



TopView SCADA Connect Users Guide

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Last update: January 19, 2024

Recent updates:

- January 19, 2024
 - Updates for changes in 7.2
- November 15, 2023
 - Added information for updated “Install for HMI” UI in v7.2
 - Moved “Redundant Server” option to “older settings” (removed in v7.2)
- May 18, 2023
 - Documented the ability to modify the server name for imported SCADA alarm tags in TopView 7.1 and later
- May 17, 2022
 - For TopView 6.37, select “OPC Classic” on license dialog
 - Tag Importer: option to include example SCADA tags and Output Points
 - OPC Classic and OPC UA information added
 - Various updates to SCADA-specific settings
- March 24, 2022
 - ClearSCADA/GEO SCADA: Additional OPC Server information added to Gateway Connection Issues > ClearSCADA/GEO SCADA
- March 17, 2022
 - Wonderware OIGateway/FSGateway: how to make a backup of your current gateway settings
- January 25, 2022
 - ClearSCADA/GEO SCADA: HMI Sync with super user may not succeed, warning about using the SCADA Connect Tag Importer preview in TopView 6.36
- August 23rd, 2021
 - FactoryTalk severity tag (priority) may require creation of severity tag in FactoryTalk
- July 13th, 2021
 - New recommendation for reconnect attempts for Wonderware/Aveva InTouch
- June 10th 2021
 - Updates to support the new SCADA Connect tag importer in version 6.36
 - Instructions for object/tag dump to CSV for System Platform
- March 15th, 2021
 - Added additional reminder to deploy objects in HMI Sync Vendor specific notes for System Platform
- January 21, 2021

- Added where/machine to install TopView for FactoryTalk A&E
- December 14, 2020
 - Updated for TopView 6.35 installation that installs SCADA Connect
- October 8, 2020
 - WinCC changed to SIMATIC WinCC
- October 5, 2020
 - Added support for RSView, FactoryTalk View SE HMI Alarm Tags and Controller-based alarms
- August 27, 2020
 - Added support for Citect, ClearSCADA, WinCC v7, and RSLinx Pro with PLC
- March 10, 2020:
 - Added support for GE iFIX and InTouch Edge

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Introduction

This purpose of this document is to assist the TopView user with the initial installation and configuration of TopView alarm and notification software with SCADA Connect.

In addition to this document, we encourage users to watch our [SCADA Connect videos](#) for step-by-step explanations and demonstrations of using TopView with SCADA Connect.

TopView and SCADA Connect

TopView is the alarm and notification software. Once configured, TopView can monitor alarms, send notifications, create reports, etc.

SCADA Connect provides configuration of the SCADA System gateway for TopView and synchronization of your SCADA alarms to a TopView configuration (HMI Sync). For some SCADAs it also includes example scripts to create SCADA tags for health monitoring between TopView and the SCADA Systems as well as example TopView objects for your HMI.

SCADA System/HMI Support

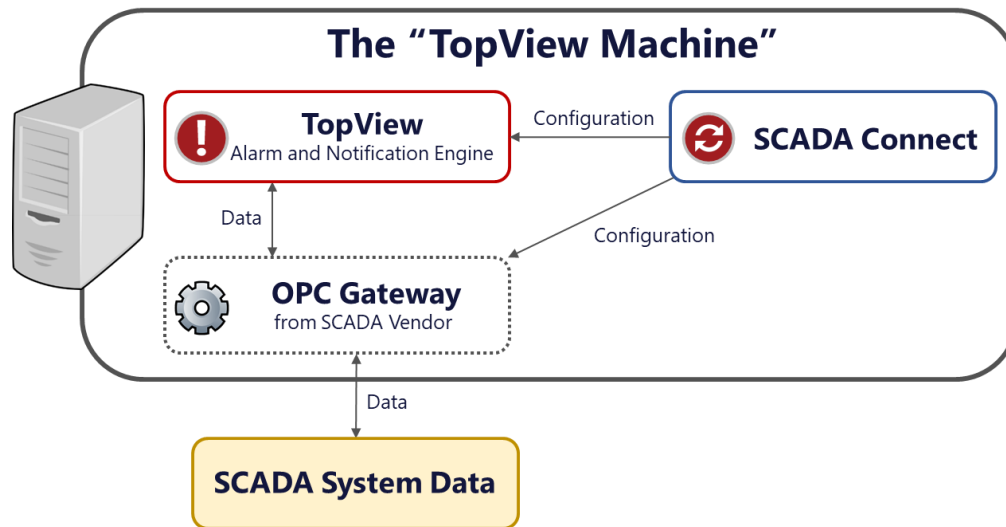
Current support for SCADA Connect and HMI Sync:

SCADA/HMI	HMI Sync
Aveva/Wonderware System Platform	Yes
Aveva/Wonderware InTouch	Yes
Aveva/Wonderware InTouch Edge	Yes
Rockwell FactoryTalk View SE <ul style="list-style-type: none">A&E Tag-Based – newer FT View versionsHMI Tag Alarms – older FT View versionsA&E Controller-based alarms	Yes
Rockwell RSLinx Pro w/ Logix PLC	Yes
Rockwell RSView32 (HMI Tags)	Yes
GE iFIX	Yes
Schneider Citect / Geo SCADA	Yes
Schneider ClearSCADA / Geo SCADA Expert	Yes
Siemens SIMATIC WinCC v7	Yes
Generic OPC (Any other HMI or PLC that is not supported)	N/A

Communication Overview (Gateway)

Gateway (from the SCADA/HMI Vendor)

TopView communicates to the SCADA System through an OPC Server in a gateway provided by the SCADA vendor.



Gateways:

The various SCADA vendors provide the OPC gateway as either a built-in feature or separate installation. See "Gateways" for details on the OPC gateway provided by each vendor.

Although OPC communication can occur remotely between the client (TopView) and the OPC Server (gateway), we recommend (and only support) installation of the gateway on the same machine as TopView and SCADA Connect. This provides local OPC communication between TopView and the gateway. The gateway can then communicate remotely or locally to the SCADA System.

If remote connection is required between the TopView machine and the gateway, please contact your OPC vendor for instructions to allow remote OPC client (TopView) connections.

OPC Information

OPC Classic or OPC-UA?

OPC UA stands for OPC Unified Architecture. It is an extensible, platform-independent standard that enables the secure exchange of information in industrial systems.

Many people are familiar with the older DCOM-based OPC, now called OPC Classic.

How is OPC UA different than OPC Classic?

- OPC Classic relies on Microsoft technologies while OPC UA is platform independent
- OPC Classic does not have built-in security for access control, authentication, and encryption
- OPC UA implements cross-platform security based on the public key infrastructure (PKI) using industry standard digital certificates

In the industrial software world, many vendors have added support for OPC UA, sometimes in addition to OPC Classic.

Starting with TopView v6.37, both OPC Classic and OPC UA are supported in TopView, although OPC Classic is currently used by SCADA Connect and therefore TopView configurations created by SCADA Connect. We expect this to change in later versions of TopView and SCADA Connect.

SCADA/HMI	SCADA Connect support	
	OPC Classic	OPC UA
Aveva/Wonderware System Platform	Yes	No
Aveva/Wonderware InTouch	Yes	No
Aveva/Wonderware InTouch Edge	Yes	No
Rockwell FactoryTalk View SE <ul style="list-style-type: none">• A&E Tag-Based – newer FT View versions• HMI Tag Alarms – older FT View versions• A&E Controller-based alarms	Yes	No
Rockwell RSLinx Pro w/ Logix PLC	Yes	No
Rockwell RSView32 (HMI Tags)	Yes	No
GE iFIX	Yes	No
Schneider Citect / Geo SCADA	Yes	No
Schneider ClearSCADA / Geo SCADA Expert	Yes	No
Siemens SIMATIC WinCC v7	Yes	No

OPC DA Specification

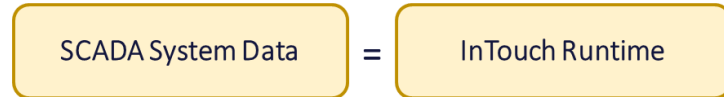
TopView and SCADA Connect allow the user to monitor the current value of “tags” within the OPC Server. For OPC Classic these are called “items” and in OPC UA they are called “node attributes”.

The OPC specification that allows monitoring of current values is [Data Access](#), or DA. This is the specification that most people are referring to when they mention “OPC”.

Therefore, for SCADA Connect users your OPC Server should support the Data Access (DA) specification.

Aveva/Wonderware InTouch (without System Platform)

TopView connects to a single InTouch runtime application through the gateway (FSGateway or OIGateway from Aveva/Wonderware). The InTouch runtime needs to be running before TopView can monitor the data.



The InTouch runtime (SCADA System) can be on the TopView machine (local) or on a remote machine. Configuration of the gateway allows the user to specify the machine with the InTouch runtime.

Licensing

A TopView license with SCADA Connect supports one InTouch runtime. If multiple InTouch runtimes (different applications, different tags) are configured through the same gateway:

- A single TopView installation will require a “data server” per runtime. Each TopView license comes with a default of one data server.
- a separate TopView Engine should run for each InTouch runtime

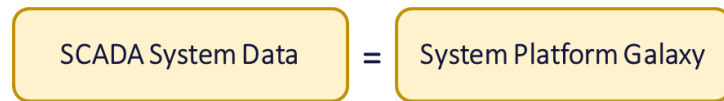
Note: It is common for users to have multiple InTouch runtimes within the same application. All of the runtimes within an application have the same tags, so TopView only needs to connect to one of the runtimes.

If different applications exist with different tags (e.g., one for Water, one for Wastewater) to be monitored by TopView, this will require TopView to connect to multiple runtimes (one per application) and will require a license with more than one data server (one per runtime)

Aveva/Wonderware System Platform

TopView connects to a "Galaxy" through the gateway (FSGateway or OIGateway from Aveva/Wonderware).

Galaxy: "The complete ArchestrA system consisting of a single logical name space (defined by the Galaxy Database) and a collection of Platforms (networked machines), Engines and objects."



Most users will only have one Galaxy on one network. The gateway only allows a connection to a single Galaxy.

The "TopView machine" can be any machine (called "platform") that is part of the Galaxy. Some users may prefer to install TopView on the Galaxy repository node, and others prefer to install it on a dedicated server or with one of the App Engines.

TopView will have access to all data in the Galaxy through the OPC gateway. The alarms that TopView monitors are inside the System Platform App Engine.

Licensing

A TopView license with SCADA Connect can connect to a single Galaxy. If multiple Galaxies are configured within TopView:

- additional "data servers" must be purchased for the TopView license (one for each additional gateway/galaxy)
- a separate TopView Engine should run for each Galaxy

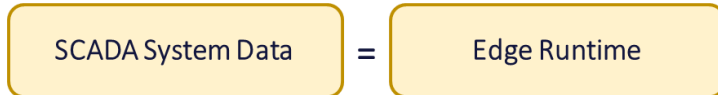
InTouch with System Platform

When using InTouch with System Platform, InTouch is just a "user interface" to the AppEngine and does not need to be running for TopView to monitor the data in the Galaxy.

Aveva/Wonderware InTouch Edge (Indusoft)

Edge has an integrated OPC Server that should already be running once Edge is installed. The project should be started before TopView can monitor the data.

TopView connects to a single Edge runtime project through the included OPC Server gateway.



The gateway provides access to both alarm and analog tag data. No additional gateway configuration work is required.

InTouch Edge OPC-DA Server (default used by TopView):

- **Studio.Scada.OPC.4** **used by SCADA Connect, browsable**

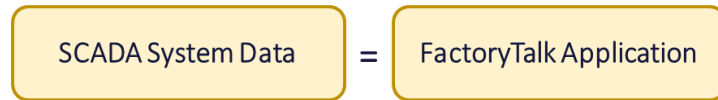
Licensing

A TopView license with SCADA Connect supports one Edge runtime. If multiple Edge runtimes (different gateway, applications, tags) are configured:

- A single TopView installation will require a “data server” per runtime. Each TopView license comes with a default of one data server.
- A separate TopView Engine should run for each Edge runtime

Rockwell FactoryTalk View SE (A&E tag based, HMI tags)

TopView can connect to one “application” inside of a single FactoryTalk directory through the gateway (FactoryTalk Gateway, now FactoryTalk Linx Gateway).



TopView should be installed on the FactoryTalk A&E Server or a FactoryTalk View node.

FactoryTalk Directory and Application and hierarchy:

- FactoryTalk Directory
 - FactoryTalk Application
 - Area
 - Area
 - HMI Server
 - A&E Server
 - Data Server
 - FactoryTalk Application
 - Area
 - Area
 - HMI Server
 - A&E Server
 - Data Server

Your structure and content can be viewed in the FactoryTalk Administration Console.

Configuration of FactoryTalk Gateway (now called FactoryTalk Linx Gateway) involves configuration of “scope”. If scope is selected as an application then anything inside any area within the application can be discovered by FT Gateway and therefore seen by TopView. See “Manual Step: Verify/Configure your gateway”

Controller-based alarms can also be exposed through the A&E Server. See “Rockwell FactoryTalk View SE (A&E Controller-based alarms)”

Licensing

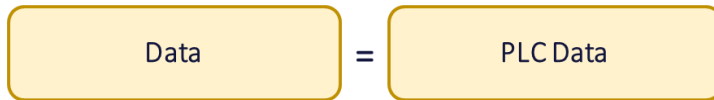
A TopView license with SCADA Connect can connect to a single Application (the highest scope allowed) in one FactoryTalk Linx Gateway. Multiple A&E Servers may exist within a single application.

If multiple Applications exist within one FactoryTalk Directory, it is possible to have multiple FactoryTalk Linx Gateways installed, each accessing an Application. A single TopView installation may be able to monitor each Application’s data through by accessing each Gateway. If this configuration is desired:

- additional “data servers” must be purchased for the TopView license (one for each additional gateway /application)
- a separate TopView Engine should run for each gateway/application

Rockwell FactoryTalk View SE (A&E Controller-based alarms)

TopView can connect to one or more PLCs/Controllers through the A&E Server gateway (FactoryTalk Gateway, now called FactoryTalk Linx Gateway).

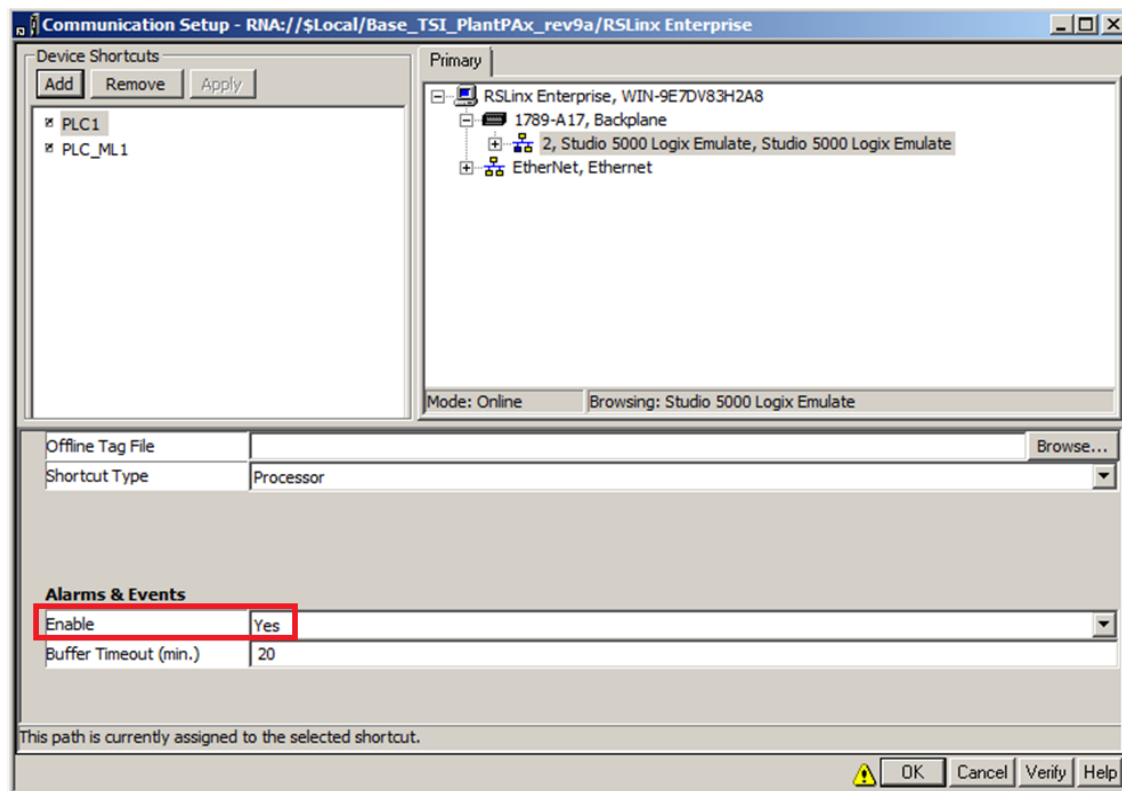


TopView should be installed on the FactoryTalk A&E Server or a FactoryTalk View node.

Expose controller-based alarms to FactoryTalk View A&E Server

Controller-based alarms can be exposed to A&E and TopView:

- In FactoryTalk View SE, go to the RSLinx Enterprise configuration
- Configure a shortcut/topic for each PLC that contains the controller-based alarms
- Change the Enable setting under "Alarms & Events" to "Yes".
- The controller-based alarms should now be visible in the A&E Server gateway



Licensing

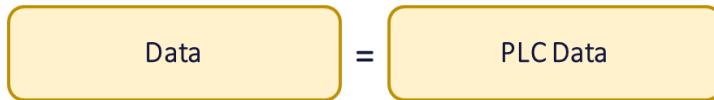
A TopView license with SCADA Connect can connect to a single FactoryTalk Linx Gateway.

If multiple FactoryTalk Linx Gateways are accessed by a single TopView installation:

- additional “data servers” must be purchased for the TopView license (one for each additional gateway)
- a separate TopView Engine should run for each gateway/application

Rockwell RSLinx Pro w/ Logix PLC

A license for the RSLinx Professional version or higher is required to use OPC as the gateway for data in the PLC.



Note: RSLinx should not be used for OPC communications to FactoryTalk View SE and should only be used for direct connections to a PLC. Use FactoryTalk Gateway for connections to View SE.

Monitoring of alarms in the PLC through RSLinx Pro:

- Supported PLCs:
 - SLC/Micrologix (older)
 - CompactLogix and ControlLogix (newer)
- OPC Server must be configured with a “Topic” for each PLC to be monitored through the OPC Server

Licensing

A TopView license with SCADA Connect can connect to and monitor the alarms in a RSLinx Pro OPC Server and the one or more PLCs configured as Topics.

A single TopView installation may be able to monitor alarms in multiple RSLinx OPC Servers. If this configuration is desired:

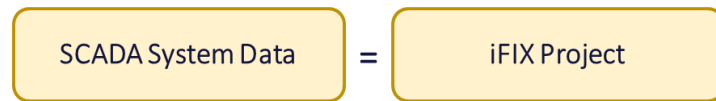
- additional “data servers” must be purchased for the TopView license
- a separate TopView Engine should run for each gateway/project

Rockwell RSView32

RSView32 has an integrated OPC Server that can be used as the Gateway.

GE iFIX

iFIX has an integrated OPC Server that should already be running once iFIX is installed.



