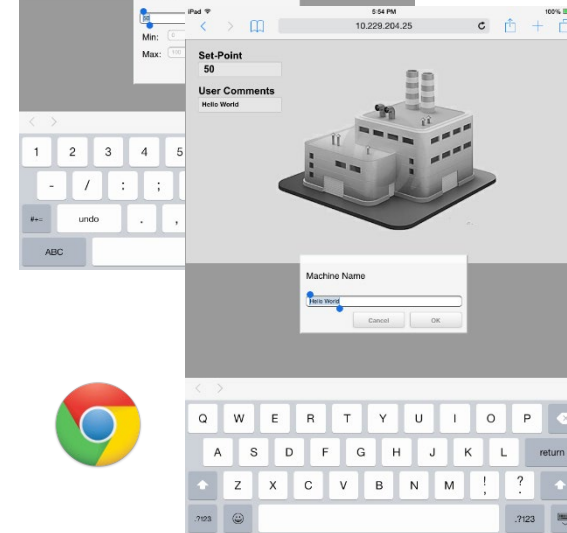
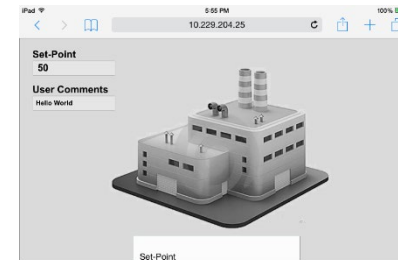
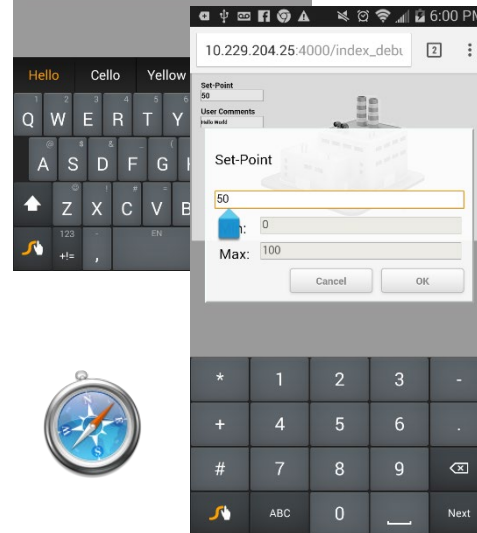
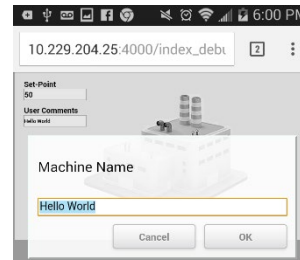
- Ability to integrate third-party web-based controls into the HMI/SCADA project screens.
- Engineers with HTML/JScript can easily create Custom Widgets and define Properties/Events through the IDE. Users can use the Custom Widgets on the local Viewer and Thin Clients.

# Data Input with native virtual keypad/keyboards on Studio Mobile Access Thin Clients (HTML5)

Support the mobile device's language

Consistent with the native virtual keyboard provided by the mobile device's operating system

Support for both numeric and alphanumeric input



# Import Wizard for FactoryTalk™ ME/SE Migration Tool (Add-On)

Import Wonderware InduSoft Web Studio Import Tool for FactoryTalk Wizard

Options

Do not import duplicate items  Replace duplicates with imported items

Tag (.csv):  Browse...

Use prefix:

Screen(s) (.xml):  Browse...

Alarm (.csv | .xml):  Browse...

FactoryTalk Application Folder:  Browse...

Drivers

Import Drivers: Configuration...

< Back Next > Cancel



## Benefits

- **Minimize cost of migration from FactoryTalk™ to InTouch Edge HMI by automatically converting FactoryTalk™ ME/SE applications to InTouch Edge HMI (graphical interface, communication interface, tags, etc).**

Note: Manual adjustments can be done after executing the automatic conversion.

# New and Updated Communication Drivers and Tag Integration

MQTT → IoT / Industry 4.0

KAWR → Robotics

SNMP → IT

SITIA → PLC + Tag Integration

20+ Updated drivers



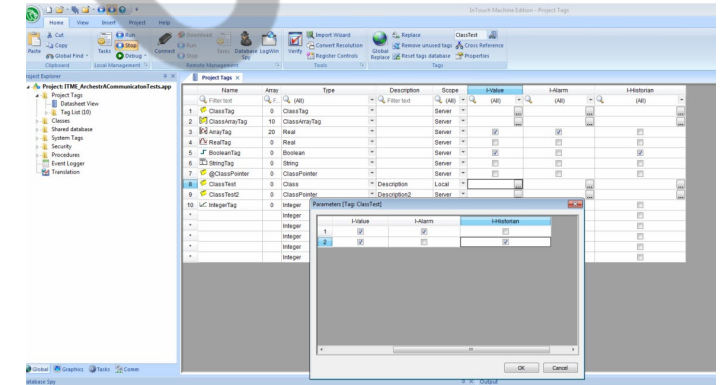
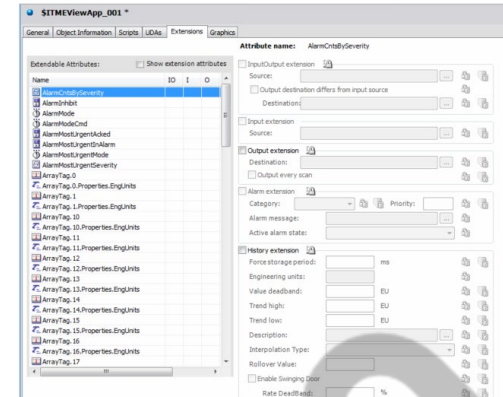
## Benefits

- Enable integration of multiple devices and systems from the plant-floor to the ERP/Cloud in a seamless manner.
- Increase productivity and quality through native tag integration for tag-based devices.

# ITMEViewApp object for WSP

Best in class solution integrating local HMIs with central SCADA system, increasing productivity and quality

- ✓ Seamless IDE integration
- ✓ ArchestrA Galaxy Repository
- ✓ Automatic point mapping
- ✓ Event-driven value communication
- ✓ Synchronized Alarm Status
- ✓ Native support for Wonderware Historian
- ✓ Remote Management and Deployment



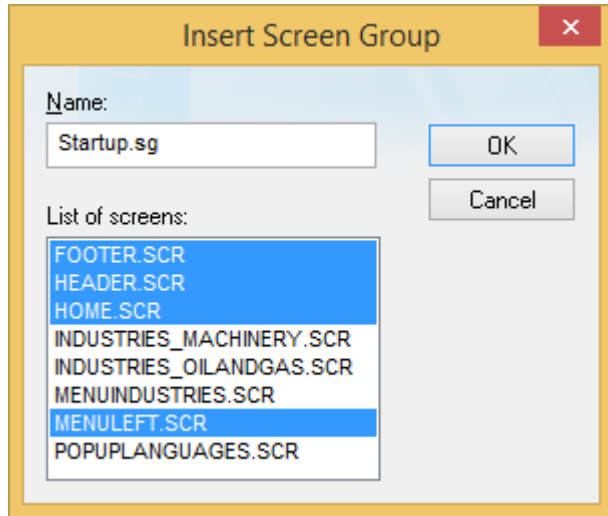


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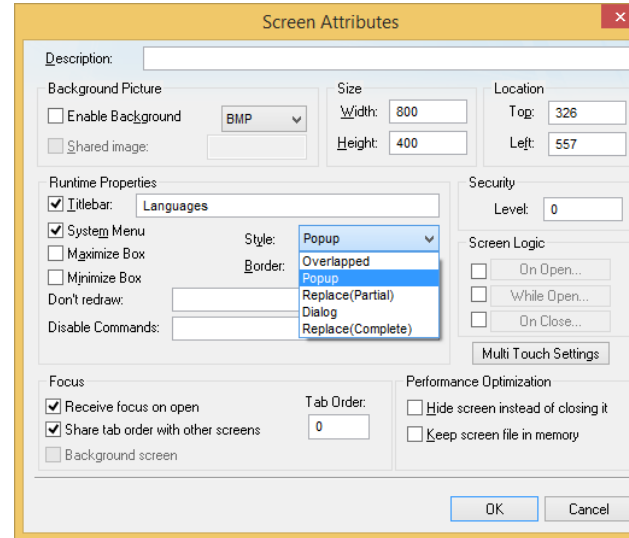
# InTouch Edge HMI 2014 V8.0

October, 2015

# Multiple Screens Support on SMA Thin Clients



Support for Screen Groups  
(e.g.: Header, Footer, Menu, etc.)



Support for Popup and Dialog Screen  
Styles



## Studio Mobile Access (SMA) Thin Clients

Platforms: Agnostic



Host: Web Browser agnostic

Technology: HTML5



---

# Support for Web Servers using CGI interfaces



**The Power of choice!**

Use the Web Server (HTTP Server) you want.

# IoTView™ Runtime Edition – Platform Agnostic

## Global

- Project Tags
- Classes
- System Tags
- Security System (local mode)

## Graphics (SMA Thin Client)

- Screens
- Screen Groups
- Project/Library Symbols

## Tasks

- Alarm Online
- Trend (remote database)

## Drivers

- MOTCP
- ABTCP
- SOFTP



IoTView™



AVEVA™

# Native OPC UA Redundancy

Redundancy group

Redundancy Settings

Group Name:

Active Connection:

Watchdog timeout (sec):

Auto return (min):

Connections

Available:

Selected:

Move Up

Move Down

Selected connection

Status tags

Code:

Message:

Disable:

OK Cancel

OPC Server Hot/Stand-by swap

Cascading Redundancy

Dynamic control per connection

Dynamic monitoring of the status

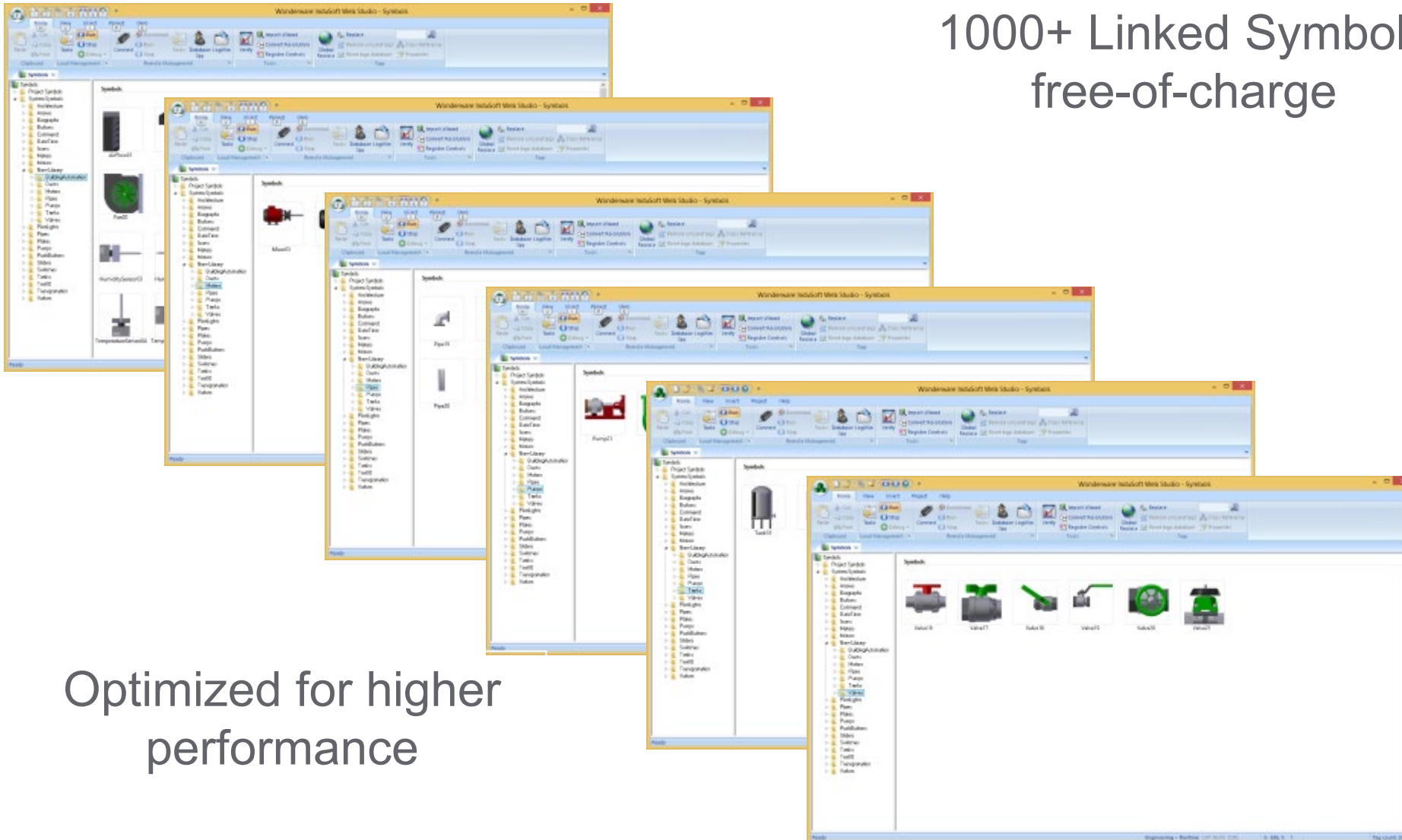


DA | XML | UA

Easy configuration >> High reliability

# Enhanced Symbols

1000+ Linked Symbols  
free-of-charge



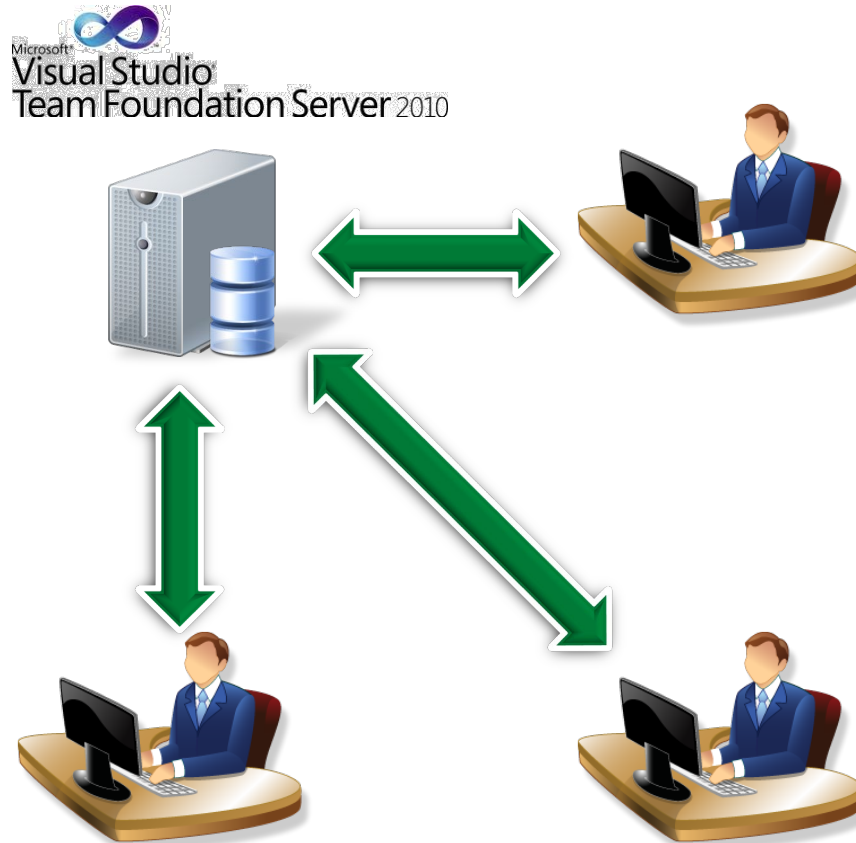
Optimized for higher  
performance

# Optimized Collaboration Server

Feature deprecated in AVEVA Edge 2020

Offline Mode Supported  
Higher Performance and Reliability!

Capability to compare any configuration file, merge changes from multiple application engineers and support for Revision Control. Also interact with the Team Foundation Server, allowing Application Lifecycle Management (ALM).