The gateway provides access to both alarm and analog tag data. No additional gateway configuration work should be required.

iFIX provides multiple OPC-DA Servers. Only one of these is used by TopView/SCADA Connect as the gateway OPC Server

- | | |
|--------------------------------|--|
| • Intellution.OPCiFIX.1 | used by SCADA Connect, browsable |
| • Intellution.OPCEDA.3 | not used by SCADA Connect, browsable |
| • Intellution.iFixOPCClient | not used by SCADA Connect, not browsable |

Licensing

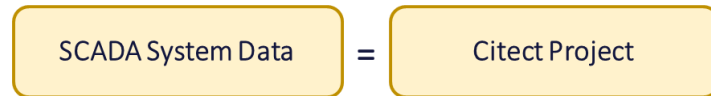
A TopView license with SCADA Connect can connect to and monitor the alarms in a single iFIX project.

A single TopView installation may be able to monitor alarms in multiple iFIX projects. If this configuration is desired:

- additional “data servers” must be purchased for the TopView license (one for each additional gateway /project)
- a separate TopView Engine should run for each gateway/project

Schneider Citect

The Citect OPC-DA Server can expose both analog tags and alarm tags.



The OPC Server name is SchneiderElectric.SCADA.OpcDaServer.1 (default name in TopView)

Licensing

A TopView license with SCADA Connect can connect to and monitor the alarms in a single Citect project.

A single TopView installation may be able to monitor alarms in multiple Citect projects. If this configuration is desired:

- additional “data servers” must be purchased for the TopView license (one for each additional gateway/project)
- a separate TopView Engine should run for each gateway/project

Schneider ClearSCADA/Geo SCADA Expert

The ClearSCADA/Geo SCADA OPC-DA Server can expose both analog tags and alarm tags.



The Gateway for ClearSCADA/GeoSCADA is the ClearSCADA/Geo SCADA OPC-DA Server. The gateway provides access to alarm and analog tag data. The OPC Server name is Serck.ScxV6OPCDA.Local.localhost (default name in TopView)

For OPC Connection information for ClearSCADA/GeoSCADA, see “ClearSCADA/GEO SCADA” under “Gateway Connection Issues”

Licensing

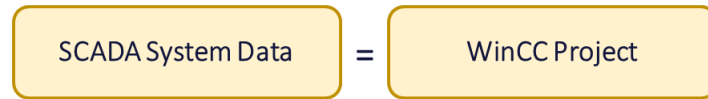
A TopView license with SCADA Connect can connect to and monitor the alarms in a single ClearSCADA/Geo SCADA project.

A single TopView installation may be able to monitor alarms in multiple projects. If this configuration is desired:

- additional “data servers” must be purchased for the TopView license (one for each additional gateway/project)
- a separate TopView Engine should run for each gateway/project

Siemens SIMATIC WinCC v7

The WinCC OPC-DA Server exposes the alarm tags.



Licensing

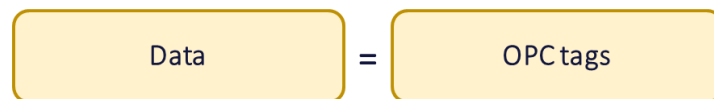
A TopView license with SCADA Connect can connect to and monitor the alarms in a single WinCC project.

A single TopView installation may be able to monitor alarms in multiple WinCC projects. If this configuration is desired:

- additional “data servers” must be purchased for the TopView license (one for each additional gateway/project)
- a separate TopView Engine should run for each gateway/project

Other SCADA/HMI

Use an OPC Server (from the vendor or 3rd party) as the gateway. The OPC Server should support OPC-DA 2.0 or later.



Prerequisites

Operating System

TopView (with SCADA Connect) and your gateway should be installed on the same machine. The TopView download page contains information on the required Windows versions.

.Net Framework

The TopView download page contains information on the required .Net Framework. See the TopView download page for more information.

TopView and SCADA Connect versions

For TopView 6.34 and earlier (separate TopView and SCADA Connect installations), the versions of TopView and SCADA Connect should match at the major and minor level. For example, SCADA Connect 6.33.x should be installed with TopView 6.33.x. TopView 6.35 and later installs SCADA Connect with TopView (single installation).

Gateways

Wonderware/AVEVA InTouch and System Platform

TopView communication occurs through FSGateway or OIGateway. This gateway should be installed on the same machine as TopView and SCADA Connect.

InTouch – Restart the gateway after project changes

We recommend restarting the gateway after InTouch project changes. Otherwise, you may see bad status for some of the alarm tags. See “Bad Status Tags”.

OI Gateway notes

- OIGateway requires Olcore to be installed first
- Writing acknowledge from TopView:
In order to support writing or alarm acknowledge from TopView, OIGateway G-2.2 (v5.2) or later is required. Note: as of August 2018, OI-Gateway is mislabeled on the Wonderware support website downloads as G-2.1 v5.2, but it installs as G-2.2

Wonderware/AVEVA InTouch Edge

The included gateway provides access to both alarm and analog tag data. No additional gateway configuration work is required.

InTouch Edge OPC-DA Server:

- **Studio.Scada.OPC.4** **used by SCADA Connect, browsable**

Rockwell FactoryTalk View SE

For FactoryTalk View SE (A&E tag based, HMI Alarms Tag, A&E Controller-based), TopView communication occurs through FactoryTalk (FT) Gateway, previously called RSLinx OPC Gateway, now also called FactoryTalk Linx Gateway. This gateway should be installed on the same machine as TopView and SCADA Connect.

Rockwell RSLinx Pro

The included OPC Server can provide access to data in one or more PLCs.

Rockwell RSView

The included OPC Server can provide access to data in one or more PLCs.

GE iFIX

iFIX provides multiple OPC-DA Servers. Only one of these is used by SCADA Connect as the gateway OPC Server

- **Intellution.OPCiFIX.1** **used by SCADA Connect, browsable**
- **Intellution.OPCEDA.3** not used by SCADA Connect, browsable
- **Intellution.iFixOPCClient** not used by SCADA Connect, not browsable

Schneider Citect

The included OPC Server gateway provides access to alarms and analog tag data.

Citect OPC Server: **SchneiderElectric.SCADA.OpcDaServer.1**

Schneider ClearSCADA/GEO SCADA

The included OPC Server gateway provides access to alarms and analog tag data.

ClearSCADA OPC Server: **Serck.ScxV6OPCDA.Local.localhost**

For OPC Connection information for ClearSCADA, see “ClearSCADA/GEO SCADA” under “Gateway Connection Issues”

Siemens SIMATIC WinCC v7

The included OPC Server gateway provides access to alarms and analog tag data.

Gateway for other SCADA Systems

The OPC Server from the SCADA vendor

Installation

Overview

The installation of TopView with SCADA Connect should include

- The installation of the gateway for your SCADA System if required
- The installation of TopView and SCADA Connect

These items should be installed on the same machine, referred to as “The TopView machine”. See “Communication Overview” for more information.

TopView download page

When you purchase or request a demo of TopView and SCADA Connect you will receive a download email with a license key and a link to the TopView download page.

The TopView download page provides the installation programs for TopView and SCADA Connect.

- **In TopView 6.34 and earlier**, TopView and SCADA Connect are separate installations so you will need to download and install each one.
- **In TopView 6.35 and later**, the TopView installation includes SCADA Connect. No separate installation is required.
- **Patches:** please note any patches listed on the download page. These patches are not part of the installations and should be applied to systems affected by the issue resolved with the patch.

Gateway installation

If gateway installation is required, this should be performed before TopView and SCADA Connect. If you have already installed TopView and SCADA Connect, you should install the gateway before starting any TopView or SCADA Connect configuration.

If the OPC Gateway is not included with your SCADA software you will need to obtain the gateway installation program from your SCADA vendor.

- Wonderware InTouch and System Platform
 - Install FSGateway or OIGateway (recommended)
 - OIGateway: also required OICore to be installed first
- Rockwell FactoryTalk SE (A&E and HMI Alarm Tags)
 - Install FactoryTalk (FT) Gateway, aka FT Linx Gateway
- Other SCADA Systems
 - The OPC-DA Server from the vendor should be installed.

Configuration of the gateway for TopView will occur when you run SCADA Connect. See “SCADA Connect” ... “Install for your HMI” for more information.

TopView and SCADA Connect Installation

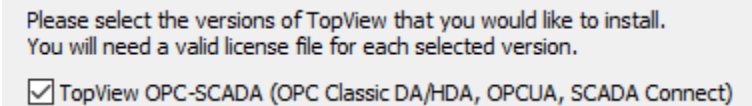
1. SCADA Connect installation (TopView 6.34 and earlier)

Note: Starting with TopView 6.35, SCADA Connect is installed with TopView. If you are using version 6.35 or later you can skip this step.

Download and run the SCADA Connect installation. If TopView is not yet installed, you should not run SCADA Connect after the installation is complete.

2. TopView installation

- a. The first screen will ask you to select the TopView data source. Select TopView OPC-SCADA



Please select the versions of TopView that you would like to install.
You will need a valid license file for each selected version.

☒ TopView OPC-SCADA (OPC Classic DA/HDA, OPCUA, SCADA Connect)

- b. Folder locations: the installation will ask for the folder locations for the application files (Program Path) and writable data files (Data Path). Most users should accept the default location.

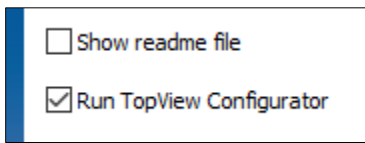
i. Program Path:

1. C:\ProgramFiles\Exele\TopView\ (v6.38 and later)
2. C:\ProgramFiles (x86)\Exele\TopView\ (v6.37 and earlier)

ii. Data Path: C:\ProgramData\Exele\TopView

Note: the default location for the DataPath may require elevated user permission for writing data which is acceptable for most users since the TopView Configurator can run elevated.

- c. On the last screen of the installation, choose “Run TopView Configurator”



☐ Show readme file

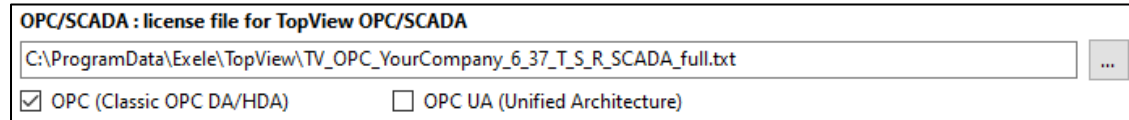
☒ Run TopView Configurator

3. TopView Configurator

- a. License file: upon first launch of the Configurator it will ask for the location of your TopView license file.

- i. Copy your TopView license file to this machine (suggested location is the TopView Data Path, C:\ProgramData\Exele\TopView\)

- ii. Choose the license file for the OPC/SCADA license file field:



The screenshot shows a dialog box titled "OPC/SCADA : license file for TopView OPC/SCADA". It contains a text field with the path "C:\ProgramData\Exele\TopView\TV_OPC_YourCompany_6_37_T_S_R_SCADA_full.txt" and a browse button "...". Below the text field are two checkboxes: "OPC (Classic OPC DA/HDA)" which is checked, and "OPC UA (Unified Architecture)" which is unchecked.

TopView currently Classic OPC for the systems supported by SCADA Connect.
If you see OPC and OPCUA checkboxes under the license file, check OPC Classic.
See "OPC Classic or OPC-UA?" for more information.

- b. OPC Server Alias: if the Configurator asks you to create an OPC Server Alias, you can choose "No" because this will be configured by SCADA Connect.
- c. Close the Configurator and run SCADA Connect (next section)

SCADA Connect

Users should run SCADA Connect before starting any configuration work in TopView.

Starting SCADA Connect

In TopView 6.35 and earlier, SCADA Connect runs as a separate application. In TopView 6.36 and later, SCADA Connect can run from within the Configurator using the SCADA Connect Tag Importer.

TopView 6.34 and earlier

A SCADA Connect shortcut should exist on your desktop. Right-click the desktop shortcut and choose “run as Administrator”. We recommend closing the Configurator while running SCADA Connect.

You can configure the shortcut to run with elevated permissions:

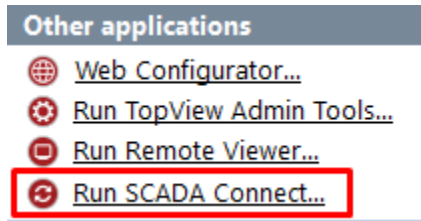
- Elevate each time: right-click the shortcut and choose “Run as Administrator”
- Configure the shortcut to run elevated:
 - Right-click the shortcut and choose Properties
 - On the Compatibility tab, check “Run this program as an administrator”

TopView 6.35

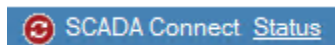
You can launch SCADA Connect from the Configurator. The Configurator should be running with elevated permissions (“as Administrator”). We recommend closing the Configurator after launching SCADA Connect.

From the TopView Configurator:

- Click “Run SCADA Connect” in the lower left corner



- Click SCADA Connect “Status” link on the bottom bar

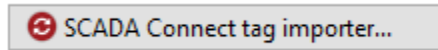


then “Launch SCADA Connect”

- Tools > SCADA Connect from the top menu
- Or Start > All Programs > Exele TopView > TopView SCADA Connect

TopView 6.36 and later

From the Configurator > Tags and Limits screen click the [SCADA Connect tag importer...] button



See “SCADA Connect tag importer” for more information.

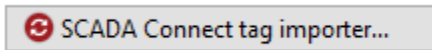
SCADA Connect tag importer

In TopView 6.36 and later the SCADA Connect tag importer is the interface between the TopView Configurator and SCADA Connect.

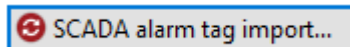
From the Configurator > Tags and Limits screen

In TopView 6.36 and later, run the SCADA Connect tag importer from the Configurator

6.36 – 7.1:



7.2 and later:





Configuration import options

SCADA Connect will import your SCADA alarm tags into a TopView configuration. You can choose to import the tags into the current configuration or a new configuration.

SCADA Connect Tag Import Options

SCADA Connect tag import options

 [SCADA Connect Users Guide \(PDF\)...](#)
 [SCADA Connect videos...](#)

You can import tags into the current TopView configuration or you can create a new configuration for the import.

When creating a new configuration, we'll start with a base configuration for your SCADA that contains recommended settings for your SCADA.
If your current configuration was not created from a base configuration for your SCADA, we recommend starting with a new configuration.
If your current configuration was created for a different SCADA, we recommend starting with a new configuration.

We recommend that you start with a new configuration because you are missing settings that are part of the base SCADA configuration

Import SCADA tags into

☐ The current configuration ()

SCADA/HMI:

Not Defined

☒ A new configuration for

Aveva/Wonderware System Platform

Configuration name:

SystemPlatform.cfg

☐ Include example SCADA tags

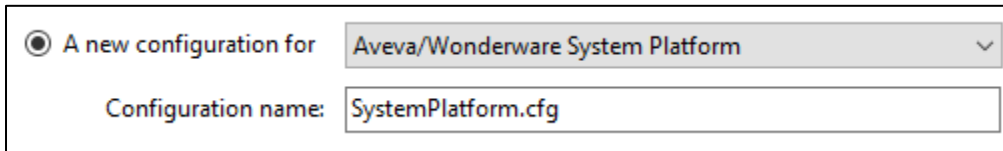
☐ Include example Output Points (health monitoring)

OK

Cancel

If this is your first import of SCADA alarm tags you should create a new configuration.

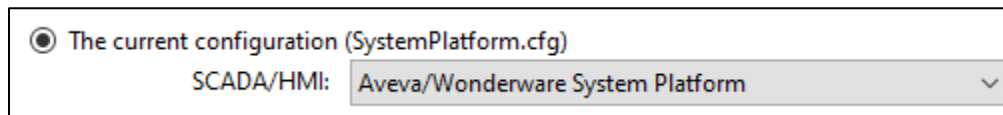
- Select your SCADA from the dropdown and confirm or change the name of the TopView configuration that will be created.



A screenshot of a configuration dialog box. It features a radio button labeled "A new configuration for" which is selected. To its right is a dropdown menu showing "Aveva/Wonderware System Platform". Below this, there is a text field labeled "Configuration name:" containing the text "SystemPlatform.cfg".

- In TopView 6.37 and later, you will have the following addition options
 - Include example SCADA tags: if selected, the TopView configuration will contain your imported alarm tags plus some examples and system tags. The example SCADA tags will show examples of how your SCADA's alarm tags may be configured. But these tags will not usually exist in your SCADA and must be removed before running the TopView Engine.
 - Include Example Output Points: if selected, the TopView configuration will contain example TopView Output Points for health monitoring of TopView in the SCADA. These Output Points will be disabled but can be enabled once you have created the output tags in your SCADA.
- Click [OK]
- The configuration file will be created and opened in the Configurator and the SCADA Connect Tag Importer will continue

If you would like to add tags to an existing configuration, confirm that the correct SCADA is selected and click [OK]



A screenshot of a configuration dialog box. It features a radio button labeled "The current configuration (SystemPlatform.cfg)" which is selected. To its right is a dropdown menu labeled "SCADA/HMI:" showing "Aveva/Wonderware System Platform".

Tag import

The tag import screen allows the user to

- Install SCADA Connect for your SCADA/HMI
- Retrieve SCADA Alarm tags into the return tag list
- Make optional changes to the tags in the tag list
- Choose which alarm tags to import to TopView
- Perform the import into the TopView Configurator tag list

SCADA Connect Tag Import for Aveva/Wonderware InTouch

SCADA Connect Users Guide (PDF)... SCADA Connect videos...

☒ New 'Retrieve HMI/SCADA alarm tags'

☒ New 'Install for your HMI/SCADA'

Retrieve HMI/SCADA alarm tags... Already installed HMI/SCADA for tag import: Aveva/Wonderware InTouch Install for another HMI/SCADA

HMI/SCADA tags (retrieved at 12/4/2023 9:14:36 AM) Tags for import Tag list filter Modify tags

Alarm tag name	Server	Description	Exists	Priority	Disabled	Tag Group (primary)	Tag Group (secondary)	Ackno
<input checked="" type="checkbox"/> InTouchOPC.ProdLevel	Gateway	Product storage level		1	False	NotifyGroup	Reactor	InTouch
<input checked="" type="checkbox"/> InTouchOPC.ReactLevel	Gateway	Reactor level		1	False	NotifyGroup	Reactor	InTouch
<input checked="" type="checkbox"/> InTouchOPC.ReactTemp	Gateway	Reactor temp		1	False	NotifyGroup	Reactor	InTouch

<< Import options

Import tags (3)

☒ Add

☐ Update

☐ Update and add

☐ Replace all

✗ Clear all tags

Displayed: (3/3) Exists in current configuration: (0/3) Total checked for import: (3/3)

Status

Today's log Show log Copy log Save log...

Info: CSV file read successfully

BYPASSED: Line 10 (Mixer) has no defined alarm state. Alarm state=None, tag will not be returned

Install for another HMI/SCADA

Click [Install for another HMI/SCADA] to install SCADA Connect for your HMI/SCADA. See “Install for your HMI” for more information.

Retrieve HMI/SCADA alarm tags

Click [Retrieve HMI/SCADA alarm tags...] to retrieve your alarm tags into the tag list. See “HMI Sync” for more information.

Import returned alarm tags

Once you have retrieved SCADA alarm tags using HMI Sync you can make modifications to the tags and decide which tags to import to your configuration.

See “Import Alarms to TopView (6.36 and later)”

Using the SCADA Connect application

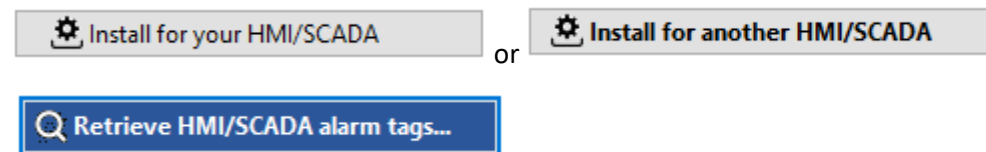
The SCADA Connect application allows the user to perform two primary tasks:

- Install for your HMI : configure the gateway. This involves the configuration of the gateway server in TopView, and may, depending on the SCADA, involve configuration steps of the gateway itself. Users will only perform this step once per SCADA.
- HMI Sync: import alarms from the SCADA to a TopView configuration.