- Integrated Interface for Microsoft Visual Studio Team Foundation Server
- Native revision control
- Multi-user collaboration
- History of changes – traceability
- Security System – access control
- Backup/restore built-in control
- Multi-version comparison and merging options

# Support for Windows 10



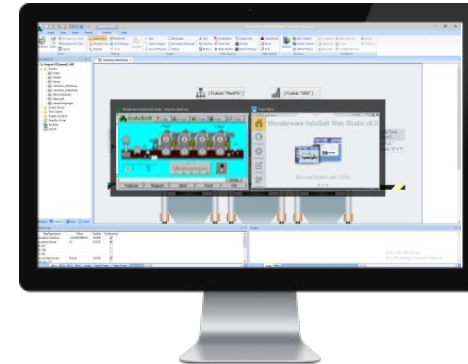
100% Compatibility with applications designed in previous versions

## Evolve protecting your investment!



**2013**  
**ITME**

Windows XP  
Windows Embedded Standard 7  
Windows Embedded Compact 6 / 5



**2015**  
**ITME v8.0**

Windows 10 / 8 / 7  
Windows Server 2012 / 2008  
Windows Embedded Standard 7  
Windows Embedded Compact 7 / 6 / 5  
Linux / Vxworks

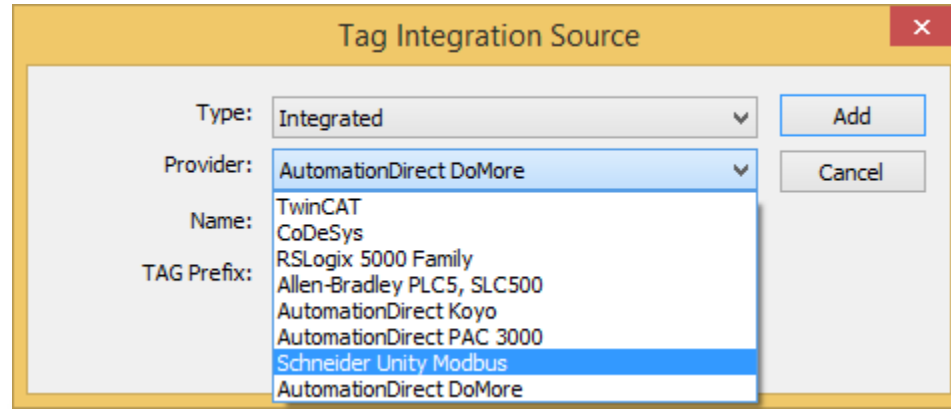


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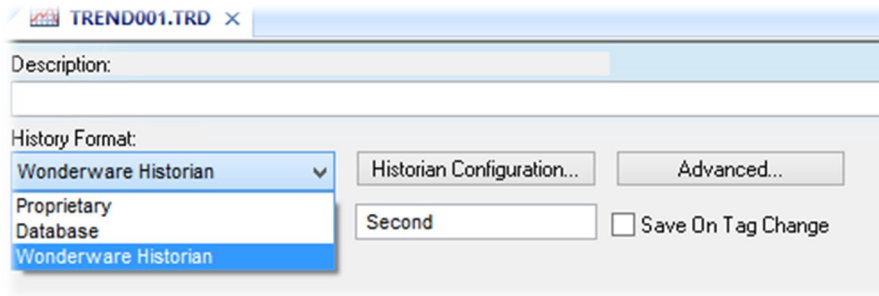
# InTouch Edge HMI 2012 V7.1+SP3

May, 2014

# Optimized Tag Integration



# Native Integration with Wonderware Historian



InTouch Edge HMI



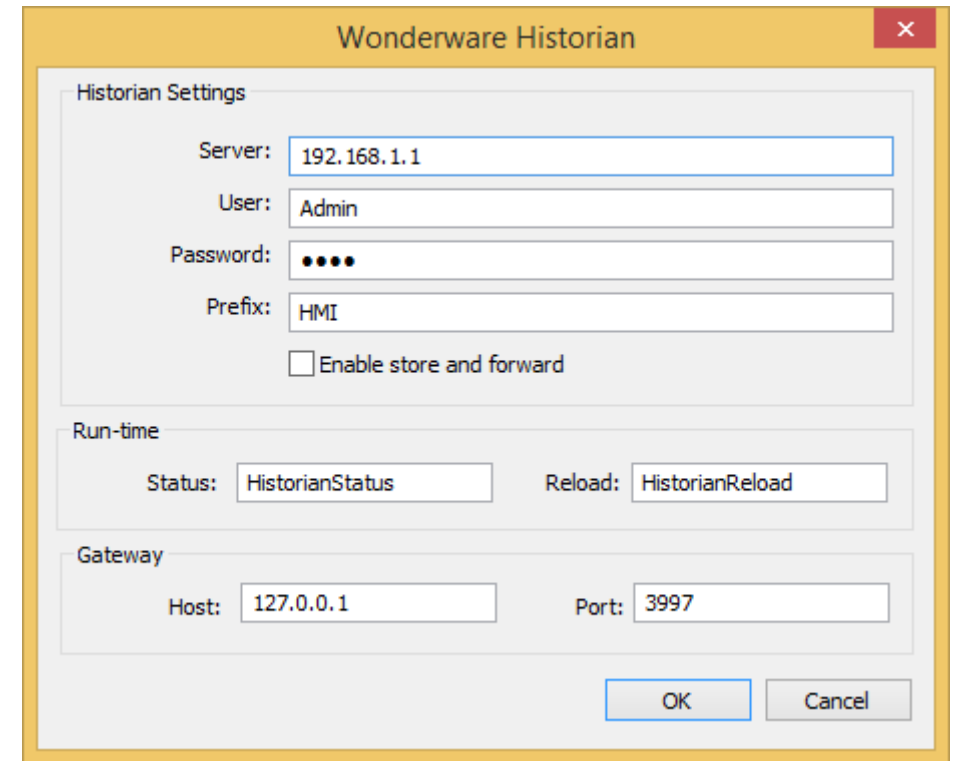
Wonderware Historian

**Native** interface to save/ retrieve data to/from the Wonderware Historian

Built-in **store and forward** feature

**Layer of abstraction** based on the History Format for each Trend Worksheet.

Support for Wonderware Historian locally or remotely (via TCP/IP), even from **embedded** devices.

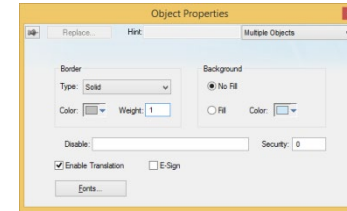


# Miscellaneous

Support for **scripting** on the Studio Mobile Access (SMA) Thin Client, based on platform independent HTML5 technology.



Enhanced the development environment, allowing the user to configure **common properties from multiple objects** selected on the screen editor.



Created built-in functions **GetAlarmCount** and **GetAlarmInfo**, allowing the user to access information about the online alarms during the runtime, via script.



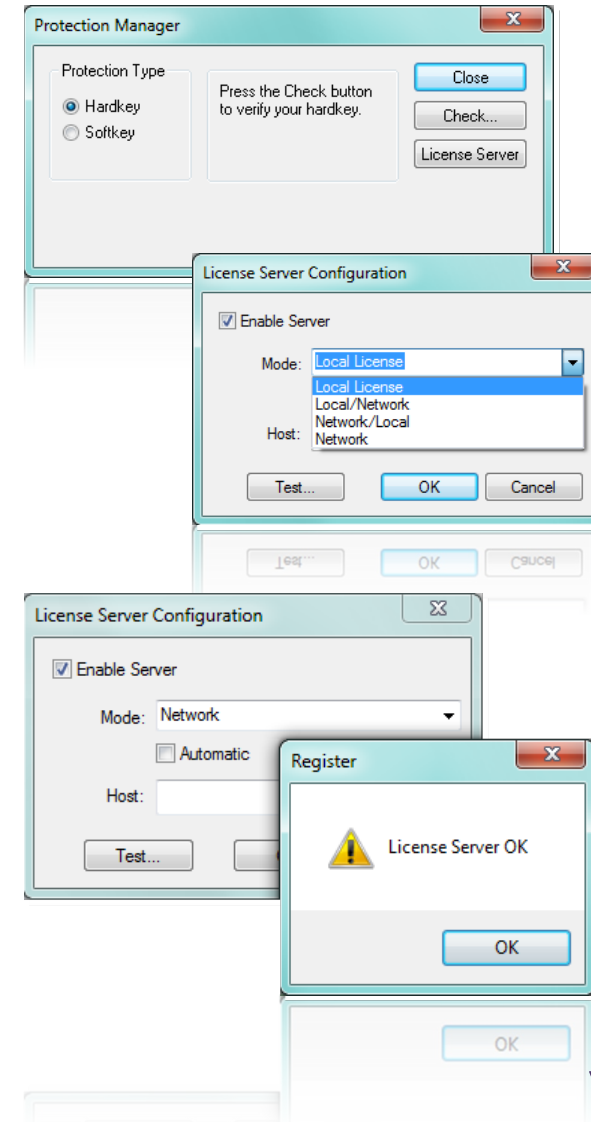
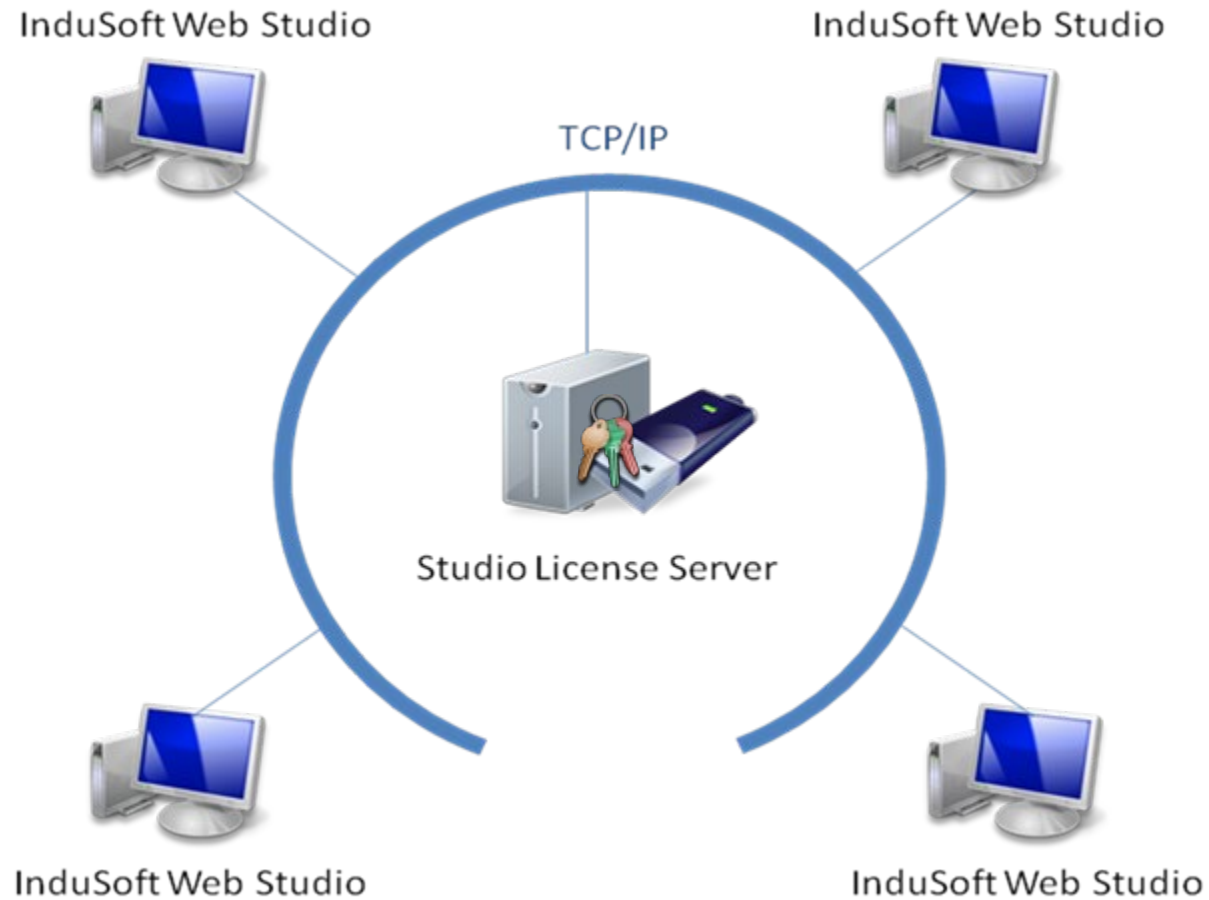
Enhanced **CEView** (runtime for Windows Embedded Compact) to support pictures in additional formats, such as **PNG, GIF, TIFF, and EXIF** (in addition to BMP and JPG that were already supported). The operating system image must provide the required libraries to support such formats.



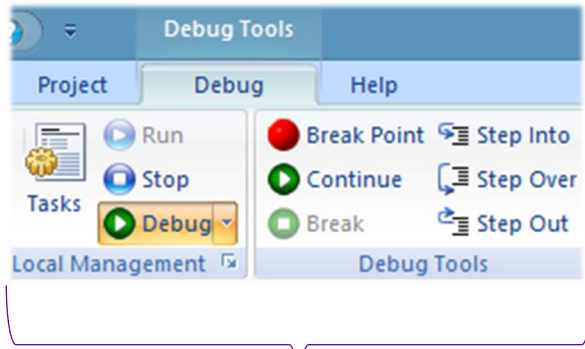
Add support for **Chinese-Simplified MUI** (in addition to Chinese-Traditional) in the development environment of InTouch Edge HMI.



# License Server

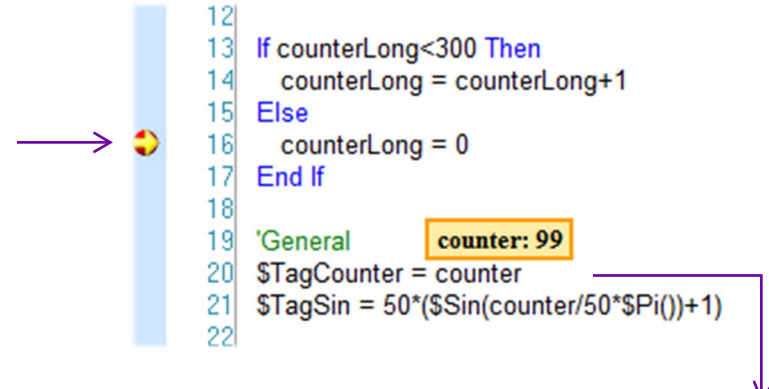


# Native Debugging tools for Scripts



Native support for debugging tools integrated in the development environment

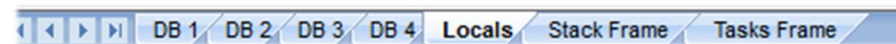
Add break points to scripts



Simply move the mouse over variables to monitor their current value

Improved Database Spy

Name	Value	Type
a	10	Integer
b	20	Integer
c	200	Integer
MyTest	Empty	User-defined Type



Monitor variables in the integrated

Watch the sequence of execution

Analyze the status of each runtime task

# Multi-touch Interface



Zoom In / Zoom out screens



Pan screens



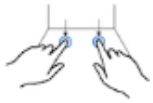
Grow & Shrink objects (Size animation)



Drag objects (Position animation)



Rotate objects (Rotation animation)



Dual or Multi-touch command (Command animation)



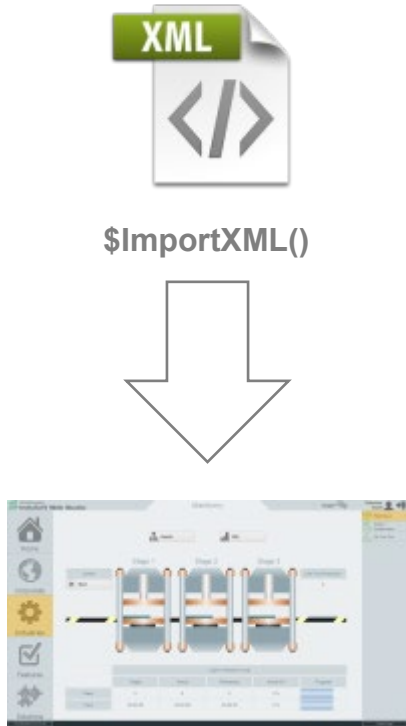
Touch events (Command animation)



Built-in Inertia effect



# Dynamic Configuration

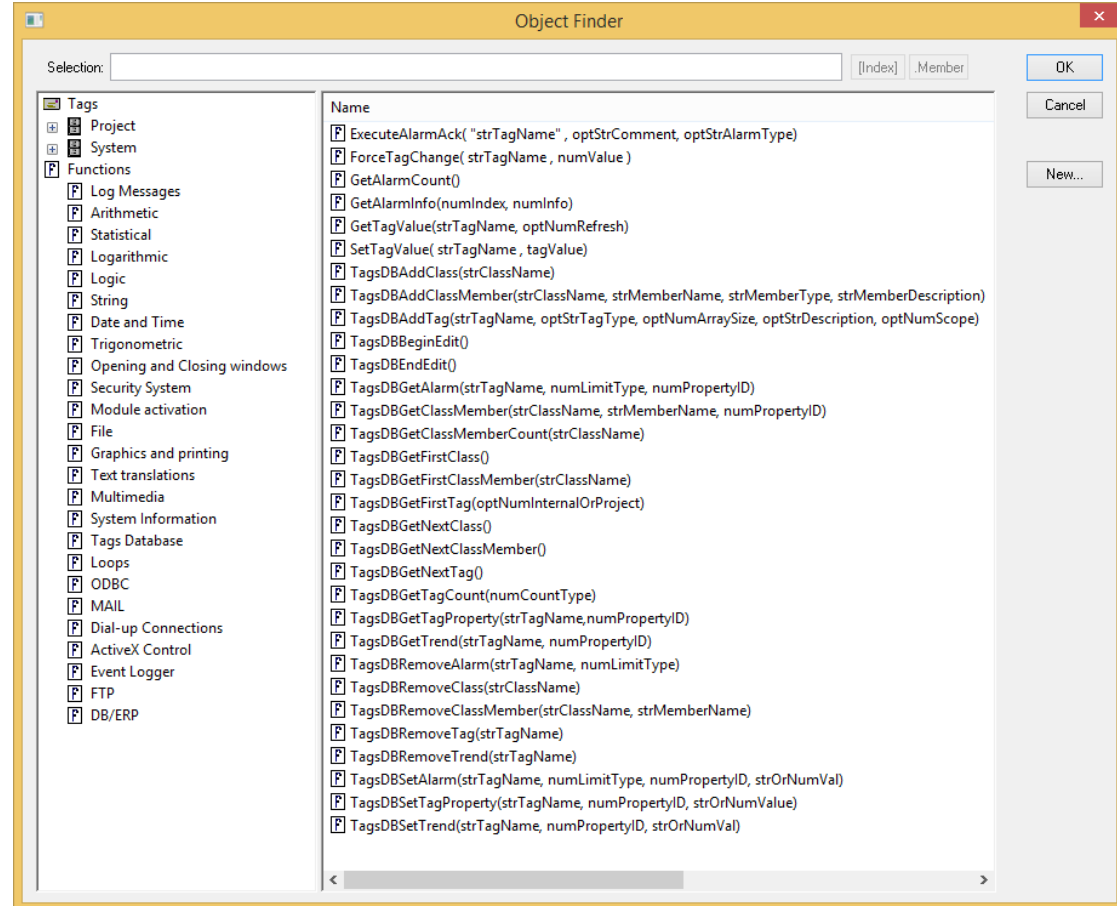


## Screen XML API Add-On

Create screens in XML and convert them to binary format during the runtime

## Tags Database Built-in Functions

Create, Modify, Delete tags and its properties during the runtime



Create Templates that can be configured during the runtime.  
Ideal for OEMs and Machine Builders!

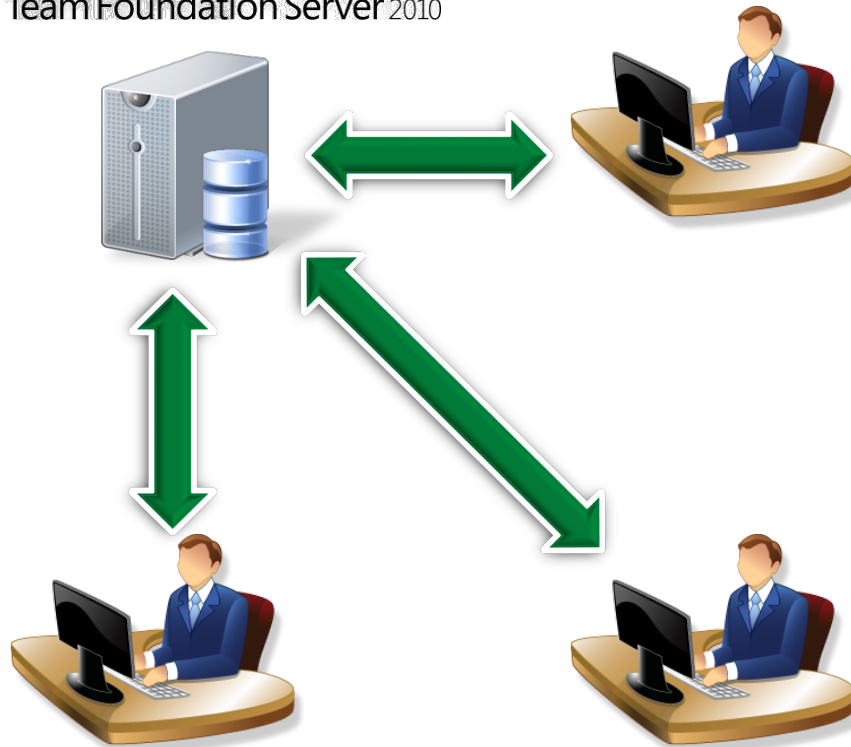


# Collaboration Server

Feature deprecated in AVEVA Edge 2020

Capability to compare any configuration file, merge changes from multiple application engineers and support for Revision Control. Also interact with the Team Foundation Server, allowing Application Lifecycle Management (ALM).

Microsoft  
Visual Studio  
Team Foundation Server 2010



- Integrated Interface for Microsoft Visual Studio Team Foundation Server
- Native revision control
- Multi-user collaboration
- History of changes – traceability
- Security System – access control
- Backup/restore built-in control
- Multi-version comparison and merging options

# SMA Thin Client (HTML5)

Tabular SMA Thin Client deprecated in AVEVA Edge 2020

## SMA Thin Client (HTML5)



## Tabular SMA Thin Client (HTML1)



**NOKIA**



### Alarms

[Home](#) [Process](#) [Log Off](#)

State	Message	Type	Time
	<a href="#">Hi Pressure</a>	HiHi	14:59
	<a href="#">Low Temperature</a>	Lo	14:44
	<a href="#">Hi Level</a>	HiHi	14:59

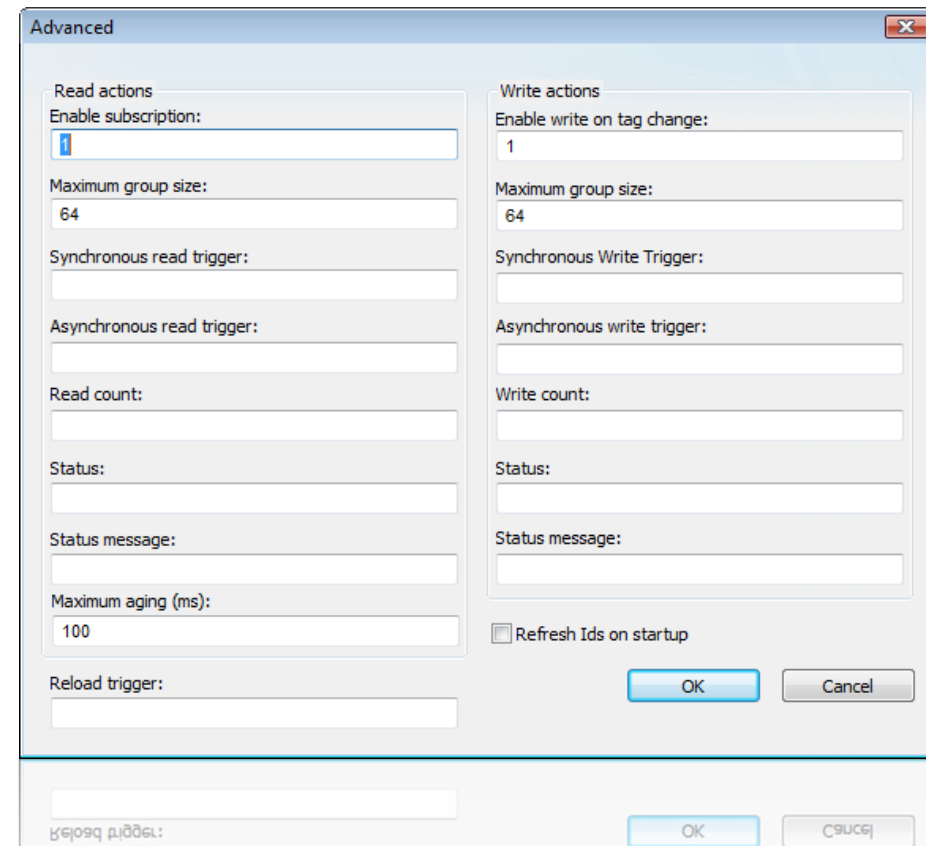
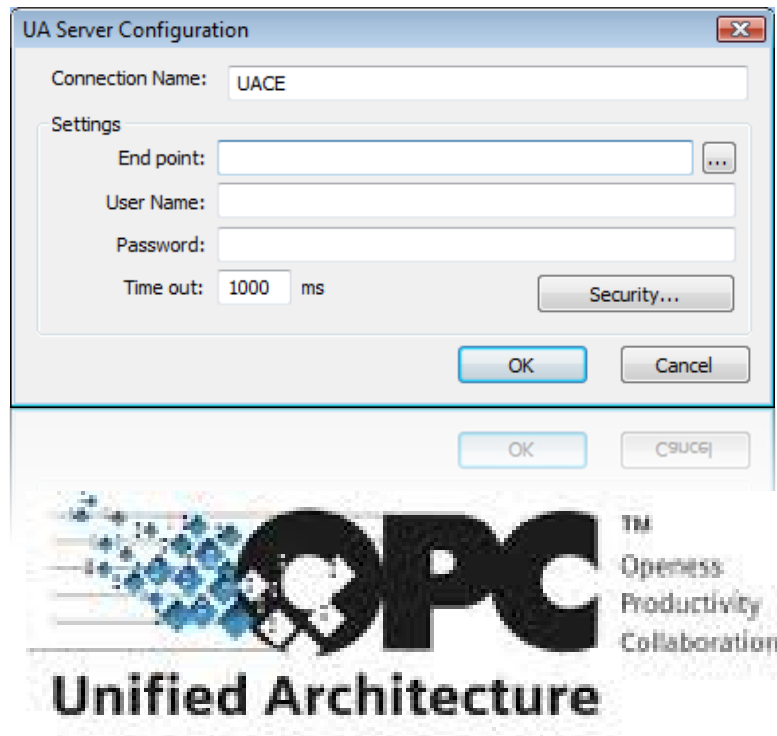
### Process

[Home](#) [Alarms](#) [Log Off](#)

Description	Value
Pressure Set Point	<a href="#">27</a>
Temperature Set Point	<a href="#">90</a>
Level Set Point	<a href="#">60</a>
Main Motor	<a href="#">On</a>

# OPC UA Client for Windows CE

- First HMI/SCADA software in the market to support OPC UA on the Microsoft Windows Embedded CE operating system (in addition to other Windows platforms).
- Increased security (built-in authentication), flexibility, and control.



# Graphical Enhancements

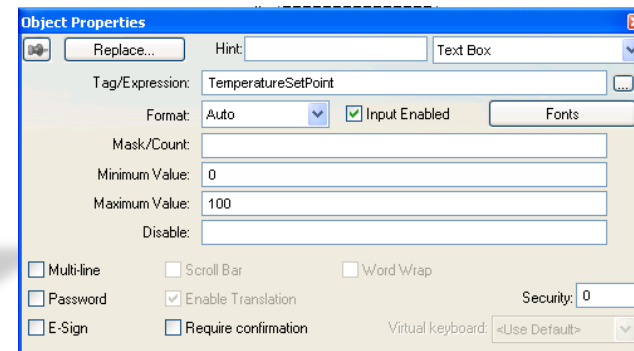
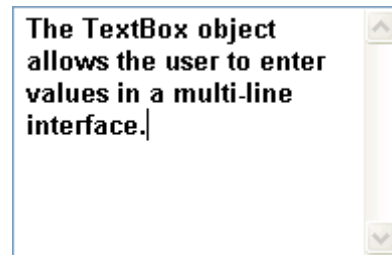
- Performance Enhancements

The screen switch greatly improved, especially on devices powered with slower processors (e.g.: ARM processors with low CPU power). Benchmark tests indicated that, in average, screen switch time is twice as fast on this version.

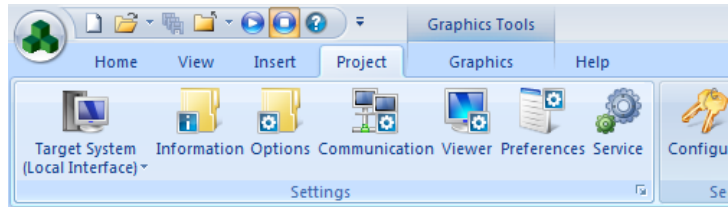


- Graphical Editor Enhancements

Tab order editor and Textbox Active Object



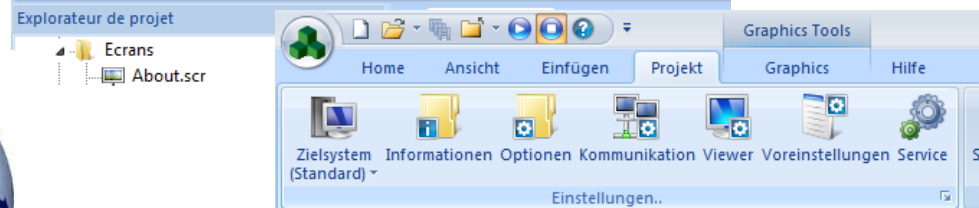
# Localization for the Development Environment



Desenvolva seu projeto em seu idioma!



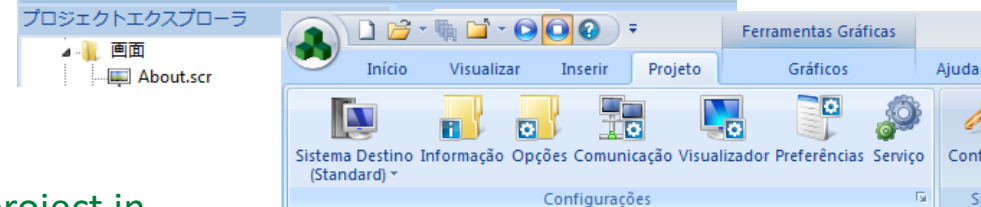
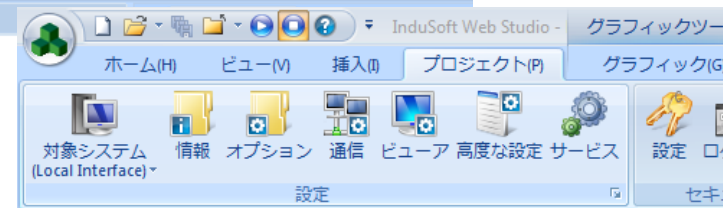
Développez votre projet dans votre langue!



Entwickeln Sie Ihr Projekt in Ihrer Sprache!