In TopView 6.35 and earlier (SCADA Connect runs as separate process), SCADA Connect has two tabs that allow the user to perform these two tasks



In TopView 6.36 and later, the SCADA Connect Tag Importer has a button for each task



Hover for help

As you are using a screen in SCADA Connect, most screen items (buttons, fields,) will display instructions and additional information as you hover over the item. This information is displayed at the right side of the application.

Success/Error status and log

When you perform tasks in SCADA Connect, a log containing details of the tasks success or failure are displayed at the bottom of the application. Be sure to read through the details to determine the status of a task.

Copy the log contents

If you right-click on the log contents, you can copy the log information to the clipboard

Access the log files

The success/error information displayed in SCADA Connect is also written to log files in the TopView DataPath\Log\SCADAConnect folder.

Default location: C:\ProgramData\Exele\TopView\Log\ScadaConnect

Backup of any overwritten settings

Execution of tasks in SCADA Connect may overwrite existing TopView settings. TopView and SCADA Connect maintain a backup of modified configuration settings in the TopView DataPath\Audit folder (default C:\ProgramData\Exele\TopView\Audit).

Install for your HMI

The installation of SCADA Connect for your HMI includes items that are performed automatically by SCADA Connect as well as some manual steps that you may need to perform depending on your SCADA.

“Install for your HMI” should be performed by all SCADA Connect users.

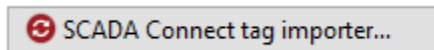
Running “Install for your HMI”

In TopView 6.35 and earlier (SCADA Connect runs as separate process), launch SCADA Connect and select the “Install for HMI” tab

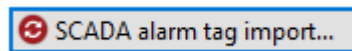


In TopView 6.36 and later, run the SCADA Connect tag importer from the Configurator

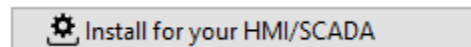
6.36 – 7.1:



7.2 and later:



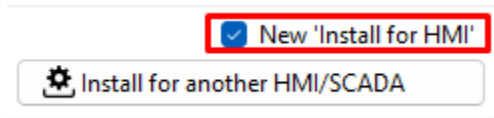
And click [Install for your HMI/SCADA]



“Install for your HMI” User Interface (UI)

The user interface for “Install for your HMI” has been updated in TopView v7.2.

The older UI can be accessed by unchecking this option:



This document includes pictures of the newer UI which is similar to the older UI.

SCADA Connect steps









This step of SCADA Connect will configure your gateway for use by TopView.

Select your HMI

Click the button for your HMI to proceed to the options screen

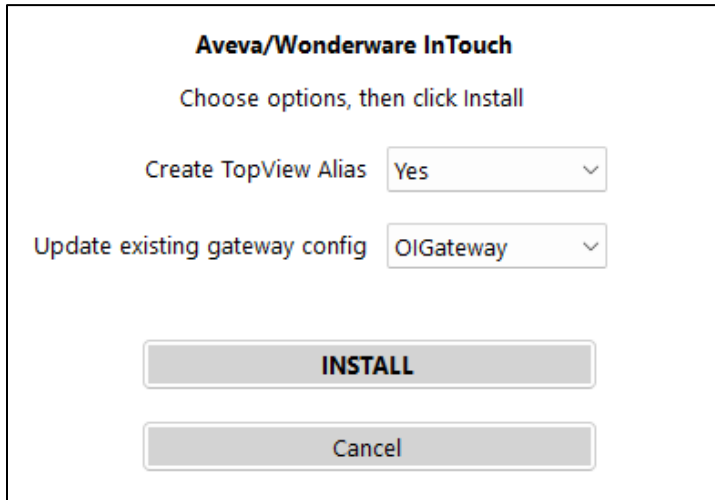
Install SCADA Connect for an HMI/SCADA

Click an HMI to install for SCADA Connect
▼

	Aveva Wonderware System Platform
	Aveva Wonderware InTouch
	Aveva Wonderware InTouch Edge
FactoryTalk View	Rockwell FactoryTalk View SE
RSView 32	Rockwell RSView32
	Rockwell Logix PLC w/ RSLinx Pro
	GE iFIX
	Aveva Citect/Plant SCADA
	Schneider ClearSCADA/Geo SCADA
	Siemens SIMATIC WinCC

Options

Example options for Aveva InTouch:



The screenshot shows a dialog box titled "Aveva/Wonderware InTouch". Below the title is the instruction "Choose options, then click Install". There are two dropdown menus: "Create TopView Alias" with "Yes" selected, and "Update existing gateway config" with "OIGateway" selected. At the bottom are two buttons: "INSTALL" and "Cancel".

Create TopView Alias

Most users should select "Yes"

The TopView Server Alias defines the OPC Server name for your gateway. Select "Yes" unless you have already configured an alias. Note that SCADA Connect assumes a specific name for your alias so if you have already configured an alias you may need to rename the alias to match the expected name.

SCADA-specific Options

Aveva/Wonderware InTouch and System Platform

Update existing gateway config

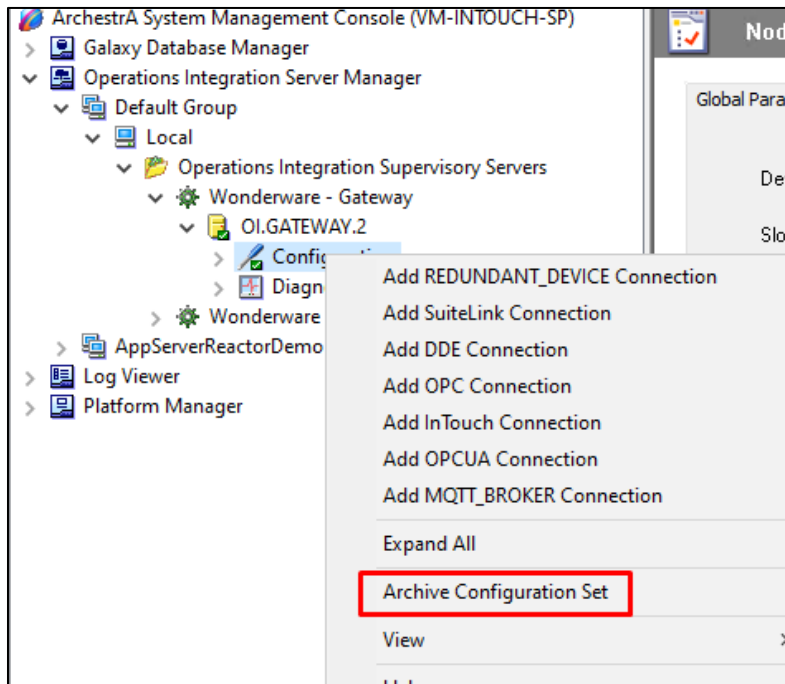
You should have OIGateway (recommended) or FSGateway already installed on the TopView machine. If you have a new gateway installation, select your gateway from the dropdown to allow SCADA Connect to configure the gateway, otherwise select "No". If you select "No" you will need to manually configure these settings in OI/FS gateway. See "Manual Step: Verify/Configure your gateway" for more information.

Newer SCADA Connect versions will modify the existing gateway configuration and will not overwrite it – the item is labeled "Update existing gateway config".

You can make a backup of your current gateway configuration:

- The default location for OIGateway's configuration file is
C:\ProgramData\Wonderware\OI-Server\Operations Integration Supervisory Servers\OI.GATEWAY\OI.GATEWAY\GATEWAY.AAcfg
- You can also make a backup of your current gateway configuration from SMC.
Right click on Configuration under the gateway > Archive Configuration Set

Example for OIGateway:



Older options

These options no longer appear in the latest version of SCADA Connect.

Redundant HMI Servers (obsolete)

Note: this option has been removed in TopView v7.2 and later.

For earlier versions we recommend selecting "No"

Overwrite TopView Alias

Similar to "Create TopView Alias" above. Most users will select "Yes"

Overwrite global config files

Most users will select "Yes"

This option will install a default set of global settings that are correct for most users. All settings can be modified later within the TopView Configurator. If select "Yes" any existing global settings will be backed up.

Notification examples to enable

The default TopView configurations created by SCADA Connect can include example notifications.

Select the types of example notifications that you would like to include in the default TopView configurations.

- None: all Notification types will be disabled in the default TopView configurations
- Local Speaker only: 'Audible Alarms' will be enabled in the default TopView configurations. All other Notification types will be disabled.
- Email/SMS only: 'Email-SMS' will be enabled in the default TopView configurations with incoming email acknowledgements and email Snapshot Report requests ENABLED. All other Notification types will be disabled.
- Email/SMS only (no incoming Ack): 'Email-SMS' will be enabled in the default TopView configurations with incoming email acknowledgements and email Snapshot Report requests DISABLED. All other Notification types will be disabled.
- Voice only: 'Voice' (phone callout) will be enabled in the default TopView configurations. All other Notification types will be disabled.
- Email/SMS & Voice = 'Email-SMS and Voice' will be enabled in the default TopView configurations with incoming email acknowledgements and email Snapshot Report requests ENABLED. All other Notification types will be disabled.
- Local, Email/SMS, & Voice = All Notification types will be enabled in the default TopView configurations except for Modem (Pagers).

Note: Modem Notification (Pager) notifications are not supported by Scada Connect and must be manually configured.

Install

Click the button [INSTALL] button to install SCADA Connect for your HMI

Installation logs: The bottom half of the window will display details of the installation steps along with success or failure information. Please read through this information to ensure that the installation process was successful.

Restart your gateway

This step may have made changes to your gateway. You should restart your gateway to ensure that these changes are applied.

Manual Step: Verify/Configure your gateway

You only need to perform these steps for the listed SCADA systems.

Aveva/Wonderware InTouch and System Platform

FSGateway and OIGateway

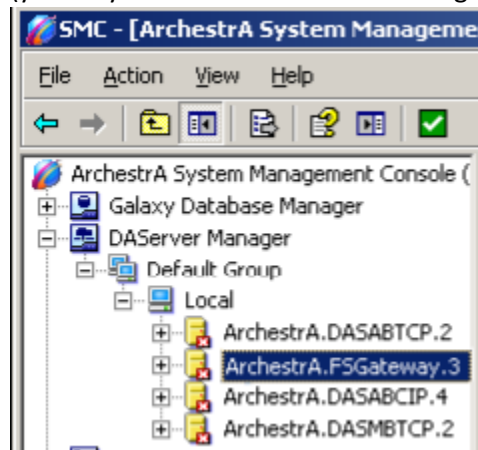
If your gateway is local and the HMI Install step above was successful and updated your gateway configuration, you should only need to

1. Verify gateway settings
2. Configure the gateway as an automatic Service
3. Start/restart the gateway Service (all users should perform this step to ensure that latest settings are applied)
4. Configure the username/password within the gateway (System Platform users)

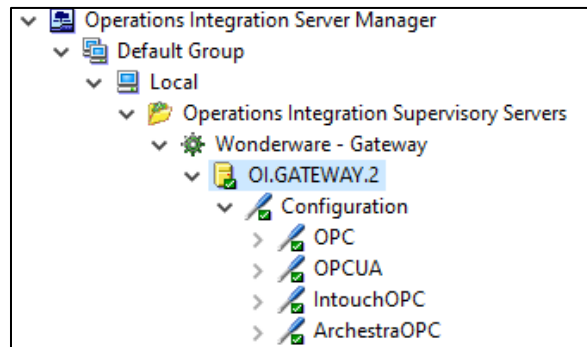
If the gateway is not local or was not configured as part of “Install for HMI” then you will need to manually configure the gateway.

All users should perform the following steps to verify gateway configuration:

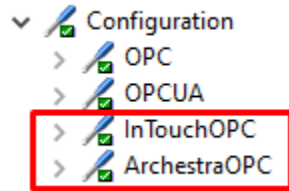
- Run SMC (System Management Console). If it is already running, restart it.
- Browse to your gateway
 - FSGateway: DAServer Manager>Default Group>Local>ArchestraA.FSGateway.3 (you may need to substitute another group for “Default Group”)



- OI Gateway: Operations Integration Server Manager>Default Group>Local> Operations Integration Supervisory Servers>Wonderware-Gateway>OI.Gateway.x



- Under “Configuration” you should see an object named “InTouchOPC” and “ArchestraOPC”



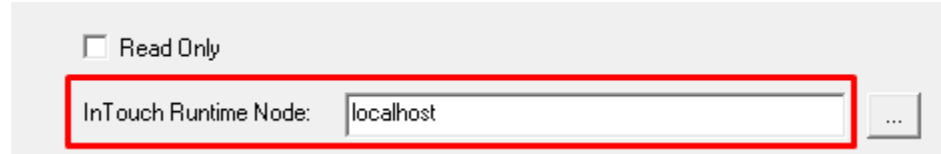
InTouchOPC for Intouch users (without System Platform)

ArchestraOPC for System Platform users

If you do not see InTouchOPC and OrchestraOPC, SCADA Connect was not able to configure your gateway and you must manually add it:

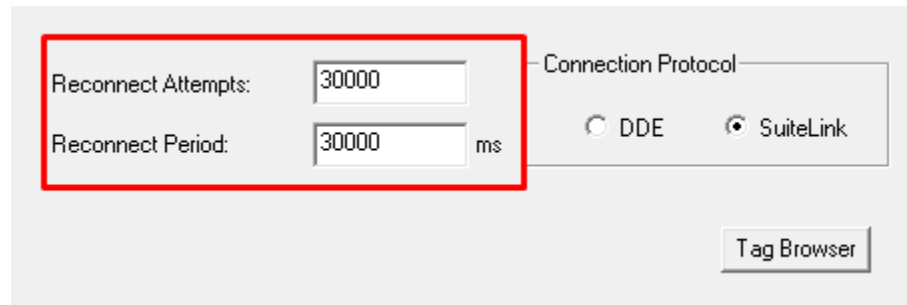
- Right-click “Configuration” and choose:
 - “Add InTouch Connection” for InTouch
OR
 - “Add Orchestra Connection” for System Platform
- Change the name of the new object (case sensitive) to:
 - **InTouchOPC** for InTouch
OR
 - **ArchestraOPC** for System Platform

- Enter additional settings for remote acknowledgement, reconnection, and remote machine access (InTouchOPC or ArchestraOPC):
 - **InTouch (InTouchOPC):**
 - Change the **InTouch Runtime Node** to the name or IP address of the machine with the primary Intouch Runtime application (if on a remote machine).



A screenshot of a configuration window. At the top, there is a checkbox labeled "Read Only" which is unchecked. Below it, there is a text input field labeled "InTouch Runtime Node:" containing the text "localhost". To the right of the input field is a small button with three dots "...". The entire input field and its label are highlighted with a red rectangular border.

- Verify that the **Reconnect Attempts** and **Reconnect Period** are both set to 30000. The default reconnect attempts value of 3 or 5 will result in the gateway permanently failing to connect to the runtime after a few minutes of a lost connection.

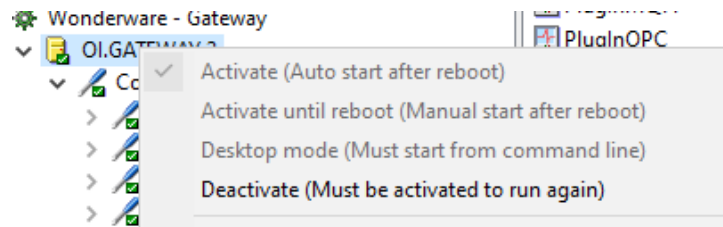


A screenshot of a configuration window. On the left, there are two text input fields. The first is labeled "Reconnect Attempts:" and contains the value "30000". The second is labeled "Reconnect Period:" and contains the value "30000", followed by the unit "ms". These two fields are highlighted with a red rectangular border. To the right of these fields is a section titled "Connection Protocol" with two radio buttons: "DDE" (which is unselected) and "SuiteLink" (which is selected). At the bottom right of the window is a button labeled "Tag Browser".

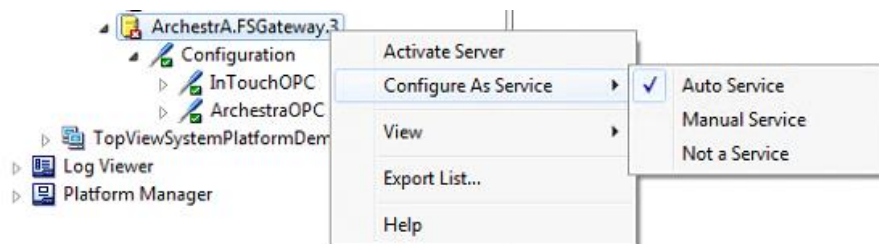
- **System Platform (ArchestraOPC):**
 - Verify that the **Reconnect Attempts** and **Reconnect Period** are both set to 30000. The default reconnect attempts value of 3 or 5 will result in the gateway permanently failing to connect to the runtime after a few minutes of a lost connection.
 - Enter a username and password for an OrchestraA user that has permission to view alarms inside the **Write Credentials** area. If TopView is to acknowledge alarms, this OrchestraA user must have permission to acknowledge alarms

The screenshot shows the 'ArchestraOPC Parameters' configuration window. The 'Device Group Name' is set to 'ArchestraA'. The 'Reconnect Attempts' and 'Reconnect Period' are both set to 30000. The 'Write Credentials' section is expanded, showing 'Read Only' unchecked, and fields for 'Domain', 'User Name', and 'Password'. A 'Show Password' button is also visible.

- Configure the gateway to run as an automatic Service:
 - Right-click the name of the gateway (ArchestraA.FSGateway.3 or OI.Gateway.x)
 - Select Configure as Service>Auto Service
 - OIGateway: Deactivate, then Activate (Auto start after reboot)



- FSGateway



- Activate/start the gateway
 - If you did not just restart the Gateway, start/restart it now

Rockwell FactoryTalk Gateway / Linx Gateway

Required for FactoryTalk View SE users (A&E tag-based, HMI Alarm Tags, A&E Controller-based).

Note: FactoryTalk Linx Gateway was previously known as OPC Gateway.

FactoryTalk View SE A&E tag-based alarms

Expose A&E Alarms as tags

FactoryTalk A&E alarms are not, by default, exposed as tags in FT Gateway and available to TopView. To expose A&E alarms as tags, see “Exposing FactoryTalk A&E Alarms as Tags in FT Gateway”

FactoryTalk View SE A&E tag-based alarms, HMI Alarm tags

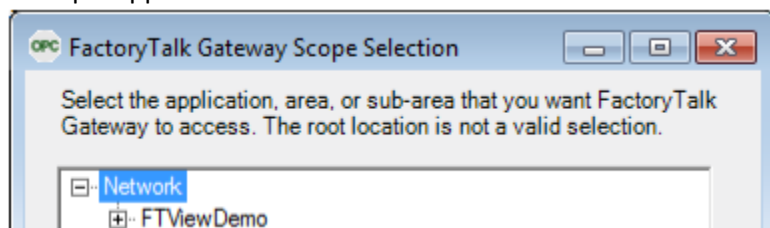
Scope for FT Gateway / Linx Gateway

If scope is selected as an application (recommended) anything inside any area within the application can be discovered by FT Gateway and therefore seen by TopView.

FactoryTalk Application and hierarchy:

- FactoryTalk Application
 - Area
 - Area
 - HMI Server
 - A&E Server
 - Data Server

Example application = FTView Demo:



Linx Gateway

Run FactoryTalk Linx Gateway Configuration

Select “Server Configuration” and set the scope to the application

Server Configuration

FactoryTalk Directory Scope

RNA://\$Global/Demo

Select

Click OK to apply changes and restart the gateway.