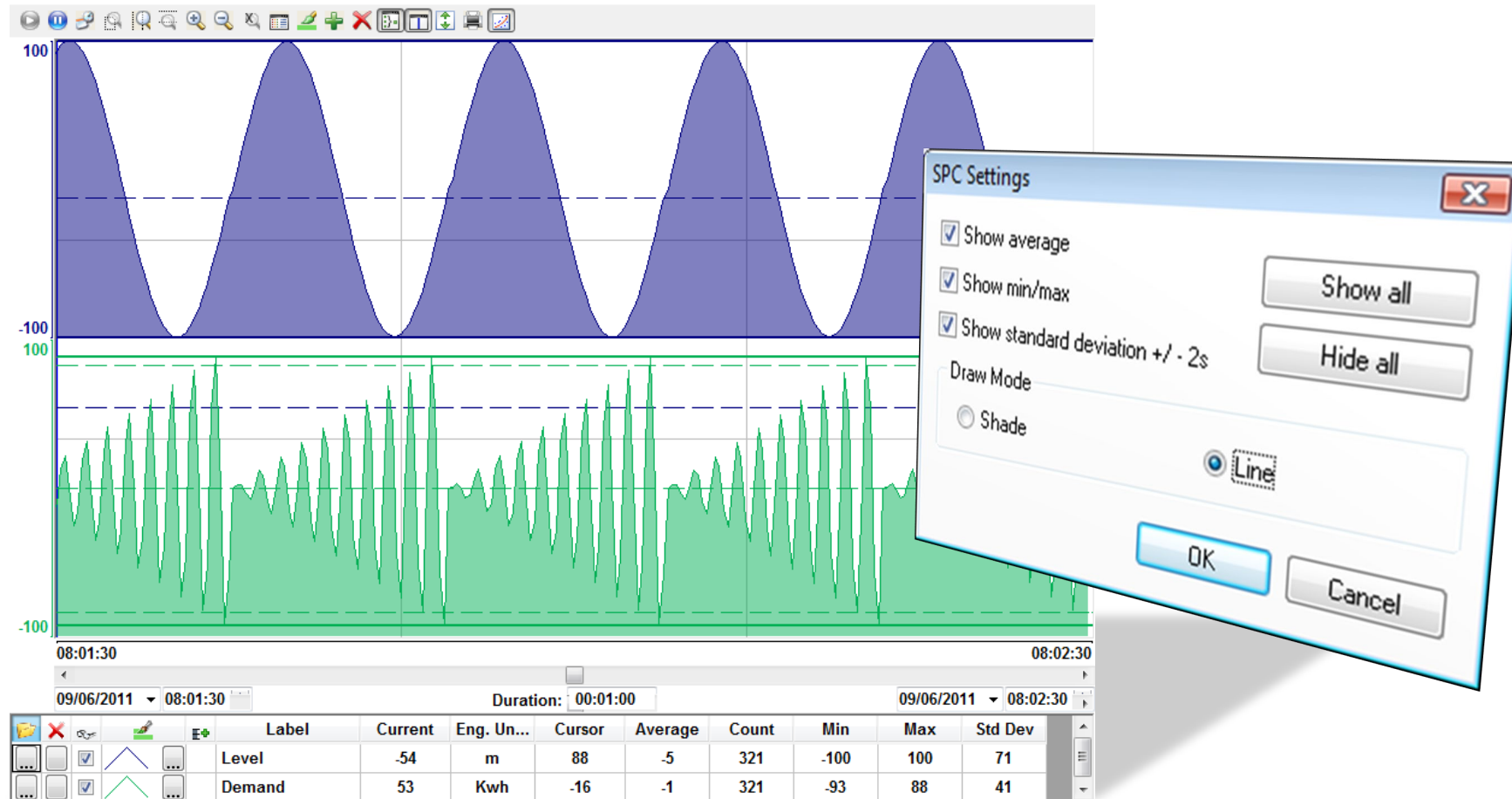


あなたの言語でプロジェクトを開発!



Develop your project in your language!

# Native SPC for the Trend Control

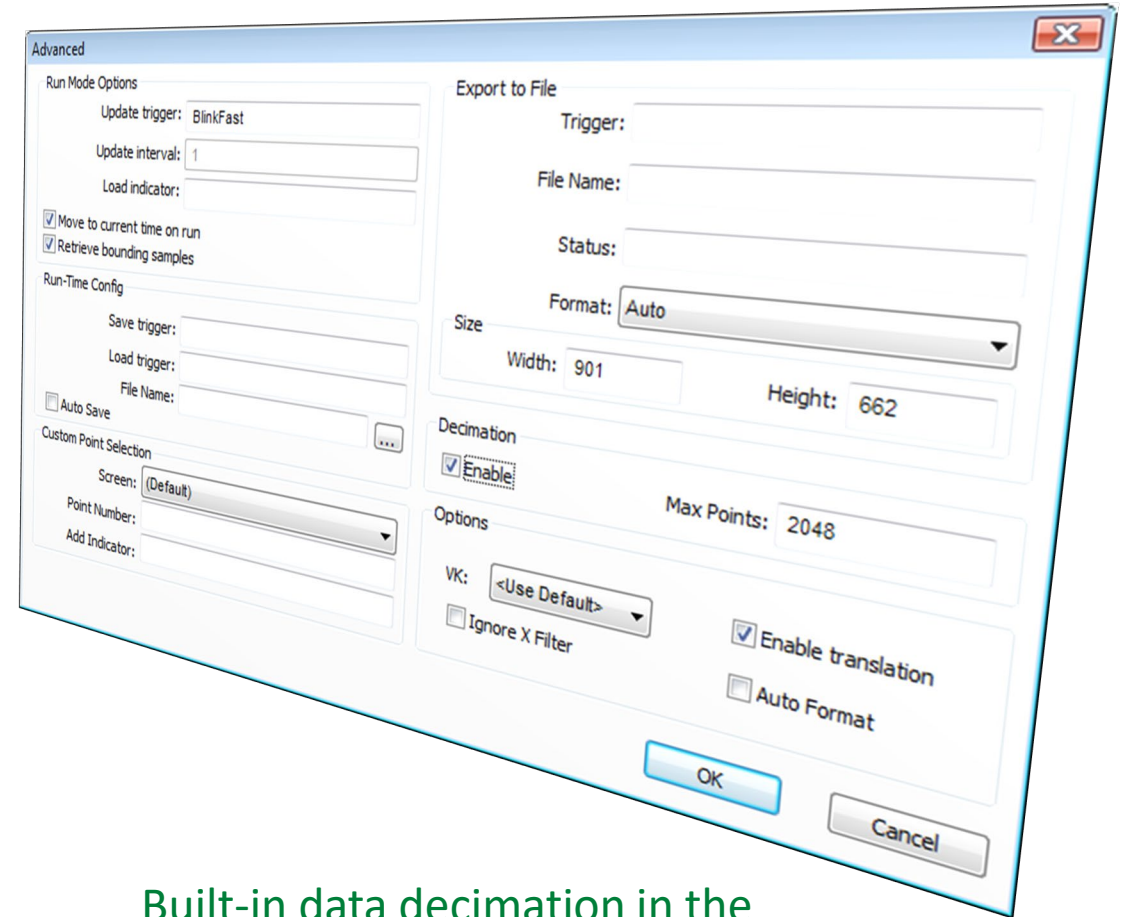


Statistical Process Control (SPC) information  
one click away!

# Database Data Retrieval Performance Optimization

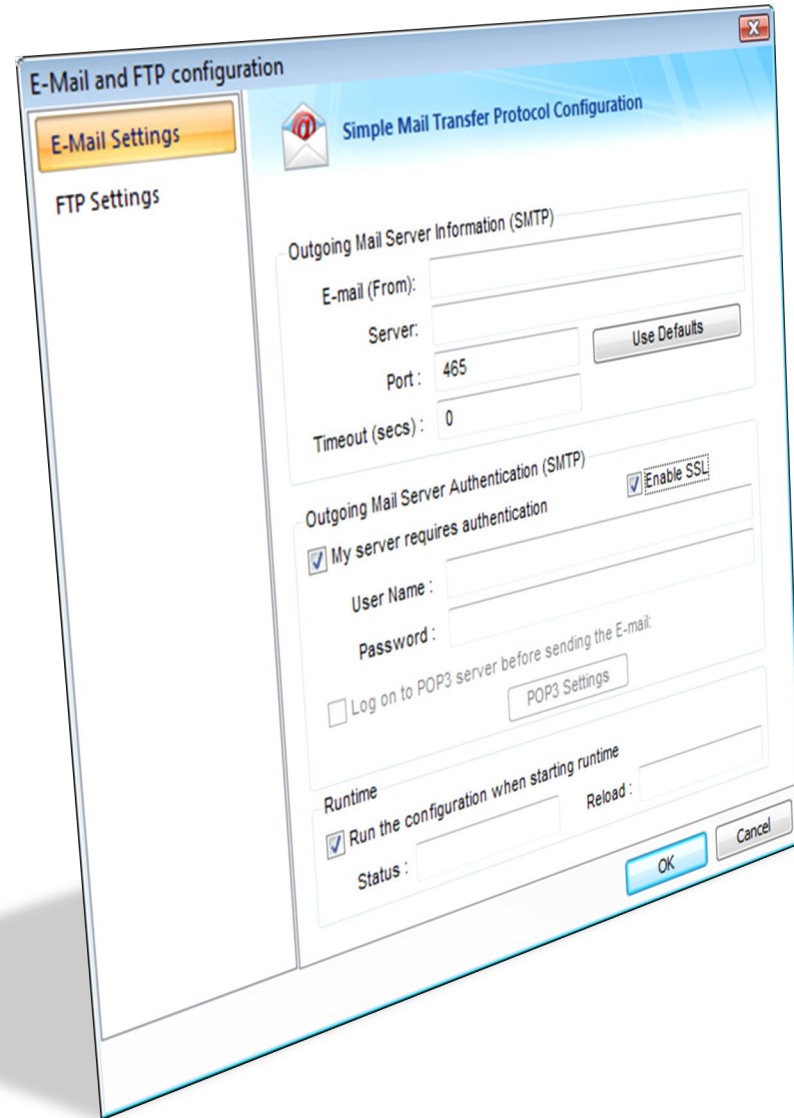


Optimized trend history module, designed to load millions of values from SQL Relational Databases with high performance!



Built-in data decimation in the Trend Control.

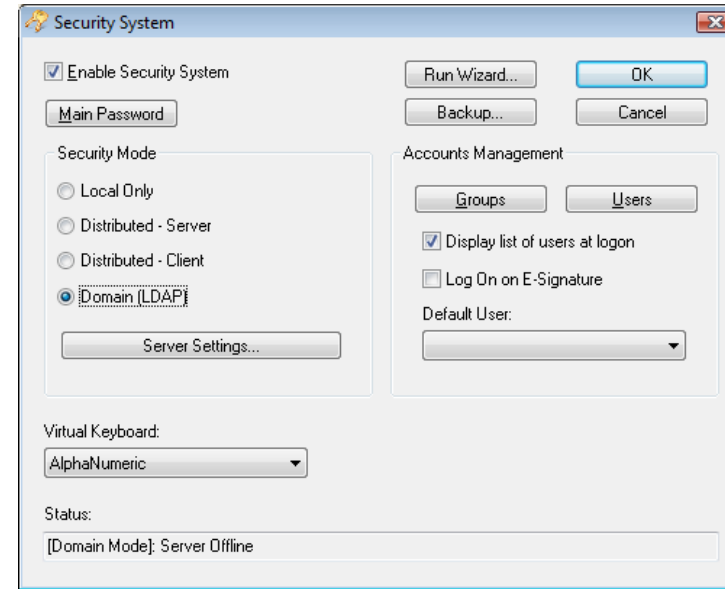
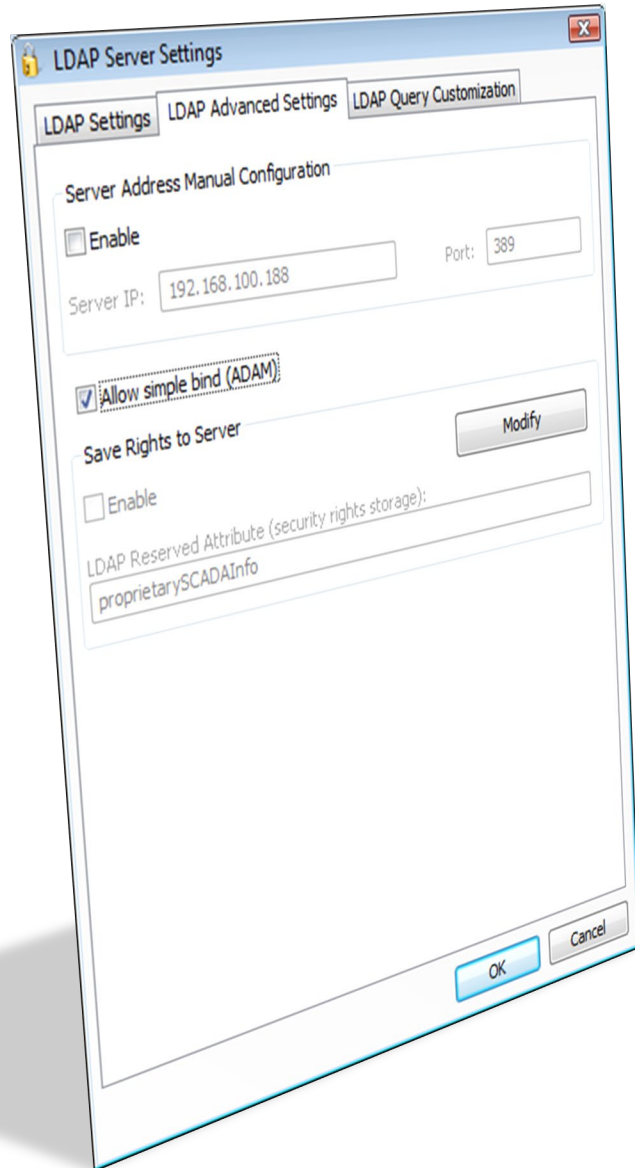
# SSL Support for Emails



Native support for Security Socket Layer (SSL), made it easier and securer than ever to send emails from InTouch Edge HMI!



# Native LDAP support

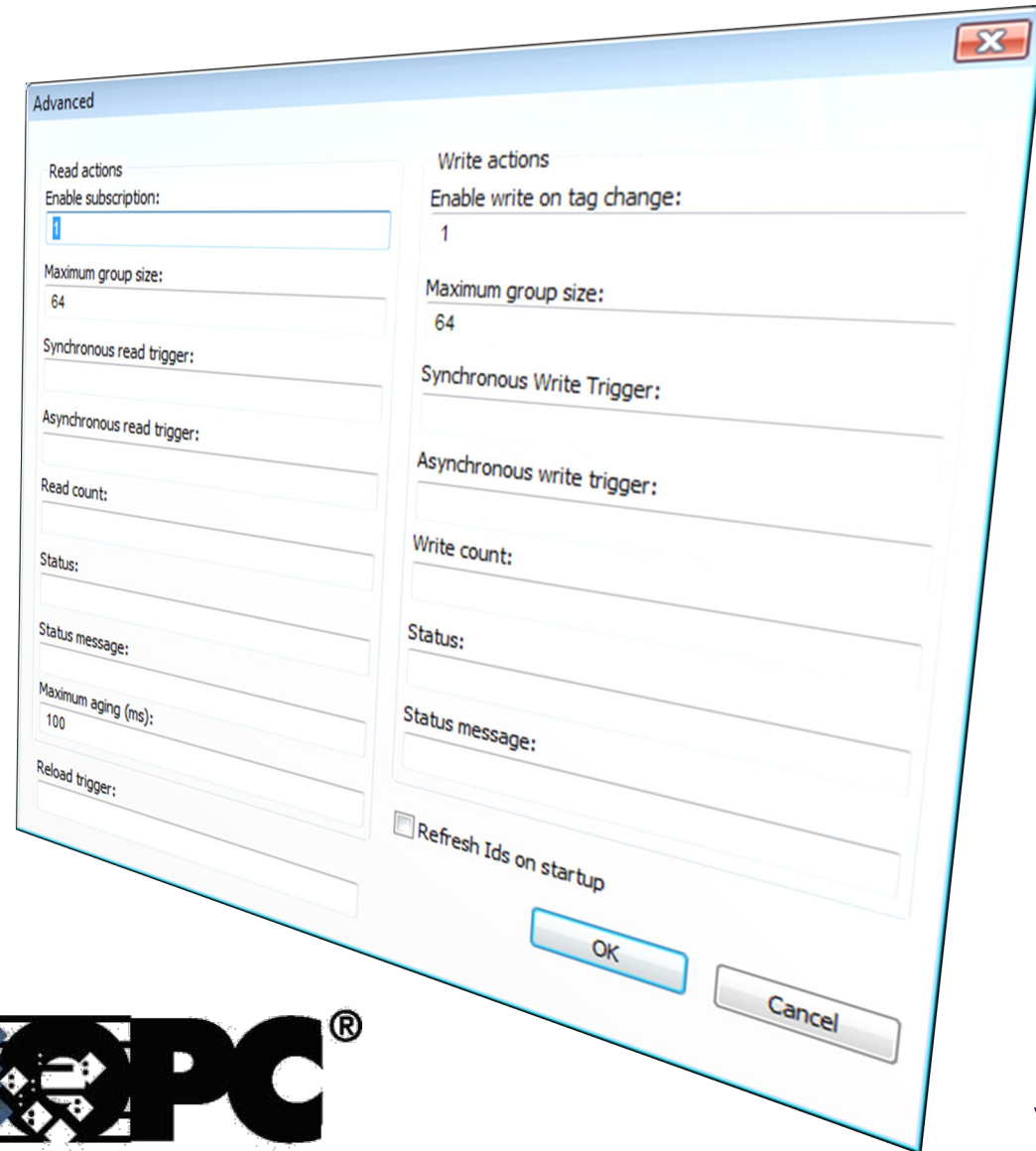
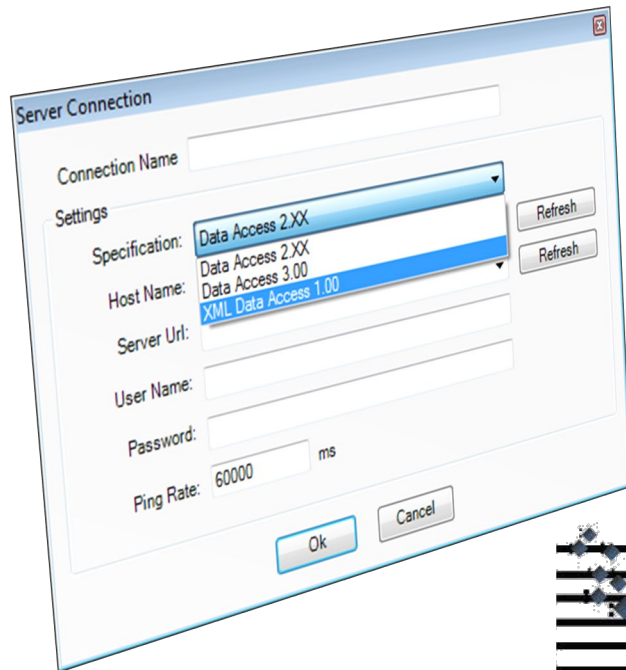


# LDAP

Support for ADAM Server in addition to standard LDAP Servers.  
Integrate your project to the Active Directory (Users and Groups).