FactoryTalk Gateway

Select your application for FT Gateway (setting the scope of FTGateway to “application”)

- Open FactoryTalk Gateway Configuration.



- Press the “Stop service” button
Note: If the Service automatically restarts:
 - Open the Windows Services app from Control Panel
 - Disable the Service
 - Stop the Service
- Click the Configure button and select your HMI application.
- Start the Service again (you will need to re-enable it if you had to disable it).

Rockwell RSView32

RSView32 has an integrated OPC Server.

Check the box for “OPC/DDE Server” in Startup for your project. Add lines to the startup macro in your project for RTDataServerOn and RTDataWriteEnable.

Rockwell RSLinx Pro

A license for the Professional version or higher is required to use OPC.

Go to DDE/OPC>Topic Configuration to add an OPC connection to your PLC.

Note: this Topic name must be entered in the HMI sync options when importing the PLC tags to TopView

Note: RSLinx should not be used for OPC communications to FactoryTalk View SE and should only be used for direct connections to a PLC. Use FactoryTalk Gateway for connections to View SE.

Schneider ClearSCADA/GEO SCADA

ClearSCADA has an OPC Server that can run local or remote to the ClearSCADA database.

For OPC Connection information for ClearSCADA, see “ClearSCADA/GEO SCADA” under “Gateway Connection Issues”

Additional Vendor-specific steps

Some SCADA Systems and gateways have additional steps that you must perform to expose features or allow certain behaviors.

Please review the follow items for your SCADA/HMI or gateway:

FactoryTalk View A&E tag-based:

- See “Exposing FactoryTalk A&E Alarms as Tags in FT Gateway”

FactoryTalk View HMI Tag Alarms / RSVIEW32:

- “Acknowledge Tags (Rockwell FT View SE HMI Tag Alarms and RSVIEW32)”

HMI Sync

HMI Sync is used to import your SCADA/HMI Alarms to TopView.

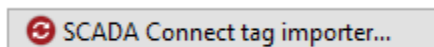
Running “HMI Sync”

In TopView 6.35 and earlier (SCADA Connect runs as separate process), launch SCADA Connect and select the “HMI Sync” tab

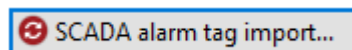


In TopView 6.36 and later, run the SCADA Connect tag importer from the Configurator

6.36 – 7.1:

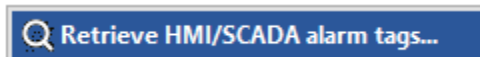


7.2 and later:

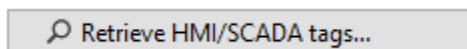


and click

7.2 and later



6.36-7.1

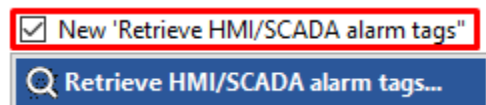


HMI Sync User Interface (UI)

The user interface for “HMI Sync” has been updated in TopView v7.2 for the following HMIs:

- AVEVA InTouch, Edge, and System Platform
- GE iFIX
- Rockwell FactoryTalk View SE A&E (alarm tags)

The older UI can be accessed by unchecking this option:



This document includes pictures of the older UI which is similar to the newer UI.

SCADA Connect steps

For supported SCADA Systems/HMIs, HMI Sync can import your alarm tags into TopView. After TopView is configured and running, HMI sync can also be used to discover new alarm tags and to import them into existing TopView configurations. Users can also make post-sync edits in the TopView Configurator.

HMI Sync – Vendor Specific notes

Wonderware System Platform

Deployed objects

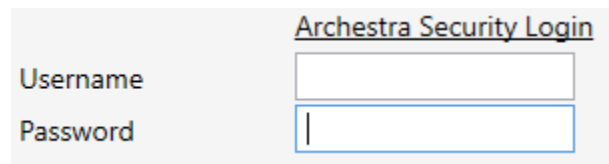
TopView can only see alarms for deployed objects. Please verify that you have deployed before executing HMI Sync.

Alarm tag descriptions and priorities

In order for the descriptions and priorities to be retrieved, you must have a Development License and the Archestra IDE on the machine running TopView and SCADA Connect. This is a requirement of GRAccess which is being used to retrieve this information.

After the alarms are imported from the Galaxy, you will be prompted “Do you want to retrieve attribute descriptions, alarm messages, and alarm priorities from the Galaxy”.

If you have a Development License and the Archestra IDE on the machine running TopView this step should work. If you receive an error “System.NullReferenceException” please verify that Archestra Security Login information is correct.



The image shows a screenshot of a login window titled "Archestra Security Login". It contains two text input fields. The first field is labeled "Username" and the second field is labeled "Password". The "Password" field has a small vertical line at the beginning, possibly indicating a cursor or a specific character.

In some cases it may be possible to export your Galaxy and have the HMI Sync process executed for you. Please [contact Exele support](#) if this is of interest.

FactoryTalk View A&E tag-based

HMI Sync will be able to see your alarms but the alarms are not visible to FT/Linx gateway (and therefore TopView) unless you expose them as tags.

- See “Exposing FactoryTalk A&E Alarms as Tags in FT Gateway”

ClearSCADA/GEO SCADA: HMI Sync Remote connection

When using HMI Sync in SCADA Connect the user must enter the following information:

- Host computer: The ClearSCADA/GEO Scada machine
- Username: ClearSCADA/GEO Scada user
- Password: ClearSCADA/GEO Scada user password

Warning: If the host computer is not the TopView/SCADA Connect computer, you may not be able to use the super user account for this connection. Please try another user.

From [Using Bulk Edit tool in ClearSCADA | Schneider Electric USA \(se.com\)](#):

“Note: With recent versions of ClearSCADA it is not possible to use the super user account to login from Bulk Edit tool (or any other remote client for that matter). It is recommended not to use the superuser credentials to login”

HMI Sync Steps

From the HMI Sync tab, select your SCADA System/HMI from the dropdown if the correct SCADA is not already selected.

Set Import/Sync Options

The available options will change based on the selected HMI.

Be sure to configure each option before you start the HMI Sync process.

Depending on your SCADA System/HMI, the available options may include:

TopView Configuration name

In TopView 6.36 and later: the current configuration file name from the Configurator is displayed and cannot be edited. The SCADA alarm tags will be returned to the SCADA Connect Tag Importer where you will have the option to import some/all of the alarm tags into the TopView configuration.

In TopView 6.35 and earlier: the TopView configuration file that will be modified to include the alarms from your HMI. This will also be the configuration that you use in the TopView Configurator and run the TopView Engine. The default name is the base configuration file that was installed for your HMI during the “Install for your HMI” step. Most users can leave this field as the default value.

Ack on Return (obsolete)

This options no longer exists in v7.2 and later

Do you want to automatically acknowledge the alarm in TopView when the alarm returns to normal (transitions from active alarm to inactive alarm)? Many customers will stop sending notifications for an alarm once it is acknowledged, so acknowledging the alarm on return-to-normal can stop notifications when the alarm ends.

The selected setting will be the default setting for each imported alarm and can be changed within the TopView Configurator.

- Yes: acknowledge alarm if the condition returns to normal
- No: do not acknowledge the alarm if the condition returns to normal
- Ignore: use the default setting in TopView for new tags

Acknowledge tag

Applies to RSView and Rockwell FT HMI Tag Alarms

HMI Tag Alarms require an additional tag to be created for acknowledgement. This can be one generic tag for Ack All, or one ack tag for each alarm tag.

- Individual Ack Tags: The user must create individual ack tags.
- One Common Ack Tag: Use the HMI tag named AckAll to acknowledge all alarms inside TopView.

Note: Conversion to FactoryTalk A&E is highly recommended

Alarm color

The default alarm color for imported tags. The alarm color is used in the TopView Remote Viewer, the TopView Mobile Web App, and TopView Snapshot Reports.

Alarm Message (Citect)

Citect alarms have two fields that may contain a description of the alarm that can be used for the TopView alarm message:

- Alarm description
- Comment

The options for importing the alarm message are either of these two fields, or a combination of both fields:

- Alarm desc: use the alarm description
- Comment: use the alarm comment
- Alarm Desc + Comment: concatenate the alarm description and comment
- Comment + Alarm Desc: concatenate the comment and alarm description

Analog Alarming Model (iFIX)

Valid for GE iFIX

HMI Sync gives two options for the configuration of analog alarms in TopView

- **Monitor .A_CUALM:** (recommended) monitor the .A_CUALM property and alarm when the value is LO, LOLO, HIHI, HI.
Note: RATE, DEV, COMM are not sync'd but can be added by duplicating the tag in TopView and adding the new alarm limits.
- **Monitor .F_CV:** monitor the F_CV property and alarm when the value is above or below the setpoint in iFIX.
Warning: if the limits are changed in iFIX you will need to modify the limits in TopView

Note: Digital alarms will monitor the .A_CUALM value and alarm when the current value is CFN (change from normal) or COS (change of state)

Convert msg to proper case

May also be named "Convert Caps to Proper)

Convert the imported description/alarm message to proper case.

Example: "TANK LEVEL HIGH" will be converted to proper case "Tank Level High"

Delay to Notify (seconds)

Configures the default delay before an alarm will be recognized in TopView and start to notify. Most users will choose 0 and only set delays for specific alarms after the import.

Deployed Objects Only

Valid for Wonderware System Platform

- Yes: only import alarms for deployed objects and ignore any undeployed objects
- No: import alarms for deployed and undeployed objects

Warning: Alarms from undeployed objects will not be visible to TopView and may cause slower communication if any exist in the TopView configuration. You should only choose this option for testing HMI Sync or if you plan to deploy the objects soon afterward.

Import Alarm Groups/Area as Group

Valid for Wonderware InTouch, InTouch Edge, iFIX, System Platform

See the HMI Sync option “Primary Tag Group” for a description of TopView’s Tag Groups and how they are populated during an HMI Sync.

The HMI alarm group or area can be imported as the Secondary Tag Group for the alarm in TopView. The Primary Tag Group will define notifications.

- Yes: import each tag's HMI alarm group/area as the Secondary Tag Group in TopView
- No: do not use the Secondary Tag Group in TopView

Import Analog Values

Valid for Wonderware InTouch, note below for System Platform

You can sync and import analog values (not alarmed) into TopView for monitoring of current analog value or later configuration of TopView alarms conditions based on the current analog value. Any alarm limits (H, HH, L, LL) for the analog tags will be imported into TopView.

- Logged Only: import only analog tags that are flagged for historical logging.
- All Analog: import all analog tags

Warning: “All Analog” will dramatically increase your tag count

Wonderware System Platform note: HMI Sync will pull in the individual analog alarms as separate discrete tags. So LIT100.Hi.InAlarm and LIT100.Lo.InAlarm would be imported as separate TopView tags with a value of True if alarm is active.

Import for Group

Valid for FactoryTalk View SE A&E

See the HMI Sync option “Primary Tag Group” for a description of TopView’s Tag Groups and how they are populated during an HMI Sync.

- Class: import the A&E Alarm Class as the Secondary Tag Group for each tag in TopView. Therefore, the Secondary Tag Group will define the imported alarm class and the Primary Tag Group will define notifications.
- Group: import the A&E Alarm Group as the Secondary Tag Group for each tag in TopView. Therefore, the Secondary Tag Group will define the imported alarm group and the primary tag group will define notifications.
- Not Used: do not use a Secondary Tag Group in TopView.

Import Priority and Filter

- **Import Priority**

Allows you to import the HMI alarm property as the TopView alarm priority

- Yes: copy the HMI priority into the TopView priority for each tag
- No: the priority for all TopView alarms will be set to 1.
- Link Dynamic: link the TopView Priority to the priority in the HMI using the HMI tag that holds the priority value. The TopView Priority will update when the priority is updated in the HMI.

Note: 'Link Dynamic' may slow down communication performance

- **Priority Filter**

If you select “Yes” for Import Priority, you can enter an import filter to only import alarms within a range of priority.

- Filter: enter a priority number and choose >= or <=
- No filter: select >= 0

Enter a number in the box if it is desired to only import alarms that are above a specific priority. All HMI alarms that have a priority lower than the number entered will be ignored on the import. (Set to 0 to import all alarms.)

Import Severity as Priority

Applies to RSView, Rockwell FT HMI Tag Alarms, Rockwell FT A&E tag-based

- Yes = Sync the alarm severity to the TopView tag priority
 - >=
Enter a priority number to only import alarms that are equal or greater than that priority. Set to 0 to import all alarms.
 - <=
Enter a priority number to only import alarms that are equal or less than that priority. Set to 999 to import all alarms.
- No = All HMI alarm tags will be imported

Note: FactoryTalk A&E users can dynamically link the alarm severity to TopView’s alarm priority. See “Severity tag (FactoryTalk A&E tag based)”

Link Dynamic Message

Valid for Wonderware InTouch, System Platform, iFIX

For each imported alarm, HMI Sync will access the alarm comment/description from the HMI. This option allows the user to either (1) link to the alarm comment/description (using the HMI tag containing this property) or to (2) import the text of the alarm comment/description.

- Yes: link the TopView alarm message to the alarm comment/description in the HMI. The TopView alarm message will update when the alarm comment/description is updated in the HMI but you will not see the alarm comment text in the TopView Configurator.
- No: copy the HMI alarm comment/description into the TopView custom alarm message. After the import, the message will need to be changed in the TopView Configurator if the HMI comment changes.

Note: choosing “No” results in better TopView performance

PLC Type (RSLinx Pro with PLC)

Valid for RSLinx Pro

The import of alarms with HMI Sync requires an export CSV from the PLC. There are two PLC export formats that are supported by HMI sync:

- SLC /Micrologix (older processors)
- CompactLogix and ControlLogix (newer)

Select the correct PLC type to match the exported CSV.

Primary Tag Group

Enter the name of the Primary Tag Group for imported alarms. This Tag Group will be used for notifications in TopView and will be created with a blank notification if it does not already exist.

About Tag Groups:

- TopView uses Tag Groups for organizing your alarms and to perform notifications.
- Each alarm tag in TopView can belong to multiple Tag Groups – the primary Tag Group and one or more secondary Tag Groups. If an alarm tag belongs to a Tag Group (primary or secondary) that performs notification then this alarm tag will execute the notifications configured for that Tag Group.
- SCADA Connect may be able to configure two Tag Groups for each alarm tag based on this option, Primary Tag Group, and a later option for creating the Secondary Tag Group from imported areas or alarm groups:
 - Primary Tag Group: used for notification in TopView

Secondary Tag Group: imported from the SCADA/HMI for the alarm tag, usually called “area” or “alarm group” in the SCADA/HMI.

The secondary Tag Group may be configured using options “**Error! Reference source not found.**” or “

- Import Alarm Groups” if supported

Redundant HMI Servers (obsolete)

Users should select “No”.

This option is ignored in TopView v7.2 and later.

Valid for Wonderware System Platform, FactoryTalk View SE A&E

Does this application connect to redundant HMI servers from a single TopView machine? This option will configure two gateways for TopView and configure the tags to access the primary or failover gateway.

- Yes: configure the TopView alarm tags for redundancy
- No: configure the TopView tags to use only one gateway

Tagname Filter

If available and a tag name filter is entered, only tags matching the filter will be retrieved.

Leave this field blank to retrieve all alarms regardless of tag name. After retrieval of the alarms, the SCADA Connect tag picker will allow you to apply additional filters.

Topic name

Valid for RSLinx with PLC, FT View SE A&E Contoller-based

When the RSLinx OPC Server is configured, the user enters a Topic for each configured PLC.

Enter the name of the Topic for the PLC whose tags you are importing.

Note: the entered Topic name will be used as the prefix for the tag names in TopView. Failure to enter the correct Topic name will prevent TopView from finding/monitoring the PLC tags in the RSLinx OPC Server until the tag names are modified with the correct Topic name.

TopView Ack Message

Valid for Wonderware System Platform

System Platform requires a string comment for all remote acknowledgements. Enter the text that is desired for each alarm acknowledge from TopView. The default is "Acknowledge from TopView".

Use Alarm Comment

Valid for Wonderware InTouch

TopView can use the InTouch alarm comment (.AlarmComment) or description (.Comment) as the alarm message.

- Yes: use the Intouch alarm comment (.AlarmComment) for the TopView alarm message
- No: use the Intouch description (.Comment) for the TopView custom alarm message.

Use for Alarm Message

Valid for FactoryTalk View SE A&E

TopView can use the A&E message or name as the alarm message and TopView tag description.

- Alarm Message: use the A&E message for the TopView tag description and custom alarm message
- Alarm Name: use the A&E name for the TopView description and custom alarm message.

Use iFIX Label

Valid for GE iFIX

Each alarm in TopView has an optional “Alarm label” that will be displayed in place of the word “Alarm” in the Remote Viewer, Mobile Web App, and Snapshot Reports.

- Yes: import the “iFIX label” as alarm label for the TopView tag
- No: use 'Alarm' as the TopView alarm label.

Use InTouch Label

Valid for Wonderware InTouch

Each alarm in TopView has an optional “Alarm label” that will be displayed in place of the word “Alarm” in the Remote Viewer, Mobile Web App, and Snapshot Reports.

- Yes: import the HMI alarm label as alarm label for the TopView tag
- No: use 'Alarm' as the TopView alarm label.

Retrieve Alarms (vendor specific)

Once you have configured the Import/Sync options you can retrieve your SCADA/HMI alarms. The retrieved alarms will be displayed in a tag picker where you can select the alarms to return.

The presented sync settings and steps will change based on your SCADA/HMI.

Wonderware System Platform

The sync for System Platform will perform two steps.

- Retrieve alarms from the Galaxy
- Retrieve descriptions and priorities for the alarms

The retrieval of descriptions and priorities requires that you have a Development License and the Archestra IDE on the machine running SCADA Connect (required by the Wonderware toolkit used to retrieve this information)

The screenshot shows a software interface with three main steps highlighted in blue boxes:

- Step 2 - Configure Settings for the Galaxy**: This section contains three input fields: "GR Node Name", "SQL Server Instance", and "Galaxy Name (DB)".
- Step 2 (alternate) - Select a Galaxy Dump csv**: This section contains a single input field.
- Step 3 - Get alarms and choose which to return**: This is the final step shown in the sequence.

Step 2 - Configure Settings for Galaxy

- **GR Node name**: the machine name that contains your System Platform Galaxy Repository
- **SQL Server Instance**: click the search button (magnifying glass) and select the SQL instance for the machine name. For most users this will be 'MSSQLSERVER', 'SQLEXPRESS', or blank.
- **Galaxy Name (DB)**: click the search button (magnifying glass) and select the name of your System Platform Galaxy
- **Sql Authentication**
 - Windows Authentication: authenticates using the current Windows User
 - SQL Authentication: authenticates using the entered SQL Username and Password

Step 2 (alternate): will be available in a future release

Step 3: Get alarms and choose which to return

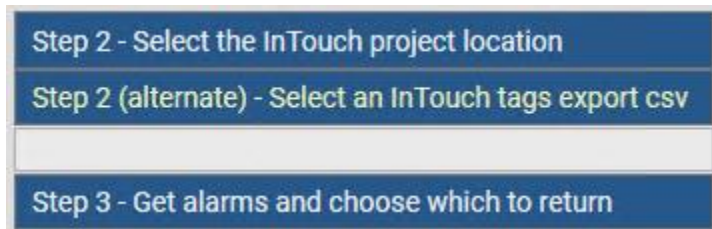
After you have entered the settings for the Galaxy, click "Step 3 – Get alarms and choose which to return". The alarms will be retrieved from your Galaxy and are ready to be imported to TopView.

Proceed to "Alarm Tag Picker"

Wonderware InTouch

The sync for InTouch can import the alarms:

1. From your InTouch project folder (if TopView and SCADA Connect are installed on the InTouch Runtime machine)
or
2. From an InTouch DBDump (CSV file)



Step 2: Select the InTouch project location

If TopView and SCADA Connect are installed on the InTouch Runtime, select the folder where the InTouch project is located.

Step 2 (alternate) – Select an InTouch tags export csv

If you cannot access the InTouch project folder or Step 2 fails to retrieve your alarms, you can import your alarms from an InTouch DBDump CSV file.

- To create the DBDump CSV file, run the InTouch Application Manager and perform a DBDump of your application.

Select “Step 2 (alternate)” and follow the instructions to import your DBDump CSV file

Step 3: Get alarms and choose which to return

After you have entered the location of the InTouch application or DBDump file, click “Step 3 – Get alarms and choose which to return”. The alarms will be retrieved and are ready to be imported to TopView.

Proceed to “Alarm Tag Picker”

Wonderware InTouch Edge

The sync for InTouch Edge can import the alarms from the Edge project.

Step 2 - Click to select the Edge project location
Step 3 - Get alarms and choose which to return

Step 2: Select the Edge project file (.APP)

Step 3: Get alarms and choose which to return

Click to retrieve the alarms from the Edge project

Proceed to “Alarm Tag Picker”

The sync for FactoryTalk View SE A&E can import the alarms from your A&E Servers in an application.



Step 2: Click to retrieve Available A&E Servers

Retrieve all available A&E servers and populate the dropdown for step 3.

Step 3: Select your server from these options

Select the FactoryTalk A&E Server to use.

Step 4: Get alarms and choose which to return

Click to retrieve FactoryTalk A&E Alarms from the selected source.

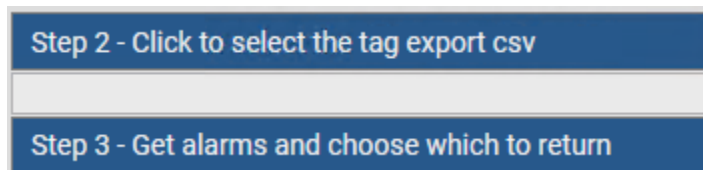
Proceed to “Alarm Tag Picker”

Rockwell RSView and FactoryTalk HMI Tag Alarms

The sync for RSView and HMI Tag Alarms can import the alarms from a tag database dump (CSV file)

CSV notes:

- Both an Alarms and Tags CSV file are required.
 - When exporting tags from either RSView or FactoryTalk View there is a check box for “Tags” and a checkbox for “Alarms”. Check both to generate both CSV files
- The two CSV files must have the same name except the alarms file has "Alarms" in the name and the tags file has "Tags" in the name.
 - The default naming is "*ProjectName*Alarms" and "*ProjectName*Tags".
- The tags CSV file cannot have "Alarms" in the file name and the alarms CSV file cannot have "Tags" in the file name.
- Both files must be in the same folder.
- The user only needs to select one file. As long as the file naming rules have been followed, HMI Sync will locate both files.



Step 2: Click to select the tag export csv (see above for more information)

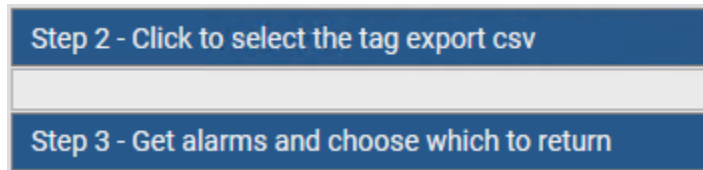
Step 3: Get alarms and choose which to return

Click to retrieve the alarms from the CSV files

Proceed to “Alarm Tag Picker”

Rockwell FactoryTalk Controller-based

The sync for FT Controller-based can import the alarms from a PLC.



Step 2: Click to select the tag export csv

Each Topic created in RSLinx is for one PLC.

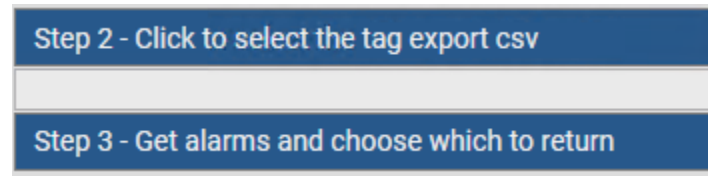
To import the alarm from the PLC you must first export the alarms from the PLC to a CSV file.

Step 3: Get alarms and choose which to return

Click to retrieve alarms from the CSV file.

Proceed to “Alarm Tag Picker”

The sync for RSLinx Pro can import the alarms from a PLC.



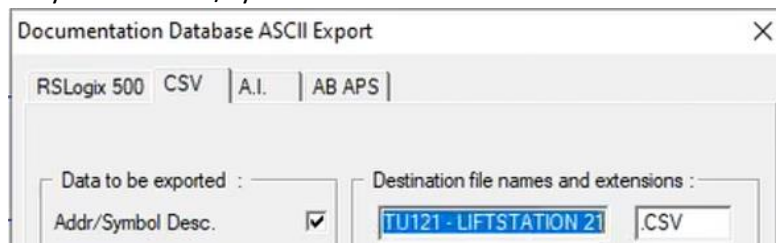
Step 2: Click to select the tag export csv

Each Topic created in the RSLinx Pro OPC Server is for one PLC.

To import the alarm from the PLC you must first export the alarms from the PLC to a CSV file.

Export: SLC and Micrologix PLCs

- Run RSLogix 500 Pro
- Select Tools...Database...ASCII export
- CSV tab
- Only check "Addr/Symdol Desc."



Export: CompactLogix and ControlLogix

- Run RSLogix 5000 OR Studio 5000 Designer (newer)
- Select Tools...Export...Tags and Logic Comments
- Set the CSV file

Imported alarms

- SLC/Micrologix PLCs: alarm booleans will be imported.
- CompactLogix and ControlLogix: ALARM_ANALOG and ALARM_DIGITAL data types

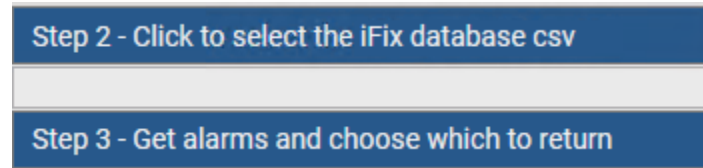
Step 3: Get alarms and choose which to return

Click to retrieve alarms from the CSV file.

Proceed to "Alarm Tag Picker"

GE iFIX

The sync for GE iFIX can import the alarms from a tag database dump (CSV file)



Step 2: Click to select the iFix database csv

To create the tag database dump

- Run iFIX
- Go to Applications>Database Manager>Export

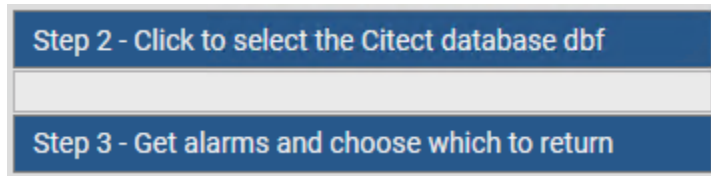
Step 3: Get alarms and choose which to return

Click to retrieve the alarms from the tag database dump CSV file

Proceed to “Alarm Tag Picker”

Schneider Citect

The sync for Citect can import the alarms from the alarm tag database files (DBF).



Step 2: Click to select the Citect database dbf

Multiple database dbf files are used for different tag types and reside in the same Citect project folder. Select the databased file digalm.dbf

Notes:

- Regardless of the dbf file selected, HMI Sync will import alarms from two tag dbf files located in the same folder: digalm.dbf (digital alarms) and advalm.dbf (advanced alarms). Analog alarms are not currently supported.
- If one of the dbf files are open in Citect the import may not succeed

Step 3: Get alarms and choose which to return

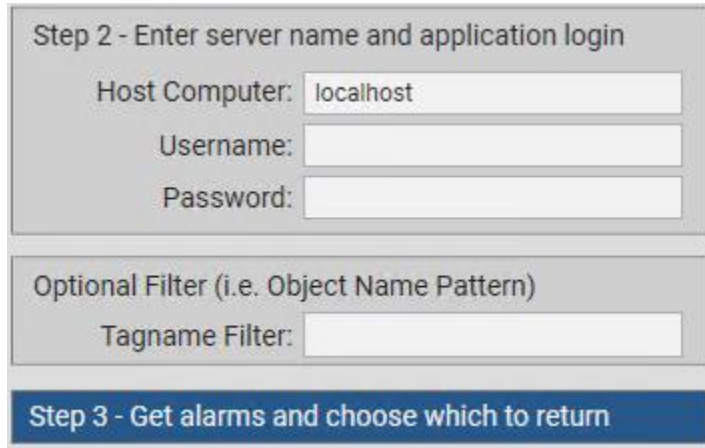
Click to retrieve alarms from the Digalm.dbf and Advalm.dbf database files.

Proceed to “Alarm Tag Picker”

Schneider ClearSCADA/GEO SCADA

The sync for ClearSCADA will import alarms using an API from ClearSCADA

Note: the ClearSCADA Server must be running for the import to succeed



Host computer: enter the machine name of the ClearSCADA server. For the local machine enter the name localhost

See “ClearSCADA/GEO SCADA: HMI Sync Remote connection” for information on username and password.

Username: enter the ClearSCADA user name

Warning: super user may not work, see “ClearSCADA/GEO SCADA: HMI Sync Remote connection”

Password: enter the password for the user

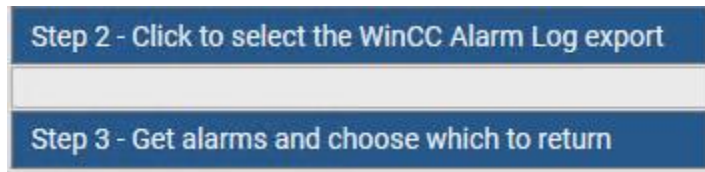
Step 3: Get alarms and choose which to return

Click to retrieve the alarms from ClearSCADA

Note: ClearSCADA alarms are presented to TopView as an integer tag with two possible values for alarm active (active/acknowledged and active/unacknowledged). TopView will read the integer tag and apply an operation to return a single alarm active/inactive state.

Proceed to “Alarm Tag Picker”

The sync for WinCC can import the alarms from a tag database dump file.



Step 2: Click to select the WinCC Alarm Log export

Please see the following page from Siemens for WinCC tag export steps:

<https://support.industry.siemens.com/cs/document/22016422/what-are-the-options-for-tag-export-import>

Step 3: Get alarms and choose which to return

Click to retrieve alarms from the file.

Note: WinCC alarms are presented to TopView as a bit within an integer tag. TopView will read the integer tag and apply a BIT operation to retrieve the current alarm value (0 or 1) for the TopView alarm.

Proceed to “Alarm Tag Picker”

Alarm Tag Picker

In TopView 6.35 and later, the user will be presented with a list of the discovered alarm tags in a “tag picker”.

In TopView 6.34 and earlier the retrieved alarm tags can now be sync'd to TopView. The user is not able to select which alarm tags should be returned. After returning the tags to TopView the user can remove unwanted tags from the TopView configuration. Proceed to “Import Alarms to TopView”

Alarm Tag Picker UI: v1 or v2?

Depending on your version of TopView and your HMI, you will see either v1 or v2 Tag Picker screen

Version 1: the top of the tag picker will look like the following:

[Aveva/Wonderware System Platform]					
HMI Sync Alarm Tags [16 total, 16 displayed]					
Type	Tagname	Description	HMI Group	Priority	Existing

TopView Config: [SystemPlatformTest.cfg]							
Return to TopView [0 tags]							
Existing	Type	Tagname	Description / AlarmMessage	PrimaryGroup	SecondaryGroup	Priority	Disabled

Version 2: the top of the tag picker will look like the following:

Select the tags to return to TopView

Select SCADA tags to import | Peek TopView tag info

Filter: ✖ Clear filter

Type

Tag name contains ✖

Group(s)

Exists in TopView

Description contains ✖

Priority 0 to 9999

Displayed: 1378 of 1378 Total tag count: 1378

Selected for import: 0 Select tags for import ☐ Show only 'Selected for import'

Type	Tag name	Description	HMI Groups(s)	Priority	Di
------	----------	-------------	---------------	----------	----

Alarm Tag Picker v1

Example alarm tag picker

[Aveva/Wonderware System Platform]						TopView Config: [SystemPlatformTest.cfg]							
HMI Sync Alarm Tags [16 total, 16 displayed]						Return to TopView [0 tags]							
Type	Tagname	Description	HMI Group	Priority	Existing	Existing	Type	Tagname	Description / AlarmMessage	PrimaryGroup	SecondaryGroup	Priority	Disabled
D	AppEngine.Engine.CheckPointFailed	N/A	GR_Platform	800									
D	AppEngine.Engine.ObjectQuarantined	N/A	GR_Platform	800									
D	AppEngine.Scheduler.ScanOverrun	N/A	GR_Platform	500									
D	Reactor_001.ReactLevel.Hi	Reactor Level	Demo_Area	500	!								
D	Reactor_001.ReactLevel.Lo	Reactor Level	Demo_Area	500									
D	Reactor_001.ReactTemp.Hi	Reactor temperature	Demo_Area	500									
D	StorageTank_001.ProdLevel.Hi	Storage tank product level	Demo_Area	500									
D	StorageTank_001.ProdLevel.Lo	Storage tank product level	Demo_Area	500									
D	Tank_001.PV.Hi	Tank 001 Level	Enterprise	500									
D	Tank_001.PV.HiHi	Tank 001 Level	Enterprise	500									
D	Tank_001.PV.Lo	Tank 001 Level	Enterprise	500									
D	Tank_001.PV.LoLo	Tank 001 Level	Enterprise	500									
D	Tank_002.PV.Hi	Tank 002 Level	Enterprise	500									
D	Tank_002.PV.HiHi	Tank 002 Level	Enterprise	500									
D	Tank_002.PV.Lo	Tank 002 Level	Enterprise	500									
D	Tank_002.PV.LoLo	Tank 002 Level	Enterprise	500									


The discovered alarm tags are displayed on the left side. The alarm tags to return to TopView are displayed on the right side.

Filters


Each column on the left side has a text box above the column name. Entering text in one of these fields will filter the displayed list of alarm tags

Choose alarm tags to return

To add tags to the return list (right side)

- Click and drag one or more tags from the left side to the right side
- Click  in the upper left corner then “Add all tags” to copy all tags to the right side

Save tags

Once the return tag list (right side) is complete, click 

TopView 6.36 and later: when you click [Save Tags] the alarm tags are returned to the SCADA Connect Tag Importer in the Configurator.

TopView 6.35: when you click [Save Tags] you are returned to HMI Sync. Proceed to “Import Alarms to TopView”

Alarm Tag Picker v2

Example alarm tag picker

Type	Tag name	Description	HMI Groups(s)	Priority	Disabled	Existing
<input checked="" type="checkbox"/> A(H)	ProdLevel	Product storage level	Reactor	1		
<input type="checkbox"/> A(L,H)	ReactLevel	Reactor level	Reactor	1		
<input checked="" type="checkbox"/> A(H,HH)	ReactTemp	Reactor temp	Reactor	1		

The discovered alarm tags are displayed. The user can select which tags to return to TopView

Filter

The filter section allows the user to filter the list of displayed tags based on the filter criteria.

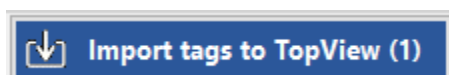
Selecting tags to import

The tags that will be imported to TopView have a checkbox in the first column. The user can check a single tag, a subset of the tags, or all tags.

- Single tag: check/uncheck the box in the first column
- Multiple tags (subset)
 - Select multiple tags in the list using the Ctrl or Shift key
 - Option 1: right click and choose the desired check/uncheck option from the context menu
 - Option 2: click the [Select tags for import] button above the tag list and choose the desired check/uncheck option
- Multiple tags (all)
 - Option 1: right click and choose the desired check/uncheck option from the context menu
 - Option 2: click the [Select tags for import] button above the tag list and choose the desired check/uncheck option

Importing the tags

Click the [Import tags to TopView] button



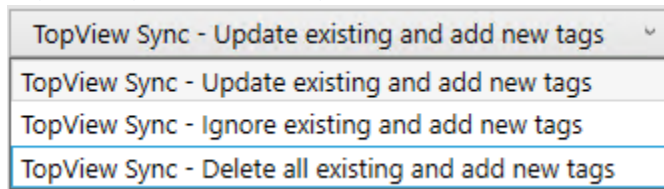
Import Alarms to TopView (6.35 and earlier)

If TopView 6.36 and later, the SCADA alarm tags are returned to the SCADA Connect Tag Importer in the Configurator and you do not need to perform this step.

In TopView 6.35 and earlier, you must sync the retrieved SCADA alarms to the TopView configuration. Once this sync completed you can reopen the Configurator.

Note: the TopView configuration file name for the sync is specified in the options on the left side of the HMI Sync screen. See “TopView Configuration name” under “Set Import/Sync Options”.

TopView Sync – how to import



From the dropdown, choose the way that TopView will import alarms. Most users will want select 'Update existing and add new tags'.

- **Update existing and add new tags**

If a tag discovered by HMI Sync already exists in the TopView configuration, it will be updated with the new tag information from HMI Sync. If it does not exist in the TopView configuration it will be added as a new tag.

- **SIMATIC WinCC v7 users warning: you cannot choose this option in TopView 6.34 because the same tag exists multiple times with different BIT operations.**

- **Ignore existing and add new tags**

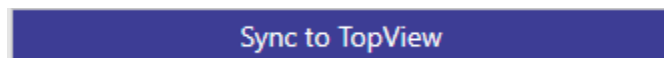
If a tag discovered by HMI Sync already exists in the TopView configuration, it will be discarded and the existing TopView tag will be preserved. If it does not exist in the TopView configuration it will be added as a new tag.

- **Delete all existing and add new tags**

Delete all existing tags in the TopView Configuration and import all tags discovered by HMI Sync.

Sync to TopView

Click [Sync to TopView] to import the retrieved SCADA/HMI alarms into the TopView configuration.



Run the TopView Configurator

The “Import Alarms to TopView” step has configured TopView and created a TopView configuration with your alarms. You can now run the TopView Configurator and open the configuration file created by SCADA Connect.

Import Alarms to TopView (6.36 and later)

In TopView 6.36 and later the alarm tags are returned to the SCADA Connect Tag Importer

HMI/SCADA tags (retrieved at 5/4/2021 10:19:07 AM)								
Tags for import		Tag list filter		Modify tags				
	Alarm tag name	Description	Exists	Priority	Disabled	Tag Group (primary)	Tag Group (secondary)	Acknow
<input checked="" type="checkbox"/>	ArchestraOPC.Tank_001.PV.Hi.InAlarm	Tank 001 Level		500	False	Notify	Enterprise	Archest
<input checked="" type="checkbox"/>	ArchestraOPC.Tank_001.PV.HiHi.InAlarm	Tank 001 Level		500	False	Notify	Enterprise	Archest
<input checked="" type="checkbox"/>	ArchestraOPC.Tank_001.PV.Lo.InAlarm	Tank 001 Level		500	False	Notify	Enterprise	Archest
<input checked="" type="checkbox"/>	ArchestraOPC.Tank_001.PV.LoLo.InAlarm	Tank 001 Level		500	False	Notify	Enterprise	Archest
<input checked="" type="checkbox"/>	ArchestraOPC.Tank_002.PV.HiHi.InAlarm	Tank 002 Level		500	False	Notify	Enterprise	Archest
<input checked="" type="checkbox"/>	ArchestraOPC.Tank_002.PV.Hi.InAlarm	Tank 002 Level		500	False	Notify	Enterprise	Archest
<input checked="" type="checkbox"/>	ArchestraOPC.Tank_002.PV.Lo.InAlarm	Tank 002 Level		500	False	Notify	Enterprise	Archest
<input checked="" type="checkbox"/>	ArchestraOPC.Tank_002.PV.LoLo.InAlarm	Tank 002 Level		500	False	Notify	Enterprise	Archest

☒ Add
☐ Update
☐ Update and add
☐ Replace all

Choose which tags to import

All tags with a check in the first column will be imported to the TopView configuration.