# OPC XML and Multi-thread OPC DA 2.XX-3.00

- OPC DA 2.05
- OPC UA
- OPC .NET
- OPC XML/DA (2.x,3.0)



# Native Communication Drivers (IEC104 and DNP)

Native drivers for standard protocols used in the Electrical Industry.



IEC-60870-5-104  
(IE104 driver)

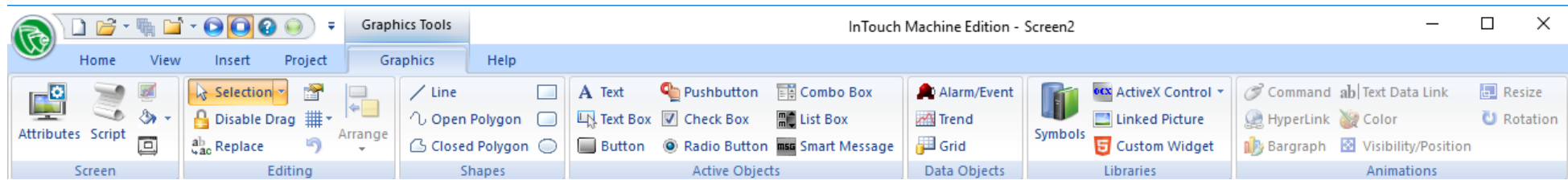


DNP3  
(DNP driver)

# Modern development Environment

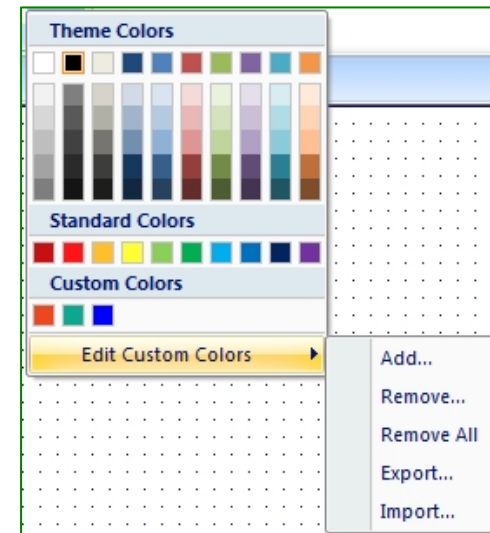
Modern look-and-feel, increased productivity

- Ribbon interface



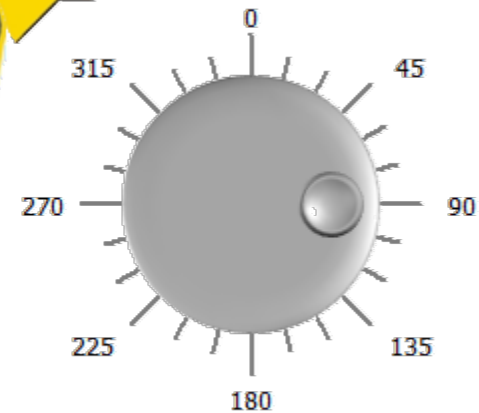
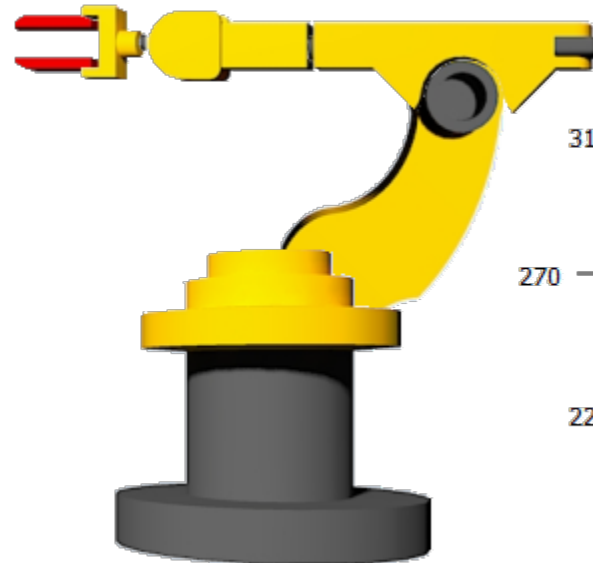
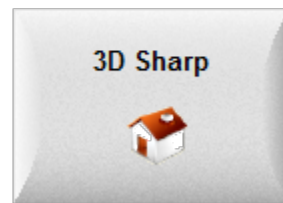
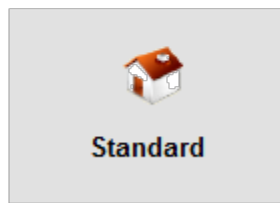
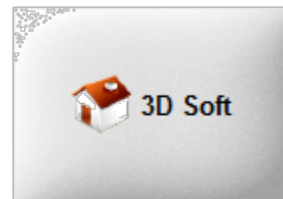
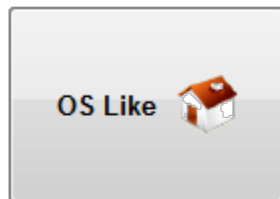
Open more than one document (tab) simultaneously

- Dock interfaces
- Larger Object Properties dialog
- Create custom palettes of colors



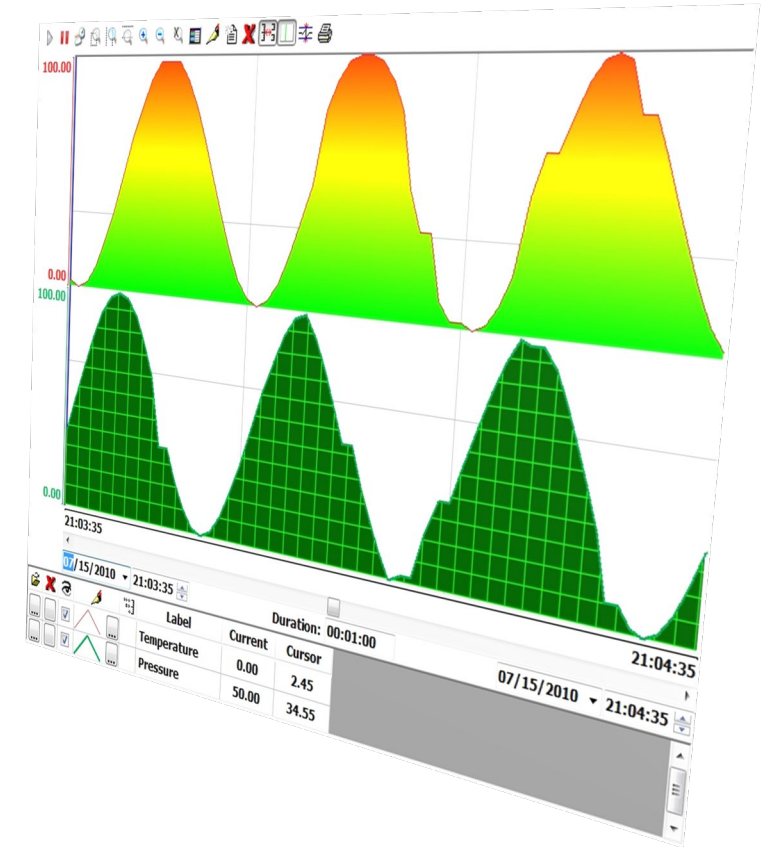
# Graphic Enhancements

- New 3D button styles
- Link icons (.ico, .bmp, .jpg, .gif, .png) to buttons
- Apply dynamic rotation to imported graphics during runtime

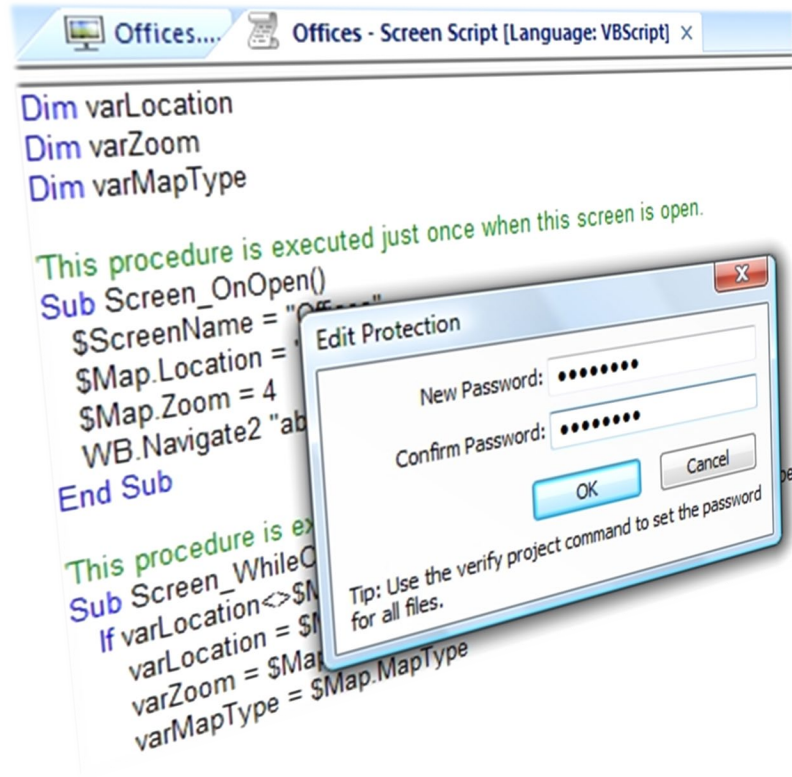


# Trend Control Enhancements

- Fill area below each pen (optional transparency 0-100%)
  - Color
  - Pictures or Patterns (.bmp)
- Add pictures or text (notation) on top of the trend control



# Native Intellectual Property Protection

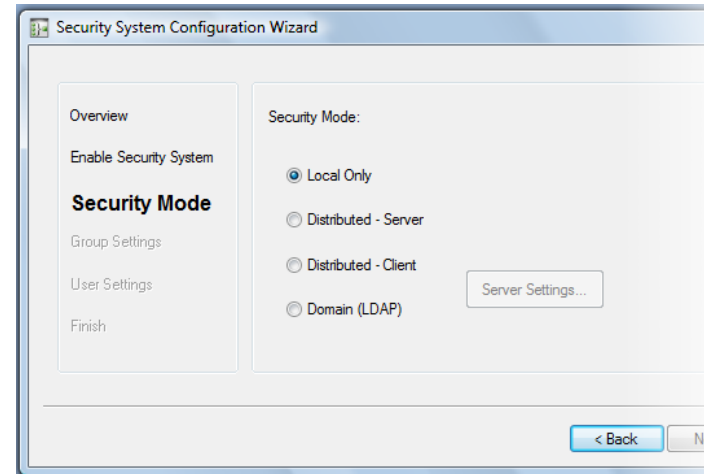


Do you or your customers have custom scripts?

What about graphics or other functionality you would like to protect?

# Security Enhancements

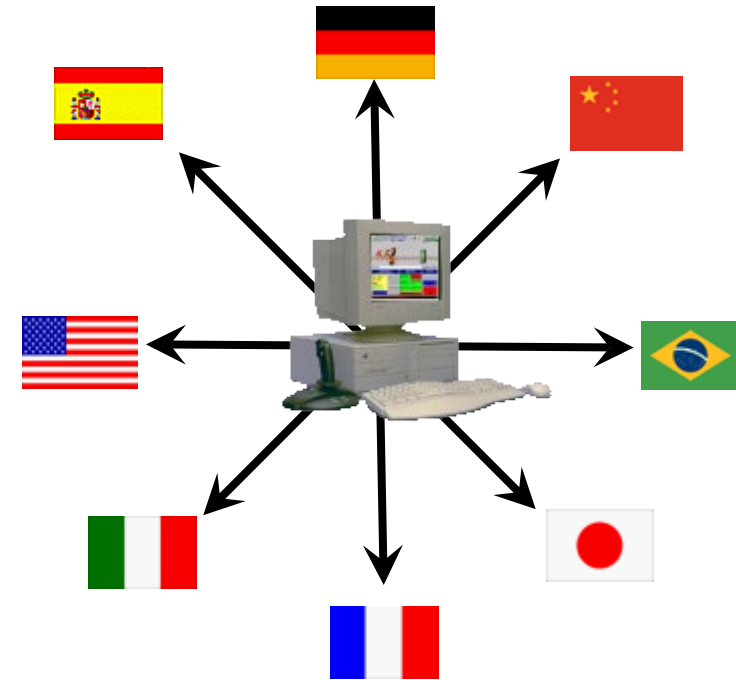
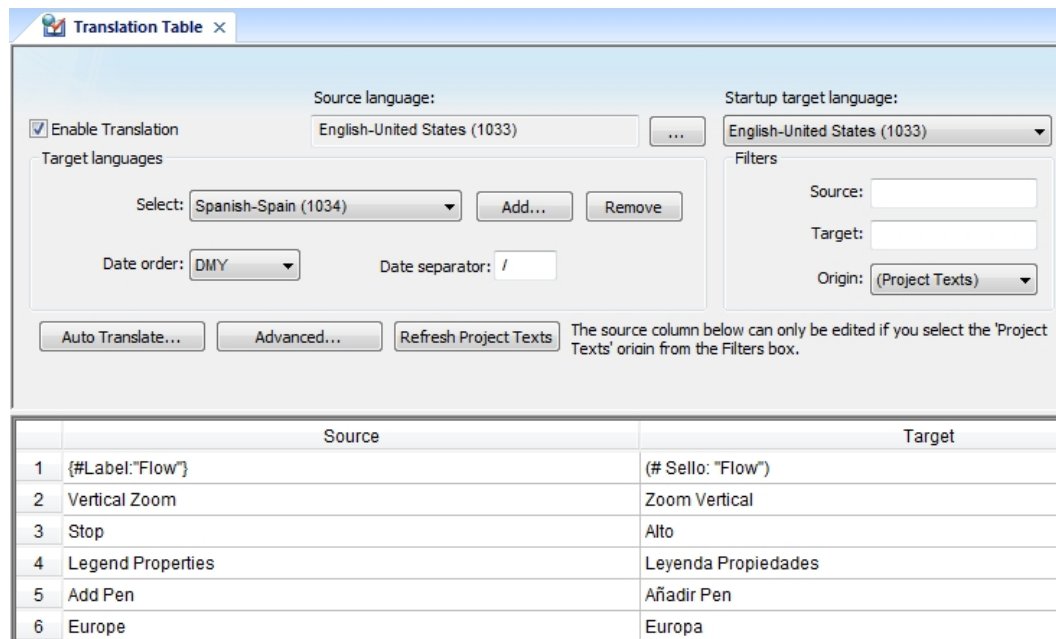
- Integrate the project with Microsoft Active Directory – domain – security system using the LDAP protocol
- Share security system settings among several stations
- Import/Export security system settings
- Cache security system authentication information
- Associate “users” with multiple “groups”
- New security system configuration wizard





# Runtime Localization

- Reduce errors, eliminate misunderstandings.
- No longer a manual “fill out the table” process
- Now a one-click online translation
- New easy-to-use interface



# User-friendly configuration interface

Instead of scripting, easy-to-use configuration forms for:

- SMTP
- FTP

The image displays two overlapping windows from a configuration application. The top window is titled "E-mail and FTP configuration" and shows the "Simple Mail Transfer Protocol Configuration" tab. It includes sections for "Outgoing Mail Server Information (SMTP)", "Outgoing Mail Server Authentication (SMTP)", and "Runtime". The "SMTP" section has fields for "E-mail (From)", "Server", "Port" (set to 25), and "Timeout (secs)" (set to 0). The "Authentication" section has a checked checkbox for "My outgoing mail server (SMTP) requires authentication", fields for "User Name" and "Password", and a checkbox for "Log on to POP3 server before sending the mail" with a "POP3 Settings" button. The "Runtime" section has a checked checkbox for "Run the configuration when starting runtime" and a "Status" field with a "Reload" button. The bottom window is also titled "E-mail and FTP configuration" but shows the "File Transfer Protocol Configuration" tab. It includes sections for "Account Information", "Hosting Server Information (FTP)", and "Runtime". The "Account Information" section has fields for "User Name" and "Password". The "Hosting Server Information" section has fields for "Server" and "Port" (set to 21), a "Use Defaults" button, and radio buttons for "FTP Mode" (Active is selected, Passive is unselected). The "Runtime" section has a checked checkbox for "Run the configuration when starting runtime" and "Status" and "Reload" fields. Both windows have "OK" and "Cancel" buttons at the bottom right.

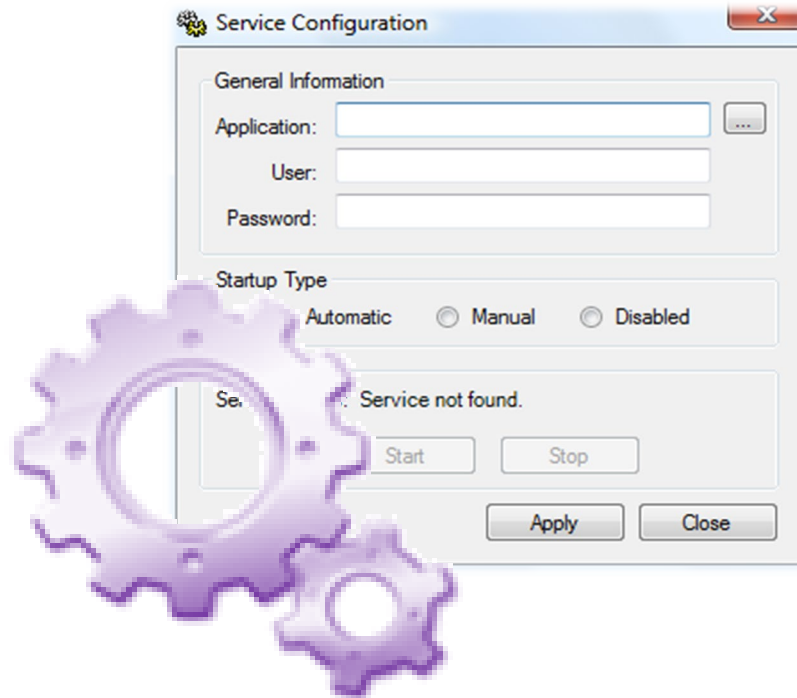


# New and Updated Native Communication Drivers

## No extra charge, built-in, installed

- CAN/CANopen (master or slave)
- Eaton ELC (PLCs)
- Opto 22
- Siemens (SIEME, SIETH, SIPPI)
- BACnet

# Run as a Service



InTouch Edge HMI can run as a Windows service. This virtually eliminates accidental shutdown of critical applications by operators.

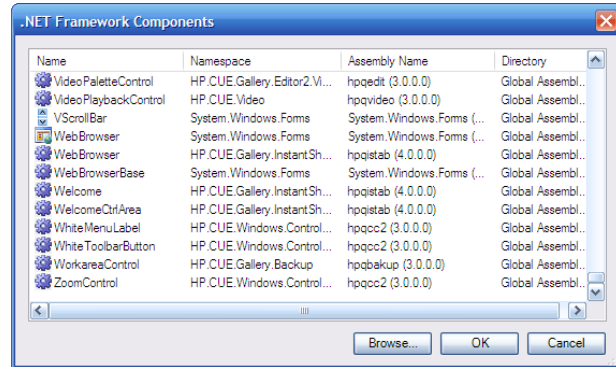
Because increased uptime is mandatory in today's facilities, running as a service also allows ITME to start even when no users are logged on to the computer. This is perfect for remote installations or recovery from power failures.

Running ITME runtime as a service increases the security of the system, blocking unauthorized users from slipping in and making any changes before launching the graphic interface.

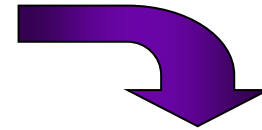
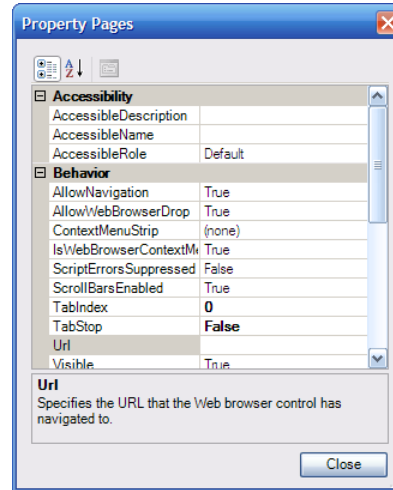
# .NET Controls Container (.NET Framework 3.5)



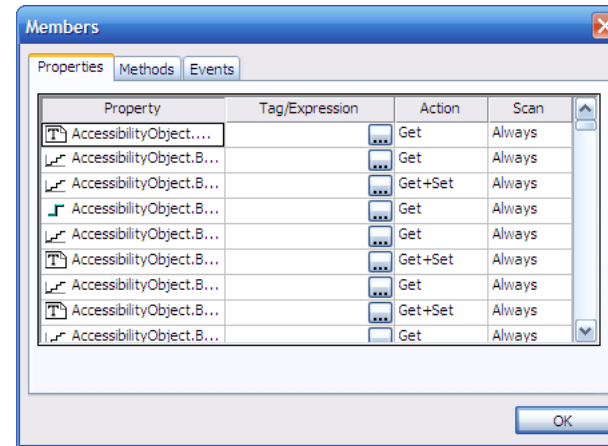
.NET Controls Browsing



.NET Control Properties

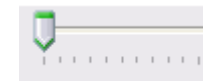
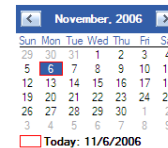


Built-in interface for Properties, Methods and Events  
(Just link tags to the interfaces – no scripting required)



Support for .NET Controls under Windows XP includes:

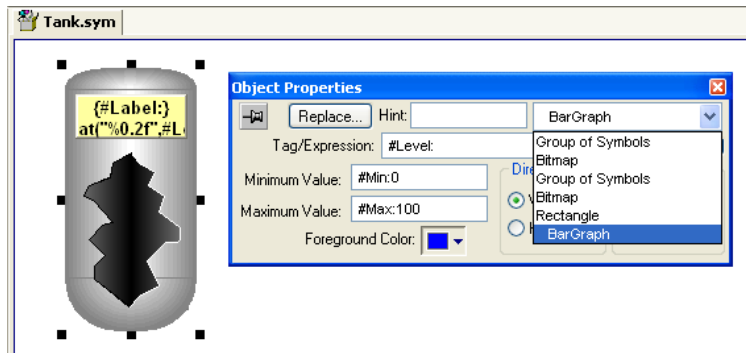
- Support for Properties, Methods and Events.



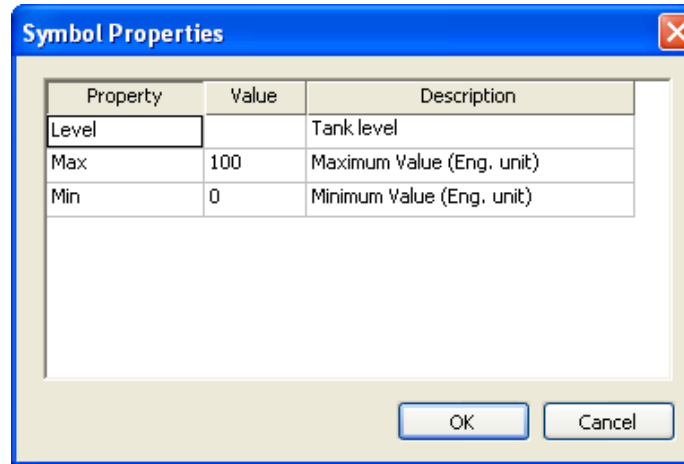
- Embedded user-friendly interface allowing the user to link tags to Properties and Methods, and to link expressions to Events. Does not require scripting to integrate the object in the project.

# Linked Symbols

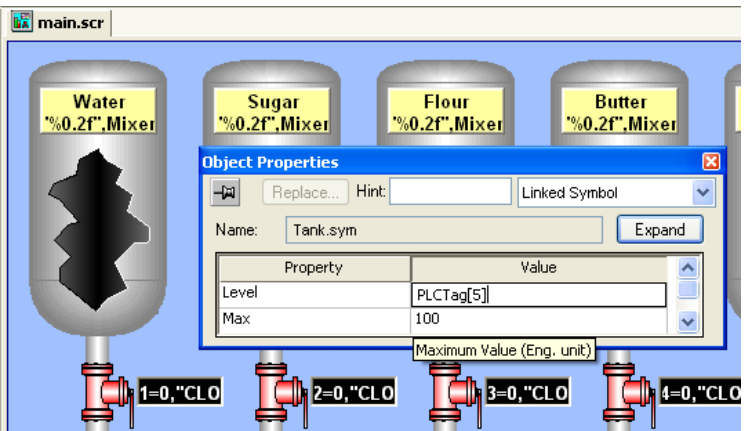
Create the Linked Symbol



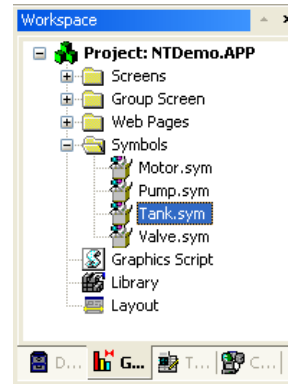
Edit your own Custom Properties



Insert the Linked Symbol into the application screens and assign tags and/or values to it.



Save the MASTER SYMBOL in the library.

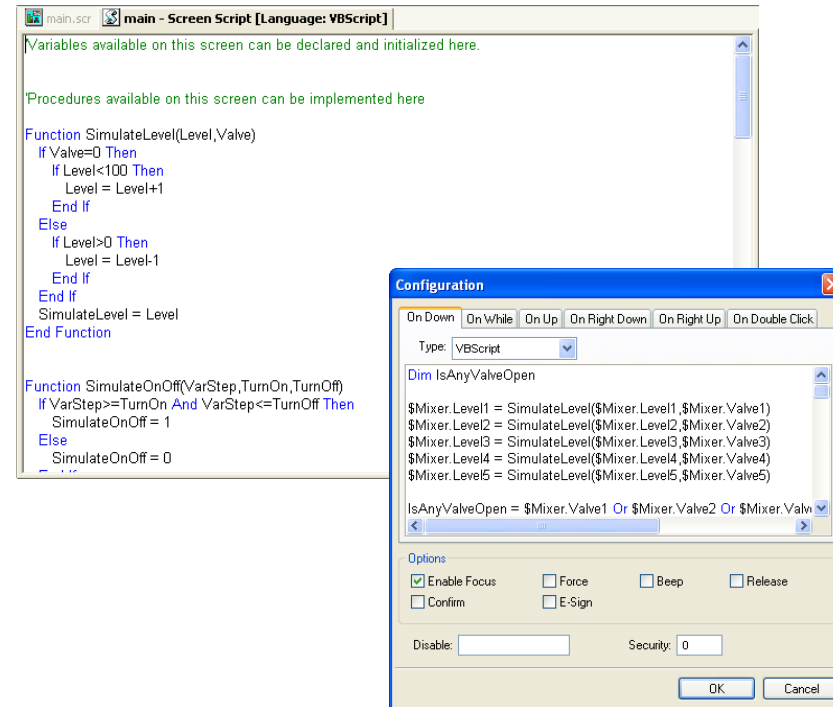
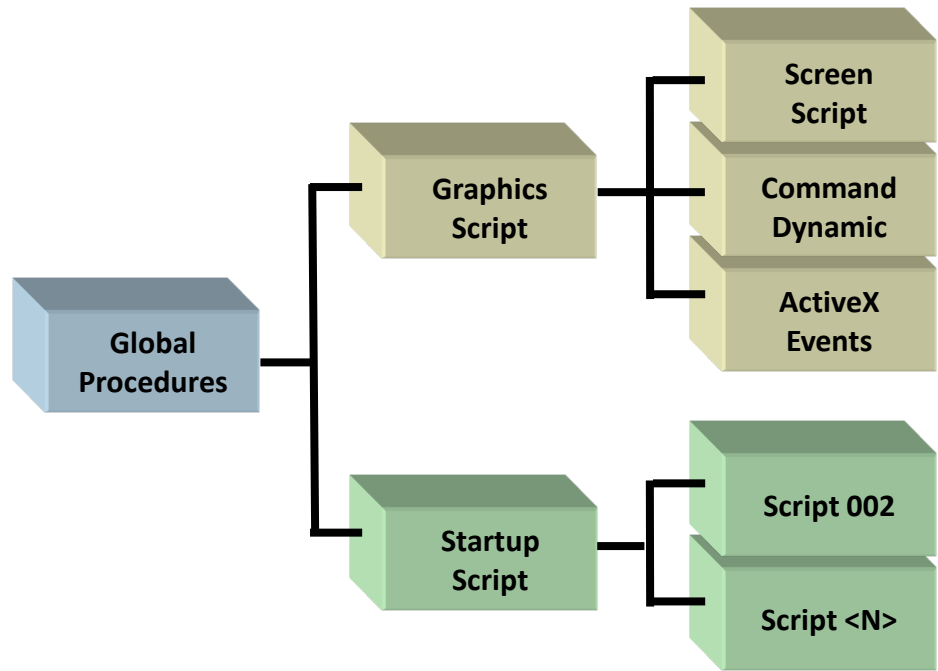


After inserting the symbol, the user can determine whether to keep the link with the MASTER Symbol or not.

Using Linked Symbols, the user can create, modify and customize his/her own library of symbols and re-use them in many different projects. After editing the MASTER SYMBOL once, the changes are replicated to all instances of this symbol in the application, improving productivity during application development.

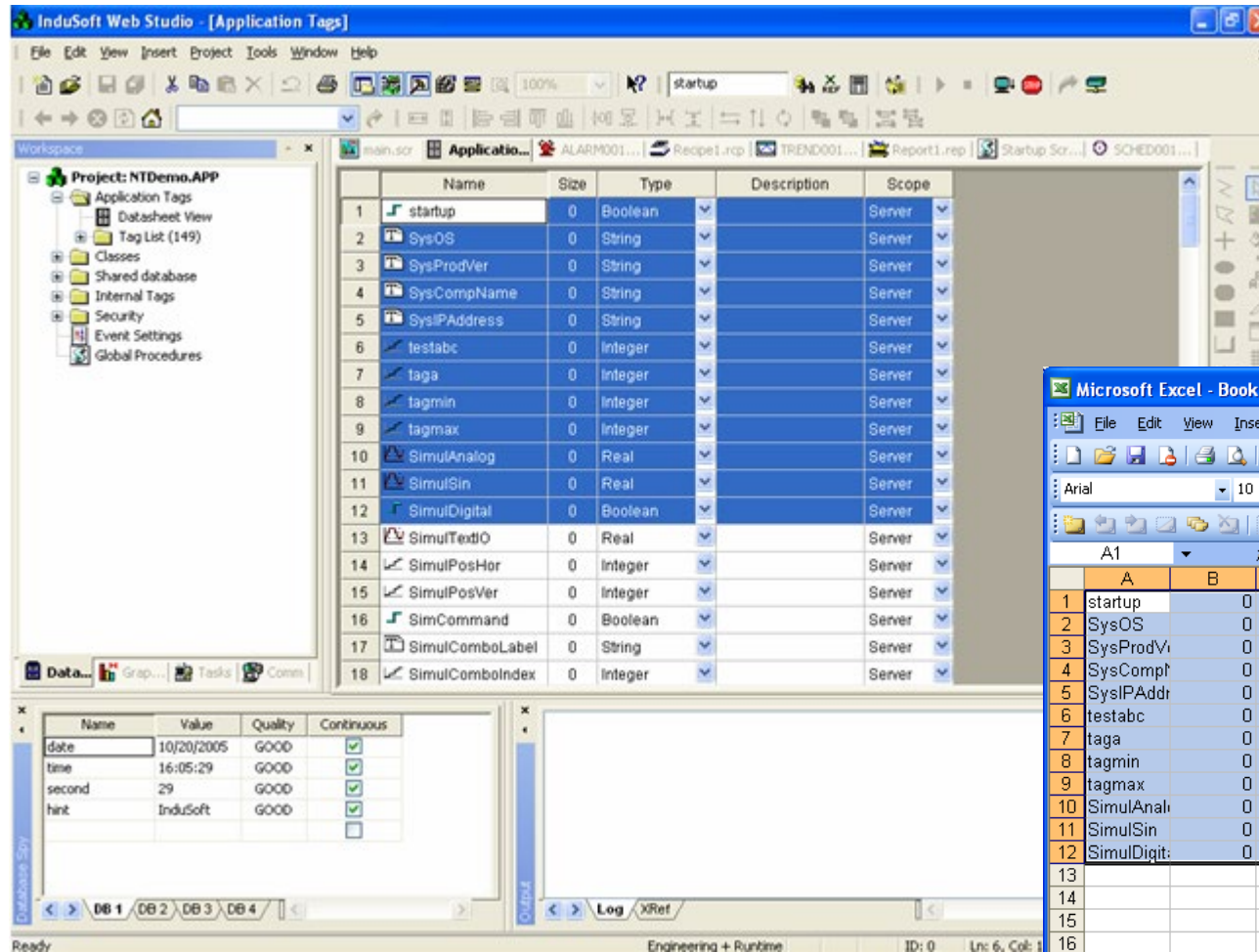
# VBScript Built-in Engine

Microsoft Visual Script Language (VBScript) is a simple, standard and flexible scripting language that allows you to implement logics and algorithms within the ITME application.