Select one or more tags if you want to check/uncheck some of the listed tags. You can also “Filter the tag list”.

To change the import (checked) tags

- Right-click on the tag list and choose Check displayed/selected or Uncheck displayed/selected OR
- Click [Tags for import] and choose Check displayed/selected or Uncheck displayed/selected

Filter the tag list

Click [Tag list filter] to filter the displayed tags.

<input checked="" type="checkbox"/> Filter	Tag name contains	<input type="text"/>	<input type="checkbox"/> NOT MARKED for import (unchecked)	<input type="checkbox"/> DOES NOT EXIST in current configuration
	Description contains	<input type="text"/>	<input type="checkbox"/> MARKED for import (checked)	<input type="checkbox"/> EXISTS in current configuration

The displayed tag list can be filtered by

- Tag name
- Tag description
- Tags marked for import/not marked for import
- Tags that exist or do not exist in the current configuration

Modify tags

Click [Modify tags] to make changes to the tag before importing to TopView.

Allowed tag changes include

- Setting or clearing the Tag Group(s)
- Clearing acknowledge input/output tags
- Changing the server name for the imported tags (v7.1 and later)
The import for each SCADA has a default server name (OPC Server Alias). If the user has changed this name for existing TopView tags, the imported tags can be modified to use the new name.

Import options

Click [[<< Import options](#)] to view/edit the import tag options

Convert acknowledge tags to extensions

SCADA Connect returns the full name for the alarm and input/output acknowledge tags.

For many SCADAs the alarm and acknowledge tags contain the same root name but different extensions/properties.

Example:

- Alarm tag: my.tag.Alarm
- Ack tag: my.tag.Ack

The specification of the input/output acknowledge tags in TopView can use the full tag name or only the extension (.Ack in the above example).

If this option is enabled, the import will convert the full acknowledge tag names to the extensions if the tag naming of the alarm and acknowledge tags supports it.

Import acknowledge input/output tags

If enabled will import the acknowledge tags. Disable these options if you do not want to import the input or output acknowledge tags.

TopView Configurator

You should now have a TopView configuration containing your alarm tags and settings.

The TopView Configurator allows users to view and edit configuration files - we will use the Configurator to verify settings and to configure and run the TopView Engine.

There are a few ways to start the Configurator:

- Click the TopView Information Icon in the system tray



and select "Configurator (desktop)"



[Configurator \(desktop\)...](#)

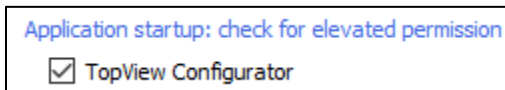
- From the Start button: All Apps>Exele TopView>TopView Configurator

Configure to run with elevated permission

You may need to run the Configurator with elevated permissions so you can write configuration data to the TopView DataPath. The default location for the DataPath is C:\ProgramData\Exele\TopView.

When you run the Configurator you may receive a warning that you may not have write permission. If this warning appears

- Click [Yes] to re-launch the Configurator with elevated permissions
- Select "Global Options" from the Global settings section of the left menu
Click the Applications tab
- Check "TopView Configurator" in the "Application startup: check for elevated permissions" section



- Click OK to close the Global Options screen

Open your TopView configuration file

When you launch the Configurator it should open the configuration file created by SCADA Connect.

To manually open your configuration file:

- Select “Configuration Files” from the left menu
- Double-click your configuration file in the list of existing configuration files. Alternately you can select your configuration file in the list and click the [Open] button.

Learn the basics about TopView (TopView 101)

Some of the steps that we will perform in the Configurator assume a general understanding of TopView terms and concepts.

If this is your first time using TopView we suggest that you read the TopView introduction manual, “TopView 101”. This manual is available in the Help menu of the Configurator.

Watch the SCADA Connect videos

Many of the steps covered here are also described and demonstrated in the [TopView SCADA Connect videos](#).

Verify your gateway

Most of the SCADA gateways are OPC Servers on the same machine as TopView.

An OPC Server is addressed through two properties:

1. The machine name where the OPC Server is running
2. The name of the OPC Server, also known as the “DA OPC Server ProgID”

Instead of requiring the user to specify both fields when addressing the gateway OPC Server, TopView uses the concept of an “OPC Server Alias” as a single name that refers to the OPC Server machine and ProgID.

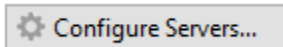
When you configured your gateway in SCADA Connect during the “Install for your HMI” step, SCADA Connect created an OPC Server Alias for your gateway.

We will check the OPC Sever Alias for your gateway and verify that we can connect to the gateway.

Open the OPC Server Alias dialog

From the left menu of the Configurator, select “Tags and Limits”

- TopView 7.2 and later: click the [Configure Servers] button



- TopView 7.1 and earlier: Next to the Server text box, click the gear icon button



Verify the OPC Server Alias settings for your gateway

The OPC Server Alias dialog should list the alias for your gateway.

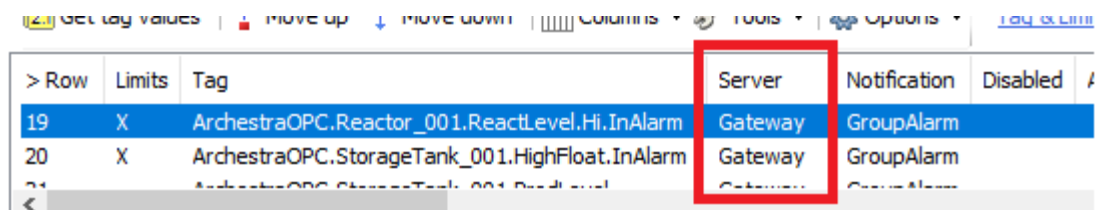
The alias name and OPC DA Server name will be different for each SCADA/HMI. The host name/IP for the alias is blank for a gateway OPC Server on the local machine.

Note: the OPC DA Server names listed below may change with newer versions of the gateway. During the “Verify connection to your gateway” step we will validate the gateway details.

- Wonderware InTouch or System Platform
Alias name = Gateway
OPC DA Server:
 - FSGateway: ArchestrA.FSGateway.3
 - OIGateway: OI.GATEWAY.3
- Wonderware Edge
Alias name = InTouchEdge
OPC DA Server: Studio.Scada.OPC.4
- Rockwell FactoryTalk View SE A&E
Alias name = FTGateway
OPC DA Server: FactoryTalk Gateway
- Rockwell RSLinx for PLC
Alias name: RSLinx
OPC DA Server: RSLinx OPC Server
- Rockwell RSView32
Alias name = RSView32
OPC DA Server: RSI.RSView32OPCTagServer
- GE iFix
Alias name = iFix
OPC DA Server: Intellution.OPCiFIX.1
- Citect
Alias name = Citect
OPC DA Server: SchneiderElectric.SCADA.OpcDaServer.1
- ClearSCADA/Geo SCADA
Alias name=ClearSCADA
OPC DA Server: Serck.ScxV6OPCDA.Local.localhost
For OPC Connection information for ClearSCADA, see “ClearSCADA/GEO SCADA” under “Gateway Connection Issues”

- SIMATIC WinCC v7
Alias name = WinCC
OPC Da Server: OPCServer.WinCC.1
- Siemens OA
Alias name = WinCC_OA
OPC DA Server: WINCC_OA.OPC.1

If your gateway is not listed you will need to create a new alias for your gateway. If you already have tags from your SCADA/HMI in the TopView monitored tag list, the alias name you create should match the name in the “Server” column.



The screenshot shows the TopView Configurator interface with a table of monitored tags. The table has columns: Row, Limits, Tag, Server, Notification, and Disabled. The 'Server' column is highlighted with a red box. The data rows are as follows:

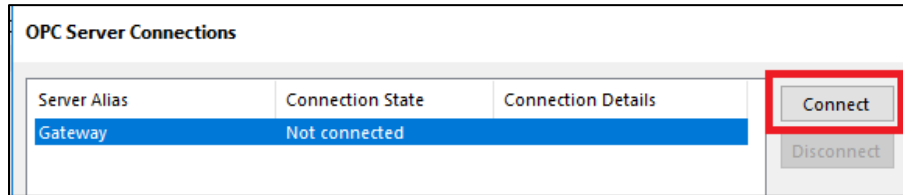
Row	Limits	Tag	Server	Notification	Disabled
19	X	ArchestraOPC.Reactor_001.ReactLevel.Hi.InAlarm	Gateway	GroupAlarm	
20	X	ArchestraOPC.StorageTank_001.HighFloat.InAlarm	Gateway	GroupAlarm	
21		ArchestraOPC.StorageTank_001.LowLevel	Gateway	GroupAlarm	

See “Defining an OPC Server Alias” in the TopView Product Help or PDF. You can access this information from the TopView Configurator top Help menu.

Verify connection to your gateway

From the Alias dialog, click the [Test connections...] button.

Select your Server Alias and click the [Connect] button



If you cannot connect

If you are unable to connect to your gateway, there are a few steps you can perform before you contact your gateway vendor.

Check the OPC Server name

- Close the Connections dialog and return to the Alias definition screen.
- If the gateway is local (recommended), the Host name/IP should be blank.
- Click the [Query] button to list the OPC Servers on the host.
- You should see any registered OPC Servers in the “DA Query results”
- Verify that the OPC DA Server configured for your alias exists in the DA Query results

If the name of the OPC Server is correct you will need to contact your gateway vendor for further assistance.

Check vendor-specific notes

See “Gateway Connection Issues” for vendor-specific notes about connection issues.

Check gateway tags for good status

Each tag that TopView reads or writes has a value, status, and timestamp.

The status of a value is an indicator of the good or bad quality of the value. If the status is not good, the value may not be valid. With some gateways an invalid tag name may not be returned as “tag not found” but may instead be returned as a valid tag having a bad status for its current value.

Configurator

We can use the TopView Configurator to return the current value of the gateway tags.

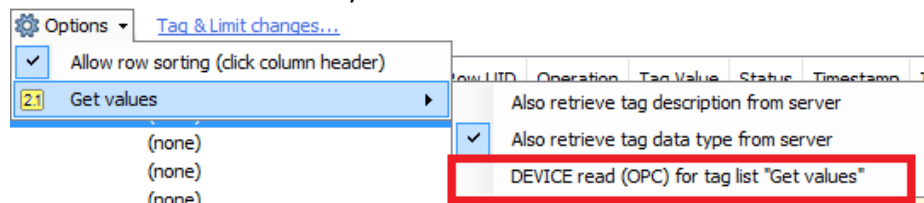
Choose which tags to check

Ideally, we want to check the status of any tag used by your configuration – monitored tags for alarming, output tags (acknowledge, health), acknowledge input tags, Output Points, etc.

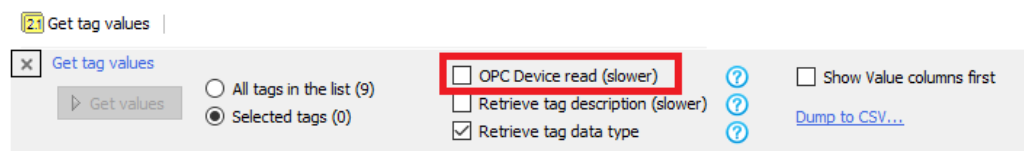
Starting with the Configurator in TopView v6.31 you can retrieve the current value of all tags used in the configuration. Prior to v6.31 you can only check the current value of the monitored tags and will need to run the TopView Engine to check the status of the other tags.

- Launch the TopView Configurator and open your configuration file.
- Select “Tags and Limits” from the left menu
- Set retrieval method to “Cache”
Cache reads ask the server to return the most recent value that the gateway has for the tag. This is usually much faster than a Device read which asks the gateway to go out and retrieve the value from the SCADA/HMI. Unfortunately, the first Cache read may not be valid since the gateway may not yet have a value in it’s cache, so we will always perform a cache read twice if any bad status values are returned.

- TopView 6.30 and earlier: Above the tag list, click Options...Get Values and uncheck “Device read” if it is currently checked



- TopView 6.31 and later: Above the tag list, click “Get Values” and make sure that “OPC device read” is unchecked



- Make sure that the Tag Group filter above the tag list is set to “(all)”

Current tag list (monitored points)

Filters: Tag Group: (all) ▼

- Display all tags in the tag list (6.31 and later)
In the filter options above the tag list, select “Display: All tags”

Display: ☐ Monitored tags (default)
☒ All tags

A “Tag type” column will be added to the tag list to describe the type of tag in TopView.

> Row	Limits	Tag type
20	X	Monitored
20		Acknowledge input
20		Acknowledge output
21	X	Monitored
21		Acknowledge input
21		Acknowledge output
22		Monitored
23	X	Monitored
23		Acknowledge input
23		Acknowledge output
24	X	Monitored
24		Acknowledge input

Retrieve the current values of the tags

The Configurator can retrieve the current value/status/timestamp for each tag in the tag list.

- TopView 6.30 and earlier: Select Get values...Get tag values (displayed tags)

21 Get values ▼ | ↑ Move up ↓ Move down

- 21 Get tag value (selected tag)
- 21 **Get tag values (displayed tags)**
- Clear tag values (displayed tags)

- TopView 6.31 and later:

21 Get tag values | ↑ Move up ↓ Move down

✕ Get tag values

▶ Get values ☒ All tags in the list (26)
☐ Selected tags (0)

- Choose “Get values”
- Select “All tags in the list”

- Click the [Get values] button

Check the status of each tag

The default location of the value/status/timestamp columns is the right-most columns of the tag list.

Tag	Value	Status	Timestamp
327686		Good	8/23/2018 1:32:44 PM
Stopped		Good	8/23/2018 1:32:44 PM
H2		Good	8/23/2018 1:32:45 PM
10		Good	8/23/2018 1:32:44 PM

Depending on the width of the displayed columns, it may be difficult to see the tag name column when you are viewing the value/status/timestamp columns.

In TopView version 6.31 and later you can show the value/status/timestamp as the left-most columns, making them closer to the tag name column. In the Get Values options panel, check “Show Values columns first”.

Get tag values

Get values

☒ All tags in the list (26)
☐ Selected tags (0)

☐ OPC Device read (slower)
☐ Retrieve tag description (slower)
☒ Retrieve tag data type

☒ Show Value columns first
[Dump to CSV...](#)

You can sort the tags by status by clicking the Status column header.

For any tags with bad status, see “Resolve tags with bad status”.

Resolve tags with bad status

Output Points:

- Example Output Points may be created in your configuration but are disabled by default. These tags do not exist until they are created in the SCADA. Disabled Output Points are not verified but all other tags are verified. You do not need to resolve the bad status of Output Points before proceeding
- See the SCADA Connect video "[Steps After Syncing Alarms to TopView](#)" for more information about the included Output Points

SCADA Tags:

- Each SCADA may have a set of default example SCADA tags included. This list may include system tags and example SCADA alarm tags.
- The description of each default SCADA tag starts with < and the description gives more information about the tag
- These tags are not required and can be removed if they have bad status
- See the SCADA Connect video "[Steps After Syncing Alarms to TopView](#)" for more information about the included SCADA tags

Imported SCADA Alarm tags

- All of your imported SCADA alarm tags and acknowledge tags should exist and have good status.
- You should resolve all SCADA alarm tags with bad status before proceeding.
- See the trouble shooting section "Bad Status Tags" for tips on resolving tags with bad status.

Test writing to output tags

The TopView configuration created by SCADA Connect's HMI Sync may create two types of outputs.

1. Output Points: used for TopView health monitoring
2. Acknowledge output tags: used to write an alarm acknowledge action to an acknowledge tag. An acknowledge output tag is assigned to an alarm tag in the monitored tag list.

To see the types of output tags in your configuration:

- Open your configuration in the TopView Configurator
- Select "Tags and Limits" from the left menu
- Above the monitored tag list, choose "Display: all tags" (TopView 6.31 and later)
- The column "Tag type" will display "Output Point" and "Acknowledge output" for the two types of output tags

Output Points

To test writing to Output Points:

- Select "Output Points" from the left menu of the Configurator
- On the Output Points dialog, select each Output Point and click the [Test output] button to send a value to the tag defined for the Output Point.
- Note: the Output Point tags only exist if you have created them. If they are disabled they are not verified by the TopView Engine.

Acknowledge output tags

You should test a few of the acknowledge output tags to verify that you can write to these tags.

To test writing to acknowledge output tags

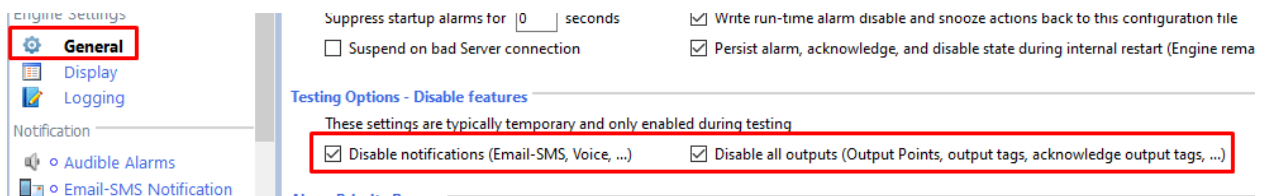
- Double-click the alarm tag associated with the acknowledge output tag. This will open the Alarm Limits and Notification settings screen.
- Select the "Acknowledge Settings" tab
- Click the [Test output] button in the acknowledge output tag section
- Warning: System Platform: writing to an acknowledge output tag for an acknowledged alarm will fail. You can only write to the acknowledge output tag if the alarm is not acknowledged.

Test the TopView Engine

In TopView 6.31 and later, you can test the TopView Engine without performing any notifications or outputs. This allows you to validate the monitoring and alarming functions in your configuration without sending notifications or outputs.

Turn off notifications and outputs

In the TopView Configurator, select General from the left menu. Then check the “Disable notifications” and “Disable all outputs” options.



Launch the Engine interactively

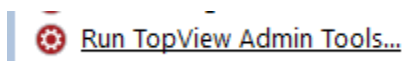
Save your configuration file using the [Save] button. Then start the TopView Engine interactively by clicking the [Launch] button.



The TopView Engine window should appear. The current values and current alarms should be visible in the windows.

Check the application log for errors

While the Engine is running, launch TopView Admin Tools using the link in the lower left corner of the Configurator.



- Make sure that your TopView Engine is selected in the “TopView Engine Details” at the top of the Admin Tools application
- From the left menu of TopView Admin Tools, select “Application logs”
- The daily application log files are listed. The current day’s log file should be selected.
- Look at the “Message level filter” to see the number of Warning and Error messages.
- Uncheck the “Information” filter and click [Refresh] to view only warning and error messages.

Stop the TopView Engine (interactive)

Click the [X] close button in the upper right of the TopView Engine Window to close the interactive TopView Engine.

Install the TopView Engine as a Service

The interactive TopView Engine is often used for testing initial configuration. Most users will eventually run the TopView Engine as a Windows Service.

Once you have verified the interactive operation of the Engine you should verify that the Engine will run as a Service.

In the Configurator:

- Open your configuration file and select “Configure Services” from the left menu
- Startup type
 - Automatic: start the Service when the machine boots
 - Manual: the Service must be started manually after the machine boots
- LogOn account
 - LocalSystem: if the gateway is on the local machine you may be able to run the Service under the LocalSystem account.
 - User: enter a Windows user account with permission to connect to the gateway.
- Click [Install] to install the Engine Service. If the installation is successful you should see your Engine in the list of existing TopView Engine Services.

Test your TopView Engine Service

- In the list of existing TopView Engine Services, right-click your Engine Service and choose “Start”
- Use TopView Admin Tools to check the application log for any errors. See “Check the application log for errors”
- Once you have verified the Engine Service you can stop your TopView Engine Service.
Warning: if you set the Service startup to “Automatic” it will automatically start if the machine is rebooted.

Configure notifications

Your TopView configuration contains Tag Groups. Tag Groups are user-named categories used for grouping alarms for displays, reports, and for configuration of notifications.

A single alarm tag can belong to one or more Tag Groups. If a Tag Group contains notification settings, any alarm tag belonging to the Tag Group will inherit these notification settings.

When you performed HMI Sync, one of the options was “Primary Tag Group” with a default value of “Notify”. You can view the Primary Tag Group in the alarm tag list.

> Row	Limits	Tag	Server	Notification	Disabled	Inhibit	Description	Primary Group	Secondary Group
3		notif_emailsms_failed	localStatus				TopView Status Tag: # of Email/SMS Notification f...	System Status	
4		notif_voice_failed	localStatus				TopView Status Tag: # of Voice Notification failures...	System Status	
5		statusnotgood_count	localStatus				TopView Status Tag: # of TopView tags with bad st...	System Status	
6	X	notif_emailsms_lastfailed	localStatus				TopView Status Tag: Will alarm if the last Email/SM...	System Status	
7	X	notif_voice_lastfailed	localStatus				TopView Status Tag: Will alarm if the last Voice Not...	System Status	
8	X	servers_connected	localStatus				TopView Status Tag: Will alarm if servers are not co...	System Status	
9	X	ArchestraOPC.Tank_001.PV.Hi.InAL...	Gateway				Tank 001 Level	Notify	Enterprise
10	X	ArchestraOPC.Tank_001.PV.Hi.Hi.In...	Gateway				Tank 001 Level	Notify	Enterprise
11	X	ArchestraOPC.Tank_001.PV.Lo.InAL...	Gateway				Tank 001 Level	Notify	Enterprise
12	X	ArchestraOPC.Tank_001.PV.Lo.Lo.In...	Gateway				Tank 001 Level	Notify	Enterprise
13	X	ArchestraOPC.Tank_002.PV.Hi.InAL...	Gateway				Tank 002 Level	Notify	Enterprise
14	X	ArchestraOPC.Tank_002.PV.Hi.Hi.In...	Gateway				Tank 002 Level	Notify	Enterprise
15	X	ArchestraOPC.Tank_002.PV.Lo.InAL...	Gateway				Tank 002 Level	Notify	Enterprise
16	X	ArchestraOPC.Tank_002.PV.Lo.Lo.In...	Gateway				Tank 002 Level	Notify	Enterprise

To configure notifications for your alarms you will need to

- Configure the settings for Email, SMS, or Voice notification
- Create at least one notification group (recipients)
- Assign the notification group to the Tag Group assigned to your alarm tags.

The separate TopView 101 document gives an overview of how Email, SMS/text, and Voice call-out notification are configured through Tag Groups. More configuration details for each type of notification are available in the TopView product documentation.

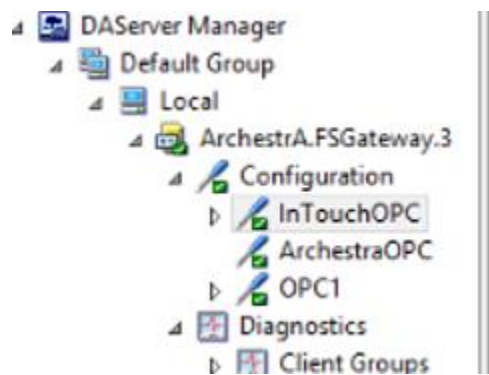
Tag names in TopView

Wonderware FSGateway and OIGateway

For InTouch and System Platform users, the prefix of the tag names in TopView will be the gateway topic name for the InTouch or System Platform connection

InTouchOPC for Intouch users (without System Platform)

ArchestraOPC for System Platform users



Wonderware InTouch Edge

Edge locks OPC to one application so no prefix will exist in the TopView tag names

Rockwell FT Gateway A&E tag-based

If scope is defined as the application, the area is the prefix for each tag

If the server scope is changed up or down a level, OPC clients may not be able to access tags from the original configuration. This is because the OPC browse interface provides tag names that are relative to the FactoryTalk Gateway's configured scope. If you change an existing configuration, you will be prompted to verify that you want to change the scope.

Rockwell FT Controller-based and RSLinx Pro with PLC

RSLinx is configured with a Topic for each PLC.

This Topic name, an option in HMI sync, is the prefix to each alarm tag.

Citect

Citect locks OPC to one application so no prefix will exist in the TopView tag names

GE iFix and WinCC-OA

Similar to Wonderware, a prefix is required for the TopView tag names.

iFix: tag name prefix is the node

WinCC-OA: tag name prefix is WinCC_OA

Vendor-specific How-to

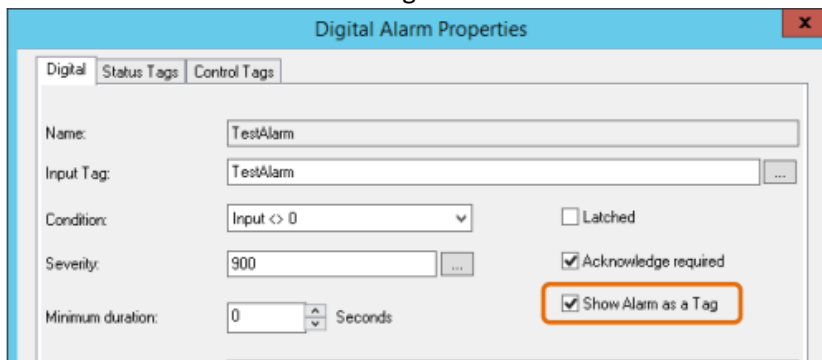
Exposing FactoryTalk A&E Alarms as Tags in FT Gateway

Does not apply to HMI Tag Alarms.

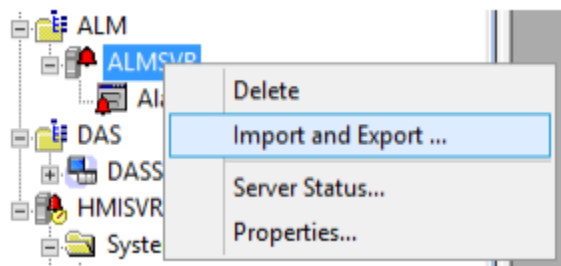
FactoryTalk Linx Gateway can expose anything within the FactoryTalk View application. The PLC data and HMI Tag Alarms will be exposed to Gateway and therefore to TopView.

By default, an A&E alarm is not exposed as a tag in FactoryTalk Linx Gateway for TopView to monitor. To configure an A&E alarm as a tag:

- Run FTVIEW Studio to view the alarms
- Go into the Alarm Properties
- Check the box “Show Alarm as Tag”



- Note: You may need to right click the HMI Server and select “Refresh All Folders” after checking the box to make the tag appear in the list (this is a common FT View SE issue)
- Bulk configuration:
 - Export all of the tags and update all in bulk in Excel. Change column I (Alarm as a Tag) to TRUE.
 - Save and import the tags back in to the A&E server.



Severity tag (FactoryTalk A&E tag based)

For SCADAs that expose the alarm priority/severity as a tag, TopView can be configured to dynamically set the TopView alarm priority to the current value of the SCADA alarm priority/severity by referencing the priority/severity tag name for each alarm.

A FactoryTalk A&E alarm tag exposed to TopView through FactoryTalk Linx Gateway will have the name tagname.InAlarm. Newer version of FactoryTalk may not expose the alarm severity to TopView through the name tagname.Severity so you will need to create a tag to expose this severity value to TopView.

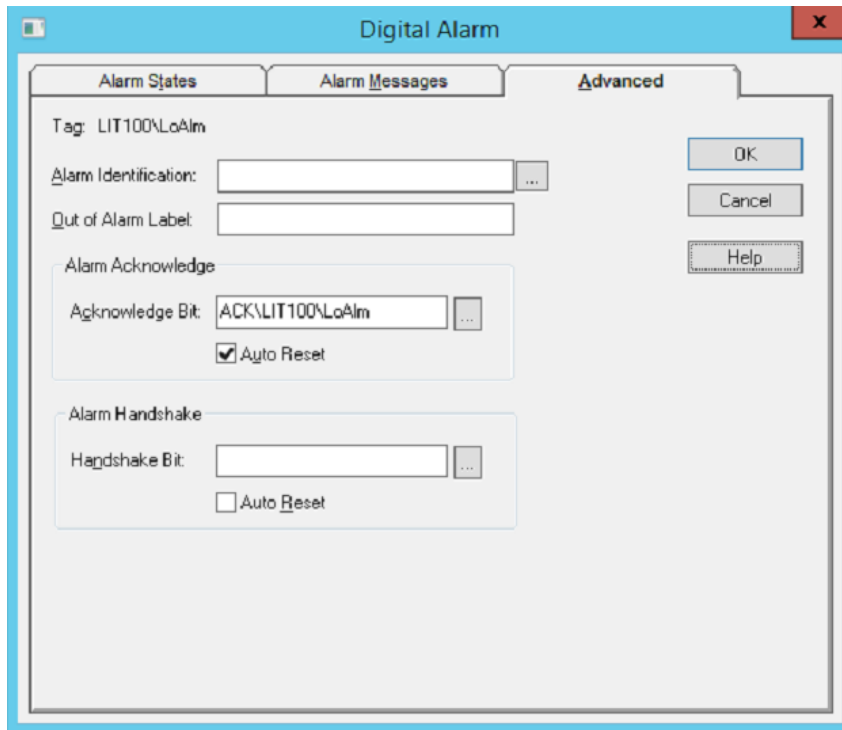
Example solution:

1. Create a derived tag in FactoryTalk where the value is derived from functions `AE_HighSeverityAcked(AlarmName)` and `AE_HighSeverityUnacked(AlarmName)`.
Note: these functions return a 0 if InAlarm is False.
2. Have an HMI tag point to the derived tag
3. Reference the HMI tag (severity) from TopView as the TopView alarm priority

Acknowledge Tags (Rockwell FT View SE HMI Tag Alarms and RSVIEW32)

Note: this does not apply to FactoryTalk View SE A&E

By default, alarms do not have an acknowledge tag exposed to the FactoryTalk communications. If you would like to synchronize the alarm acknowledge with TopView's alarm acknowledge, you can create a memory tag for ACK in a folder named "ACK", and select it in Advanced-Acknowledge Bit in the Alarm setup. Auto Reset must be selected. This is the same process that was used for SCADAAlarm.

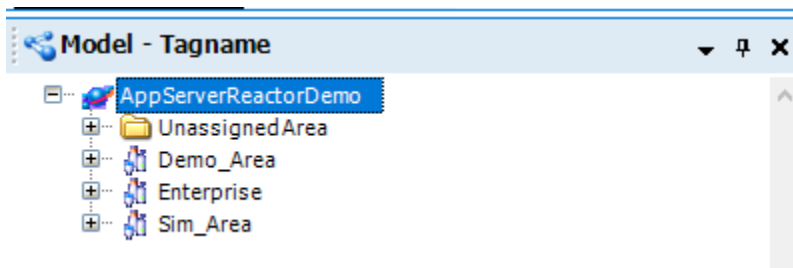


System Platform: Export objects/tags to CSV

Launch the System Platform/Archestra IDE and connect to your Galaxy

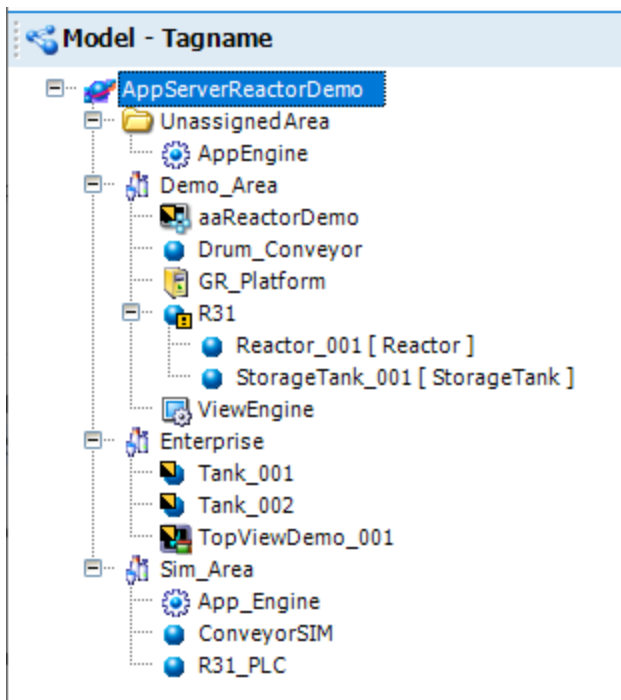
- From the top menu, select View...Model

Select the first node in the Model tree



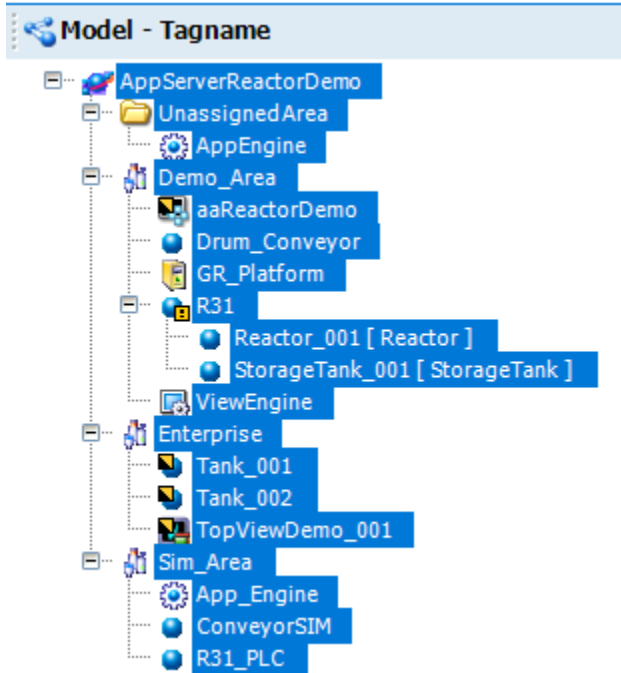
Expand all nodes in the tree

- Press the * key on the number keypad
Note: only the * key on the number keypad will expand all nodes, not Shift+8



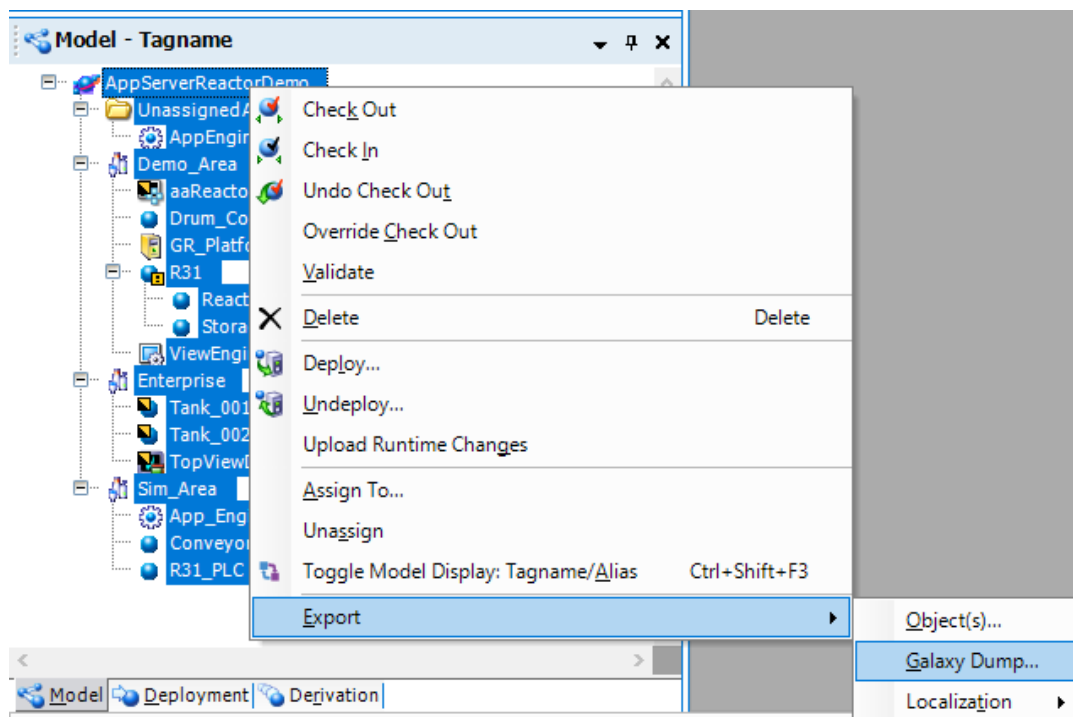
Select all nodes in the tree

- Click the first node in the tree
- While holding down the Shift key, click the last node in the tree
- The whole tree should now be selected



Export to CSV

- Right-click on the tree and choose Export > Galaxy Dump



Save the CSV file.

Enable Tag Search

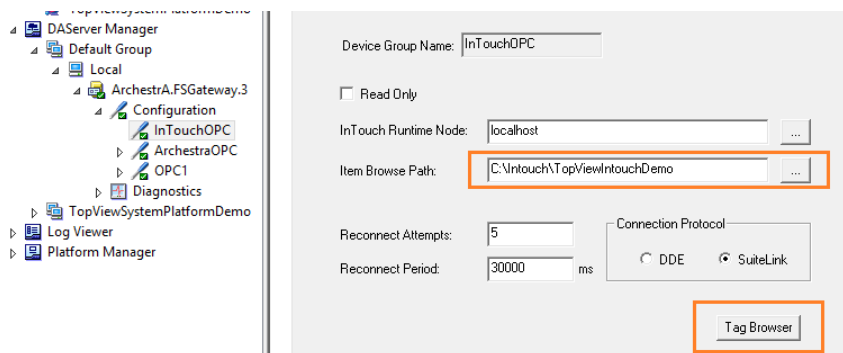
The OPC gateway from your vendor may not support browsing/searching for the available tags from the TopView Configurator's Tag Search. This section contains information on enabling tag search for SCADA Systems that do not enable this feature by default.

Wonderware InTouch

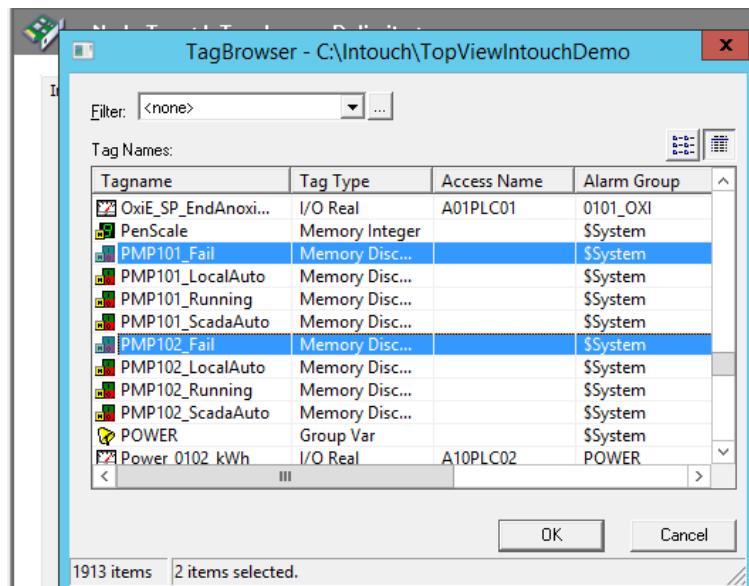
The tag search through FSGateway or OIGateway does not, by default, display all of the tags available to TopView.