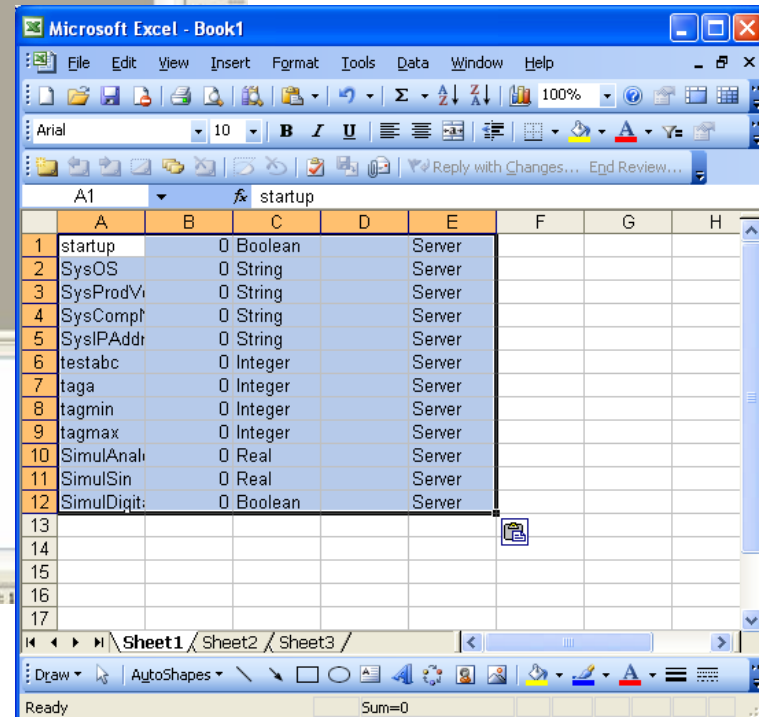


- Built-in VBScript editor with IntelliSense.
- Support for syntax, operators, functions and standards from VBScript, integrated to the Studio tags and functions database.
- Ability to create your own variables and procedures (functions and/or sub-routines).
- Easy interface to access to properties, methods and/or events from COM objects, including ActiveX controls.
- Ability to execute the logics in any platform that supports VBScript, including MS Windows NT/2K/XP (ITME Server station), MS [Windows CE](#) (CEView) and MS Internet Explorer - [Web Thin Client](#).

# Native Configuration Integration with Excel



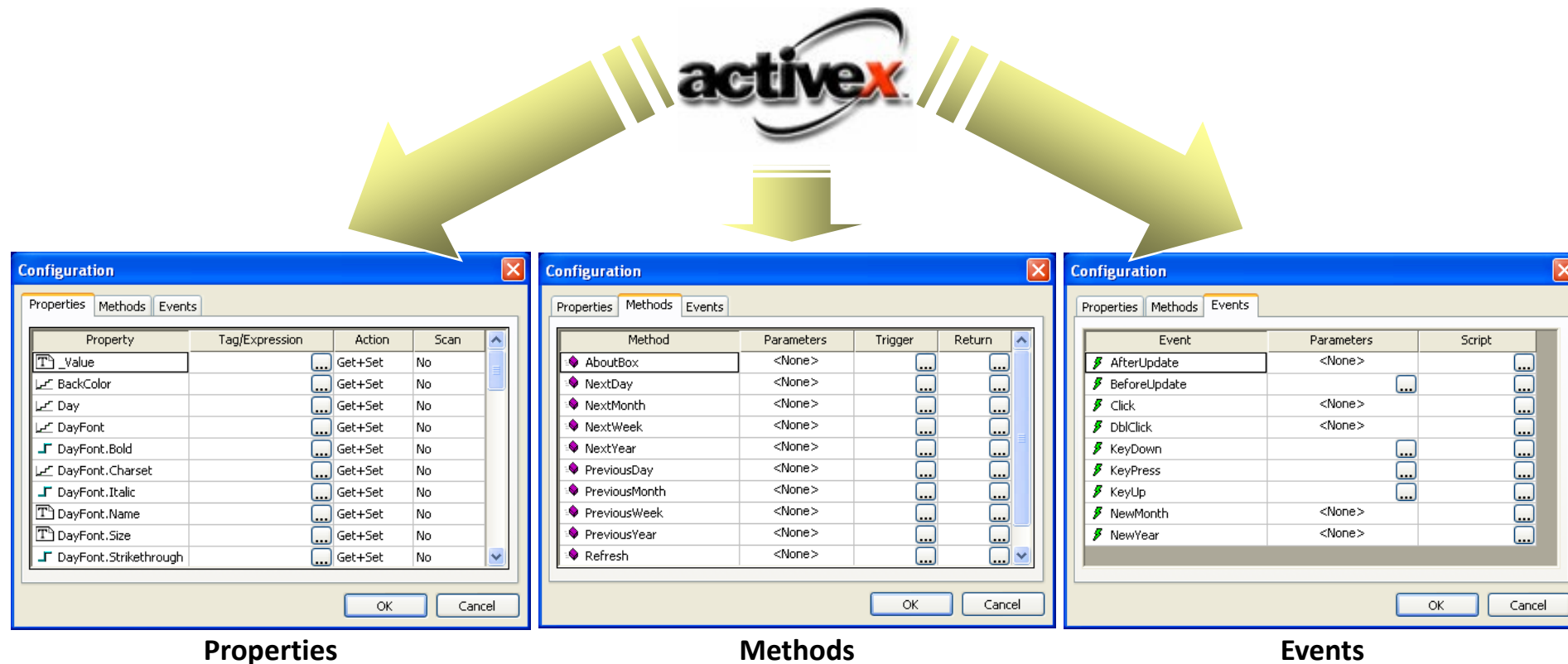
Tab-based interface  
increases productivity



Microsoft Excel compatible (copy/paste data and follow the same standards)



# ActiveX Controls Container



ActiveX Interface Enhancements:

- Support for Events in addition to Properties and Methods.
- Embedded user-friendly interface allowing the user to link tags to Properties and Methods, and to link expressions to Events. Does not require scripting to integrate the object in the project.

# Tools for FDA 32 CFR Part 11



U.S. Food and Drug Administration



**Advanced**

**Options**

Minimum Password Size: 0 chars.

Password aging: 0 days.

E-signature time-out: 0 minutes.

**Account Auto Lock-up**

Enable

Lock-up account after: 0 invalid attempts.

Reset counter after: 0 minutes.

OK Cancel

## Security System

Password Size  
Password Aging  
E-signature  
Auto Lock-up user

**Event Settings**

Enable event logger Disable: [ ] Event Database...

**Settings**

Security System  Recipe  Custom Messages

Display  Report  System Warning

Tags:

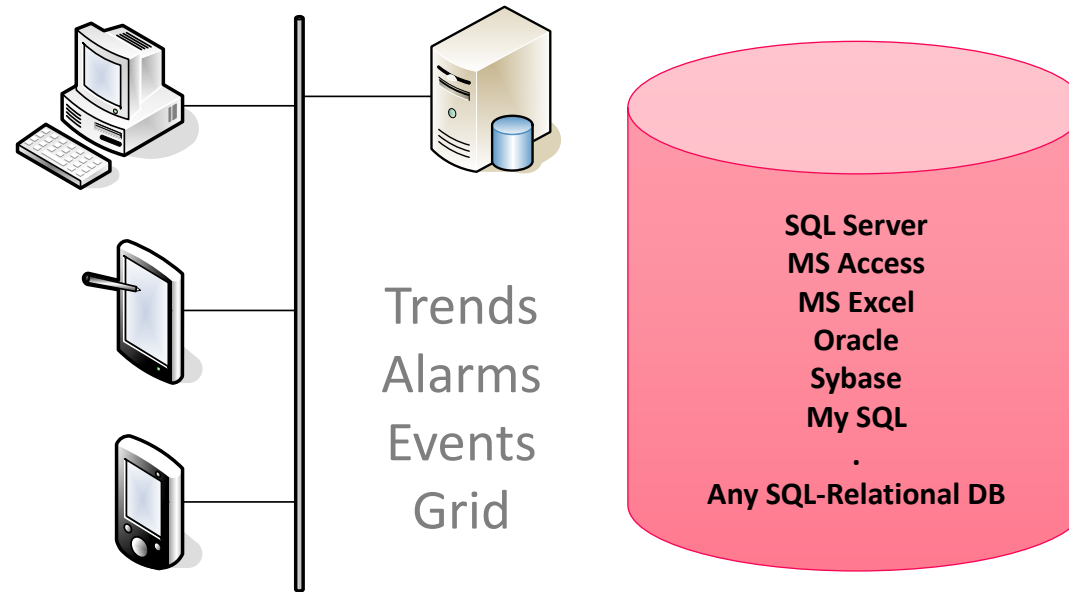
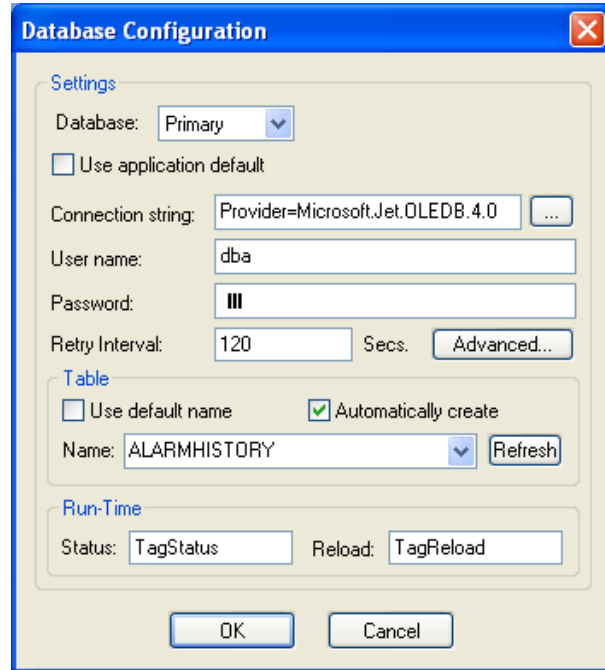
	Tag Name	Dead Band	Message
1		0.000000	
2		0.000000	
3		0.000000	
4		0.000000	

OK Cancel

## Event Logger

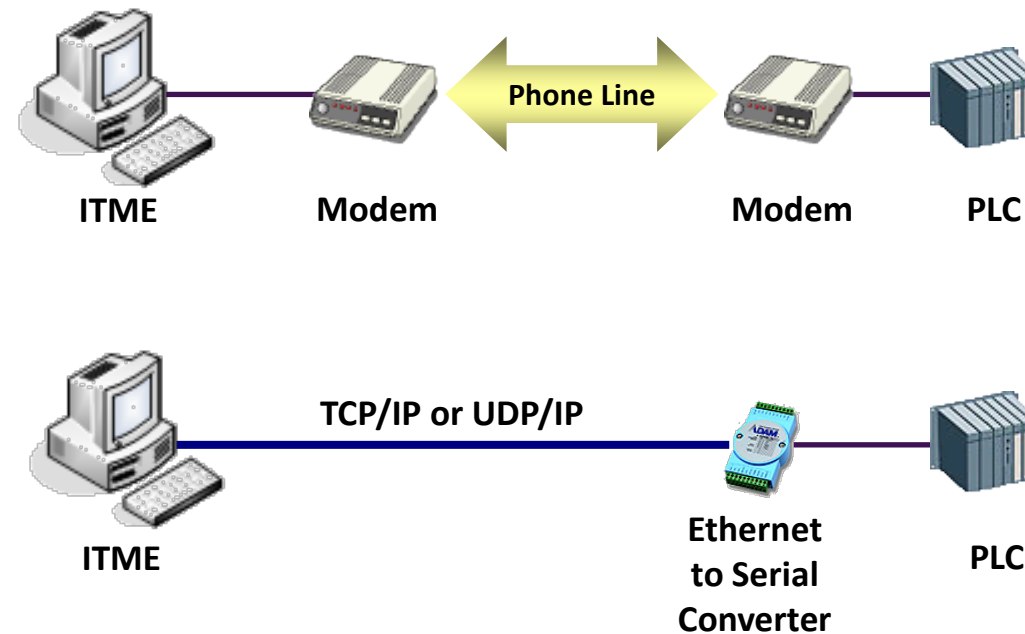
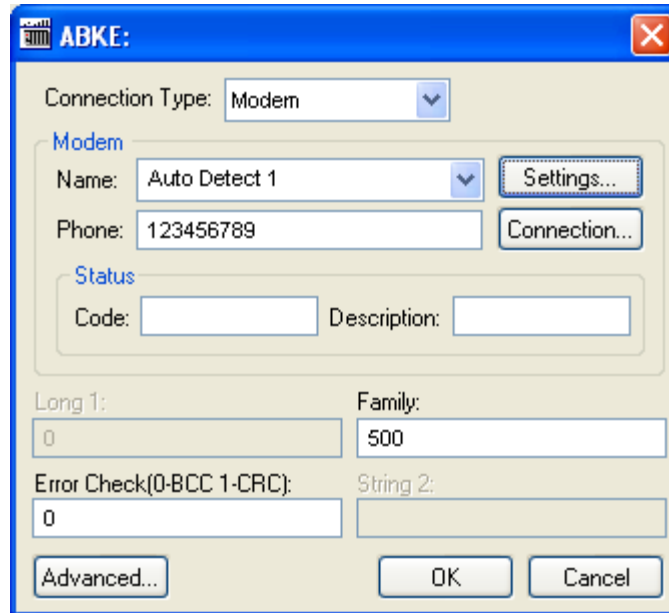
System Events  
Process Events  
User Events  
Read-Only signed reports

# Native Interface to any SQL Relational Database



- ✓ Support for third-party SQL Relational Databases such as SQL Server, MS Access, Oracle, Sybase and others, via standard ADO.NET providers.
- ✓ Embedded ADO.NET interface for all history tasks (Alarms, Events and Trends) as well as for the native Grid object.
- ✓ Database connectivity from any platform supported by ITME or CEView (including *Windows CE and PocketPC*), through the unique Studio Database Gateway, which provides connection to the database through a standard TCP/IP link.
- ✓ User-friendly interface which does not require scripting or SQL knowledge to configure the database interface.
- ✓ Support for Secondary Database in the modes “Redundancy” or “Store and Forward,” increasing the reliability of the system and avoiding loss of data.

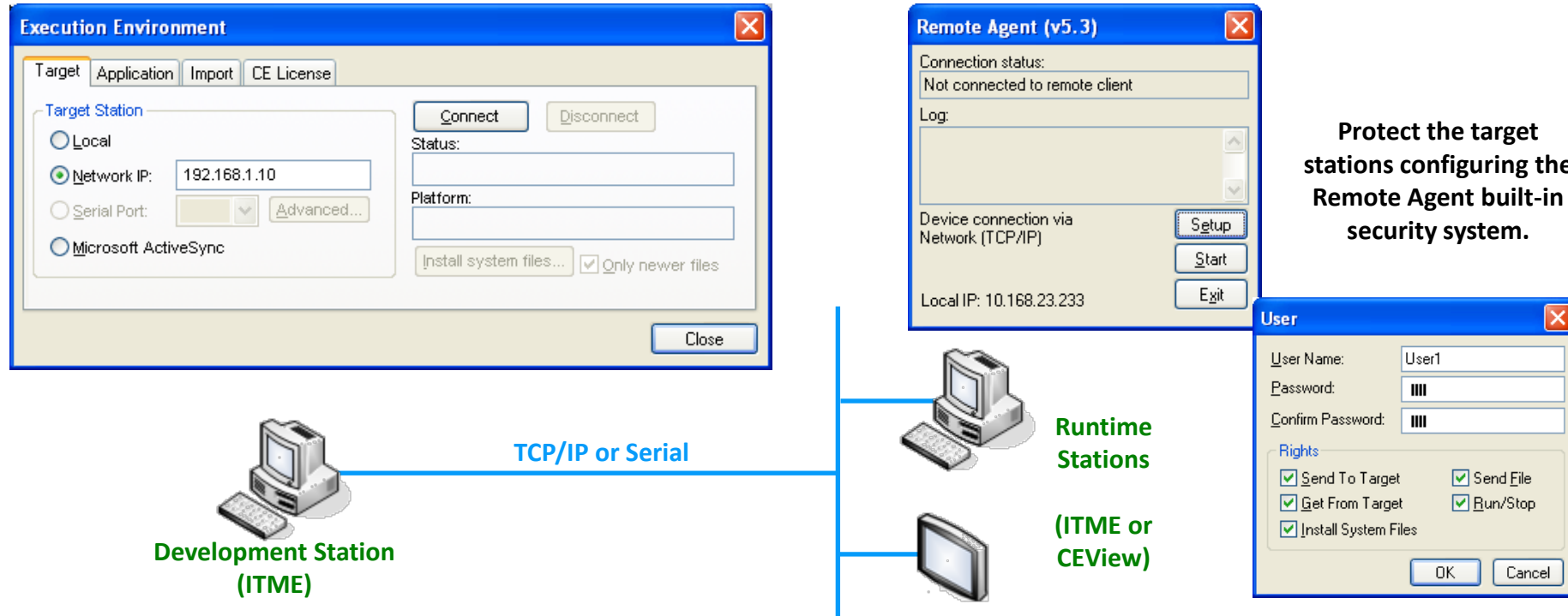
# Native Serial Communication Encapsulation



Communication Drivers Enhancements:

- ✓ Option to dial to a remote site automatically and connect a remote device (e.g. PLC) through modems connected with the standard phone line.
- ✓ Option to encapsulate the protocol from any serial communication driver available in ITME (or CEView) under TCP/IP or UPD/IP, to exchange data with remote devices (e.g. PLCs) through an “Ethernet to Serial converter.”

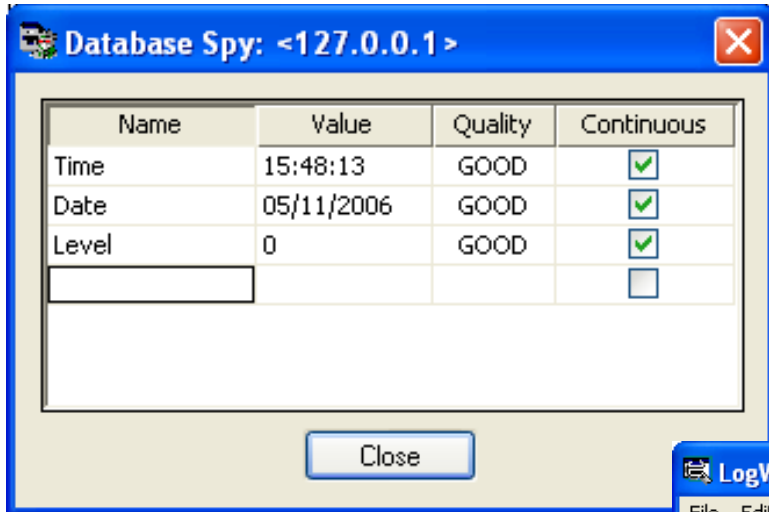
# Remote Management



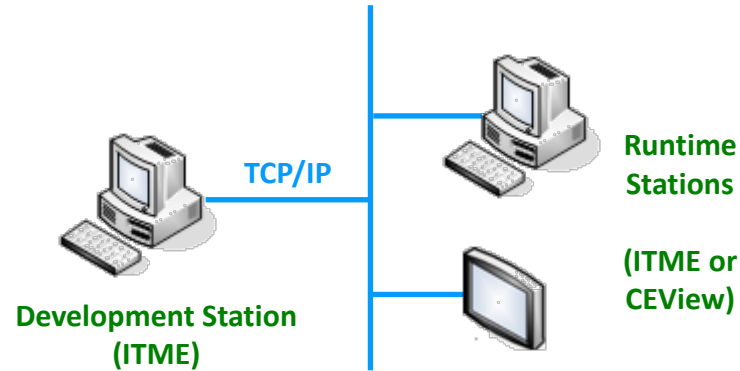
- ✓ Connect to remote runtime stations from the Development Station (ITME) through any valid TCP/IP link, such as Ethernet, Wireless Ethernet (IEC 802.11), Internet, Dial-Up connection.
- ✓ Download the local application to the target station; Import the application from the target station; Install or upgrade the System Files (e.g.: CEView runtime software); License remotely; and Start or Stop the application remotely.
- ✓ Implement changes on the screens from the development station and download them as soon as the changes are saved (**On-line Remote Configuration**).

# Remote Troubleshooting

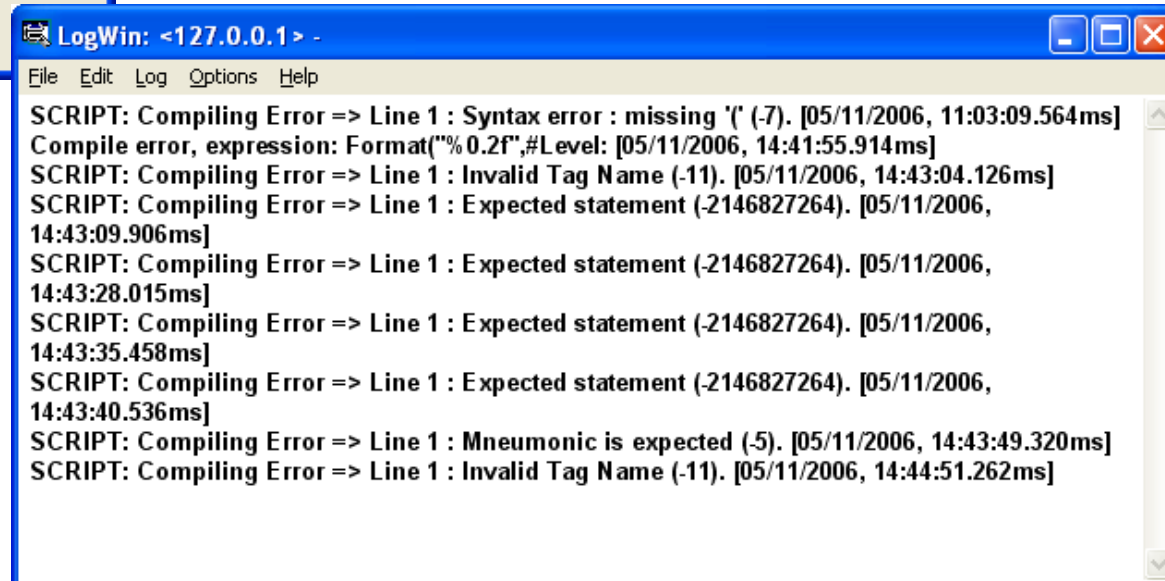
## Remote Database Spy



Name	Value	Quality	Continuous
Time	15:48:13	GOOD	<input checked="" type="checkbox"/>
Date	05/11/2006	GOOD	<input checked="" type="checkbox"/>
Level	0	GOOD	<input checked="" type="checkbox"/>
			<input type="checkbox"/>



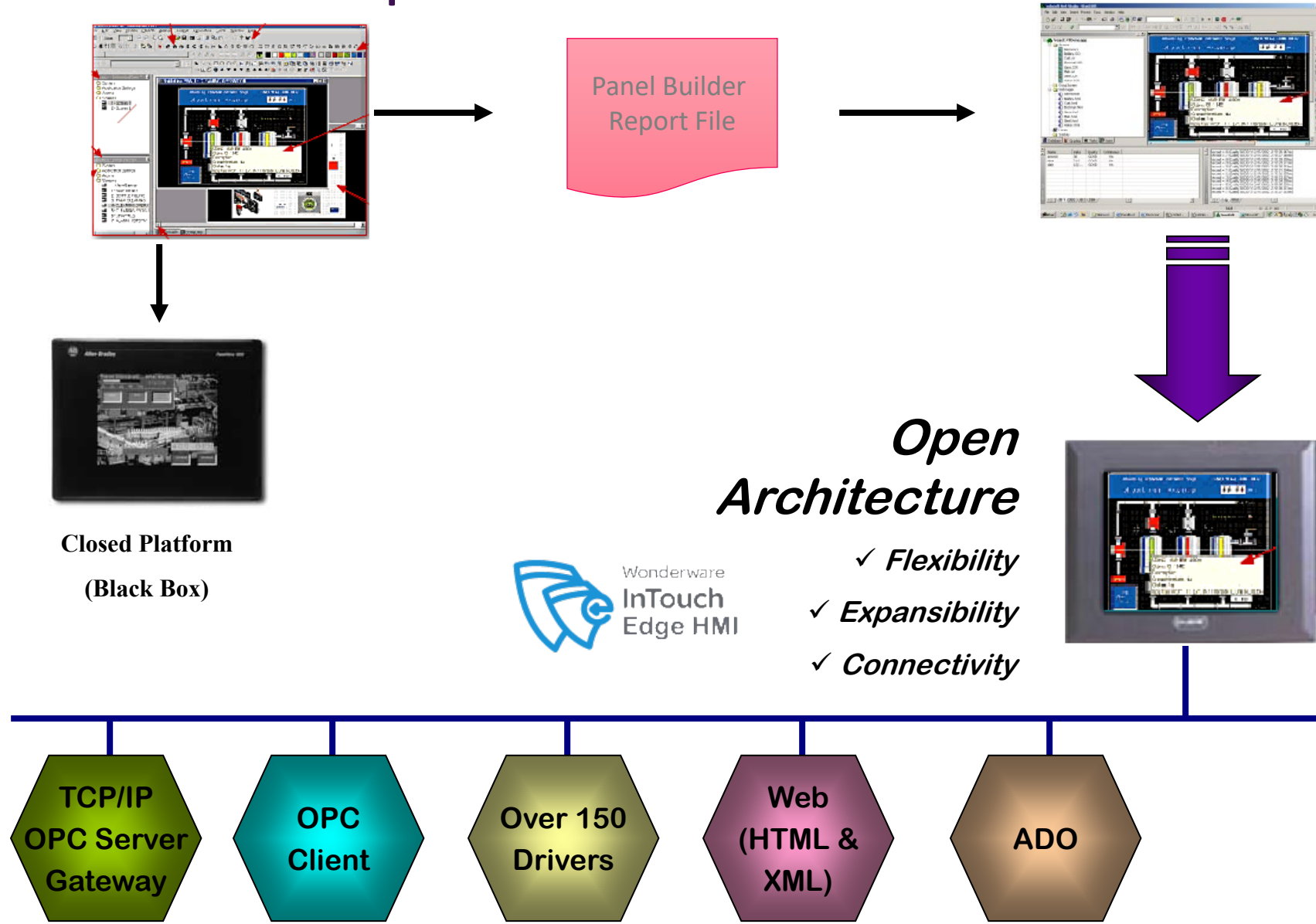
## Remote LogWin



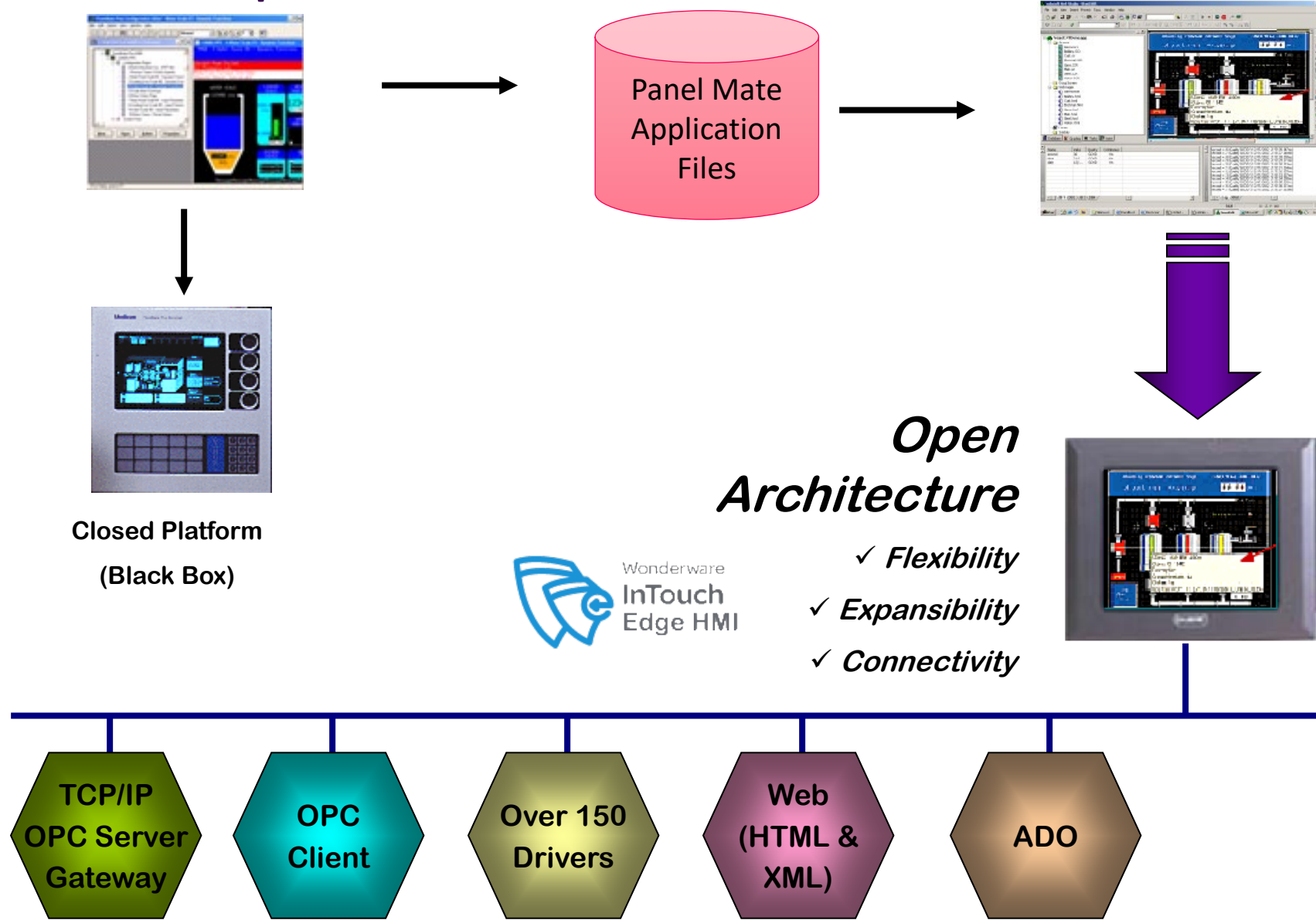
```
LogWin: <127.0.0.1> -
File Edit Log Options Help
SCRIPT: Compiling Error => Line 1 : Syntax error : missing '(' (-7). [05/11/2006, 11:03:09.564ms]
Compile error, expression: Format("% 0.2f",#Level: [05/11/2006, 14:41:55.914ms]
SCRIPT: Compiling Error => Line 1 : Invalid Tag Name (-11). [05/11/2006, 14:43:04.126ms]
SCRIPT: Compiling Error => Line 1 : Expected statement (-2146827264). [05/11/2006,
14:43:09.906ms]
SCRIPT: Compiling Error => Line 1 : Expected statement (-2146827264). [05/11/2006,
14:43:28.015ms]
SCRIPT: Compiling Error => Line 1 : Expected statement (-2146827264). [05/11/2006,
14:43:35.458ms]
SCRIPT: Compiling Error => Line 1 : Expected statement (-2146827264). [05/11/2006,
14:43:40.536ms]
SCRIPT: Compiling Error => Line 1 : Mnemonic is expected (-5). [05/11/2006, 14:43:49.320ms]
SCRIPT: Compiling Error => Line 1 : Invalid Tag Name (-11). [05/11/2006, 14:44:51.262ms]
```

- ✓ Debug the application running in the remote target stations from the development station.
- ✓ Monitor tags, Force tags or execute Expressions remotely.
- ✓ Monitor events and log the protocol communication remotely.


# PanelBuilder32® Import Wizard




# PanelMate® Import Wizard





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AVEVA is a global leader in engineering and industrial software driving digital transformation across the entire asset and operational life cycle of capital-intensive industries.

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