To enable tag search for additional InTouch tags:

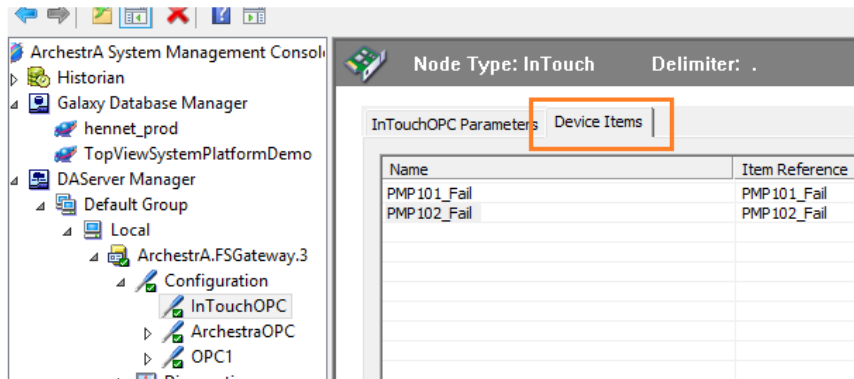
- Run Archestra SMC (System Management Console)
- Enter the properties of the "InTouchOPC" topic in the gateway
- Set the Item Browse Path to the path of the InTouch application
- Click the [Tag browser] button



- Choose the tags to add to the browser. Use Ctrl or Shift to select multiple
- Click OK



- Choose the “Device items” tab to see your tags. These tags should now be visible to the tag search in the TopView Configurator.



ClearSCADA/GEO SCADA

If you cannot browse all tags, you may need to enable OPC Private Security settings for your TopView OPC Server Alias.

See “ClearSCADA/GEO SCADA” “OPC Private Security” for more information.

Vendor Online Product Manuals and Information

Rockwell FactoryTalk Gateway

http://literature.rockwellautomation.com/idc/groups/literature/documents/gr/ftgate-gr001_-en-e.pdf

Rockwell FactoryTalk Alarms & Events

<https://www.logic-control.com/datasheets/23/Components%20Manual/FactoryTalk%20Alarm%20&%20Events.pdf>

Wonderware System Platform Alarms

[http://global.wonderware.com/EN/SoftwareGCC15PPTs/TSS-01 Troubleshooting Alarms in AppServerv1.pdf](http://global.wonderware.com/EN/SoftwareGCC15PPTs/TSS-01_Troubleshooting_Alarms_in_AppServerv1.pdf)

Wonderware FSGateway User Manual

2014: <https://knowledge.insourcess.com/@api/deki/files/2357/FSGateway>

TopView Health Monitoring in your SCADA/HMI

Overview

Optional Step: create tags, displays, and scripts for your HMI

The TopView Configurations generated by HMI Sync can include TopView health indicators (outputs) that can be monitored in the SCADA System to provide health information to the operator/HMI. There are also signals in the SCADA System that can indicate SCADA health information to TopView. See “Configuration import options” for more information about including these tags in your TopView configuration.

Note: the health monitoring Output Points in TopView are disabled by default. If you create the TopView health tags in your SCADA system you can enable these Output Points and assign them to the Health heartbeat output for the TopView configuration.

To support health monitoring, the following are required:

- TopView health indicators must be written from TopView to SCADA tags (TopView health SCADA tags). If these SCADA tags do not exist, they must be created.
- Scripts must be created in the SCADA system to monitor some of the TopView health SCADA tags to recognize TopView health issues. For example, if TopView is writing a sawtooth to a TopView SCADA health tag, a SCADA script must run to recognize when this tag stops updating
- The TopView health SCADA tags, or scripted health results, can be viewed in the HMI display
- The SCADA system can provide a system tag or scripted tag that can be monitored in TopView to recognize a SCADA health issue. Example: a clock/counter tag can be monitored by TopView and TopView can recognize when this tag stops updating.

The output of TopView health indicators in TopView configurations created by SCADA Connect will be disabled by default. After the steps in this section have been followed and the required SCADA tags and scripts exist, the output of TopView health indicators can be enabled.

SCADA Tag creation, health monitoring scripts, and HMI displays

SCADA Connect included a set of example scripts for tag creation and TopView health monitoring as well as example graphics for displaying TopView health information in the HMI.

***These items are provided as examples and are not supported. A working knowledge of the development software for your HMI is required. Contact your HMI’s technical support if you are unaware of the procedures for importing and modifying the examples provided to make them work with your HMI.**

The example files are installed to the following location:

C:\Users\Public\Documents\TopView\ScadaConnectivity\HMI_Config

TopView health indicators

TopView health indicator are outputs from the TopView Engine to tags that you create in your HMI.

When you generate a TopView configuration using SCADA Connect, the following outputs will be created although they will initially be disabled.

- **Sawtooth heartbeat output**
 - Created in the TopView configuration through a sawtooth health Output Point (select Output Points from the left menu of the Configurator) and the assignment of this Output Point to the health/heartbeat setting of the Engine (select Health from the left menu of the Configurator)
- **Notification failure**
 - Two internal TopView status tags are added to the list of monitored alarm tags
 - notif_emailsms_lastfailed (last Email-SMS Notification failed)
 - notif_voice_lastfailed (last Voice Notification/call-out failed)
 - These status tags have the following integer values
 - 1 = the last notification failed
 - 0 = the last notification was successful
 - The status tags are configured in TopView with alarm condition “= 1”
 - Alarm is active when a notification fails, and return to normal when a notification is successful
 - When the status tag enters alarm (notification failed) it will write a 1 to a TopView health SCADA tag. When the alarm clears (notification working) it will write a 0 to the same TopView health SCADA tag.
 - This output upon alarm and return-to-normal is configured on the Alarm Limits screen...Outputs through the assigned Output Points

When monitoring the TopView health indicators in the SCADA tags, the following script/logic must be applied:

- Sawtooth tag: TopView health alarm if the tag value stops updating. The sawtooth will update periodically based on the output frequency configured for the Sawtooth Output Point in TopView.
- Notification failure tag: notification failure if the tag value = 1

Importing Scripts

This section includes vendor-specific information for the importing of scripts into your SCADA/HMI. See “TopView Health Monitoring in your SCADA/HMI” for more information.

Wonderware InTouch and System Platform

The default location for the scripts is

C:\Users\Public\Documents\TopView\ScadaConnectivity\HMI_Config\Wonderware

The InTouch and SystemPlatform folders contain scripts for various versions of the software.

Special notes about importing the Wonderware Scripts

- System Platform 2017
 - If 2017 files are not included in your version of SCADA Connect you can import the "aapkg" files for 2014R2. They will import to any version of 2017.
- InTouch (general):
 - When importing, check the Use Existing Tags (Conserve Placeholders) check box. This will use the tags in the same tags as in the Tagname Dictionary if they are there. See [Wonderware support information](#). If the user does not choose this option:
 - InTouch adds the tags as "placeholders". ?d = discrete, ?i = analog. You can usually perform a tag replacement (CTRL-E), and then there will be a "CONVERT" button. Choose "Local" and all of the ? placeholders should disappear.
- InTouch 2017
 - (August 2018)

Importing the scripts into Intouch 2017 may cause a failure during the import. This could be due to a bug in InTouch and the issue is being investigated.

There is a note in the folder for InTouch 2017 stating that the user should manually type in the scripts for Intouch 2017 and also for any version that causes problems on import. The scripts are in an Excel file located in the Intouch imports folder.
- InTouch (any version where script import fails)
 - See the note for InTouch 2017 and manually enter the scripts.

Troubleshooting

Alarm Tags not working

Wonderware System Platform

System Platform alarms may stop working on a client machine. FSGateway/OIGateway should be immune to this since it uses a direct Galaxy connection instead of an alarm consumer query (like the alarm clients do).

- Verify that you can see alarms in an Intouch alarm client on the same machine as the TopView engine. If you cannot then please contact Wonderware support and/or reference this [Wonderware tech note](#).
- Verify the username and password entered for the OIGateway/FSGateway connection to the Galaxy.

Bad Status Tags

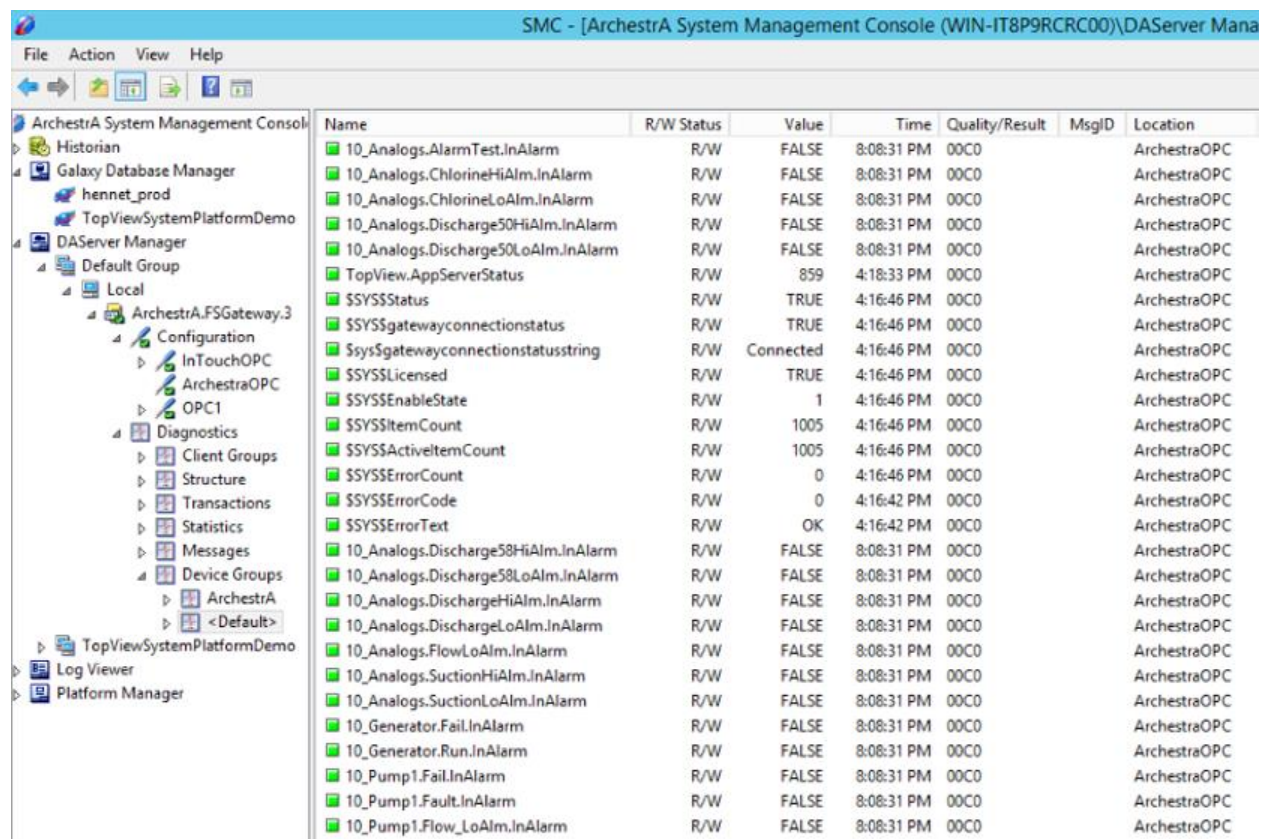
All SCADAs – Restart the gateway

- Try restarting the gateway
 - Wonderware FSGateway/OIGateway: the terms used in SMC are “deactivate” and “activate”

Wonderware FSGateway or OI Gateway

The SMC (System Management Console) can be used to view the status of any tag that has been accessed by TopView. Before running this tool you should use the Configurator to retrieve the value of all tags (inputs and outputs). See “Check gateway tags for good status” for steps to retrieve the tag values.

From SMC, choose the gateway...Diagnostics...Device Groups...<Default> as show below. Tags with the green icon will have a good status in TopView, and tags with a red icon will have a bad status in TopView.



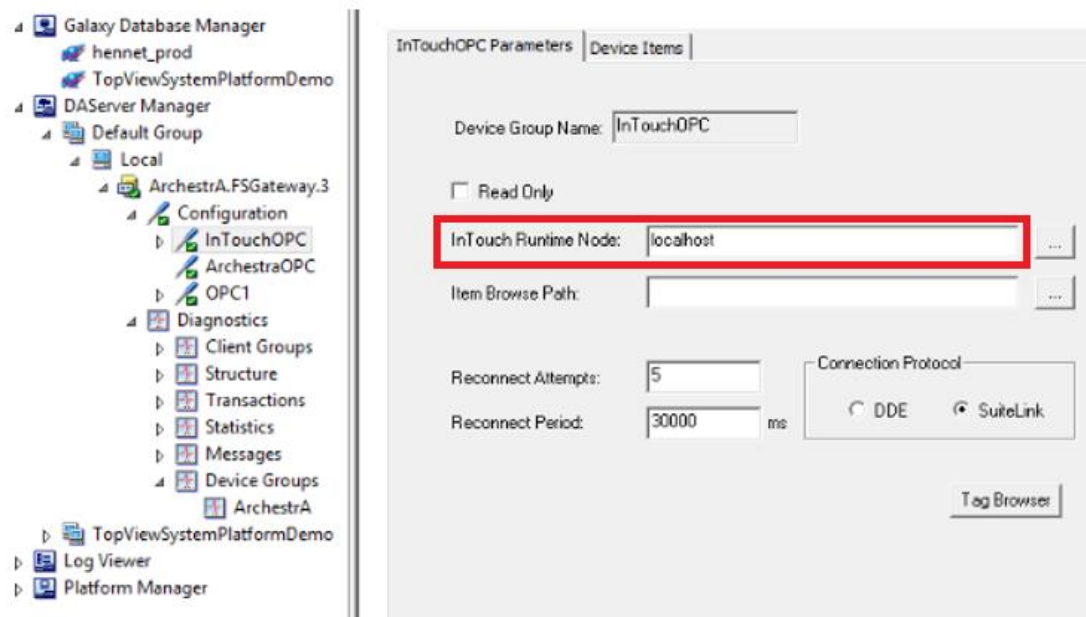
The screenshot shows the SMC (System Management Console) interface. The title bar reads "SMC - [Archestra System Management Console (WIN-IT8P9RCRC00)\DAServer Mana". The menu bar includes "File", "Action", "View", and "Help". The left pane shows a tree view of the system structure, including "Archestra System Management Console", "Historian", "Galaxy Database Manager", "henet_prod", "TopViewSystemPlatformDemo", "DAServer Manager", "Default Group", "Local", "Archestra.FSGateway.3", "Configuration", "InTouchOPC", "ArchestraOPC", "OPC1", "Diagnostics", "Client Groups", "Structure", "Transactions", "Statistics", "Messages", "Device Groups", "TopViewSystemPlatformDemo", "Log Viewer", and "Platform Manager". The right pane displays a table of tags with the following columns: Name, R/W Status, Value, Time, Quality/Result, MsgID, and Location. The table lists various tags, including "10_Analogs.AlarmTest.InAlarm", "10_Analogs.ChlorineHiAlm.InAlarm", "10_Analogs.ChlorineLoAlm.InAlarm", "10_Analogs.Discharge50HiAlm.InAlarm", "10_Analogs.Discharge50LoAlm.InAlarm", "TopView.AppServerStatus", "\$SYSStatus", "\$SYS\$gatewayconnectionstatus", "\$SYS\$gatewayconnectionstatusstring", "\$SYS\$Licensed", "\$SYS\$EnableState", "\$SYS\$ItemCount", "\$SYS\$ActiveItemCount", "\$SYS\$ErrorCount", "\$SYS\$ErrorCode", "\$SYS\$ErrorText", "10_Analogs.Discharge58HiAlm.InAlarm", "10_Analogs.Discharge58LoAlm.InAlarm", "10_Analogs.DischargeHiAlm.InAlarm", "10_Analogs.DischargeLoAlm.InAlarm", "10_Analogs.FlowLoAlm.InAlarm", "10_Analogs.SuctionHiAlm.InAlarm", "10_Analogs.SuctionLoAlm.InAlarm", "10_Generator.Fail.InAlarm", "10_Generator.Run.InAlarm", "10_Pump1.Fail.InAlarm", "10_Pump1.Fault.InAlarm", and "10_Pump1.Flow_LoAlm.InAlarm". The "R/W Status" column shows "R/W" for all tags. The "Value" column shows "FALSE" for most, "859" for "TopView.AppServerStatus", "TRUE" for "\$SYSStatus", "Connected" for "\$SYS\$gatewayconnectionstatusstring", "1" for "\$SYS\$EnableState", "1005" for "\$SYS\$ItemCount" and "\$SYS\$ActiveItemCount", "0" for "\$SYS\$ErrorCount" and "\$SYS\$ErrorCode", "OK" for "\$SYS\$ErrorText", and "FALSE" for the remaining tags. The "Time" column shows "8:08:31 PM" for most, "4:18:33 PM" for "TopView.AppServerStatus", and "4:16:46 PM" for the others. The "Quality/Result" column shows "00C0" for all. The "MsgID" column is empty for all. The "Location" column shows "ArchestraOPC" for all.

Name	R/W Status	Value	Time	Quality/Result	MsgID	Location
10_Analogs.AlarmTest.InAlarm	R/W	FALSE	8:08:31 PM	00C0		ArchestraOPC
10_Analogs.ChlorineHiAlm.InAlarm	R/W	FALSE	8:08:31 PM	00C0		ArchestraOPC
10_Analogs.ChlorineLoAlm.InAlarm	R/W	FALSE	8:08:31 PM	00C0		ArchestraOPC
10_Analogs.Discharge50HiAlm.InAlarm	R/W	FALSE	8:08:31 PM	00C0		ArchestraOPC
10_Analogs.Discharge50LoAlm.InAlarm	R/W	FALSE	8:08:31 PM	00C0		ArchestraOPC
TopView.AppServerStatus	R/W	859	4:18:33 PM	00C0		ArchestraOPC
\$SYSStatus	R/W	TRUE	4:16:46 PM	00C0		ArchestraOPC
\$SYS\$gatewayconnectionstatus	R/W	TRUE	4:16:46 PM	00C0		ArchestraOPC
\$SYS\$gatewayconnectionstatusstring	R/W	Connected	4:16:46 PM	00C0		ArchestraOPC
\$SYS\$Licensed	R/W	TRUE	4:16:46 PM	00C0		ArchestraOPC
\$SYS\$EnableState	R/W	1	4:16:46 PM	00C0		ArchestraOPC
\$SYS\$ItemCount	R/W	1005	4:16:46 PM	00C0		ArchestraOPC
\$SYS\$ActiveItemCount	R/W	1005	4:16:46 PM	00C0		ArchestraOPC
\$SYS\$ErrorCount	R/W	0	4:16:46 PM	00C0		ArchestraOPC
\$SYS\$ErrorCode	R/W	0	4:16:42 PM	00C0		ArchestraOPC
\$SYS\$ErrorText	R/W	OK	4:16:42 PM	00C0		ArchestraOPC
10_Analogs.Discharge58HiAlm.InAlarm	R/W	FALSE	8:08:31 PM	00C0		ArchestraOPC
10_Analogs.Discharge58LoAlm.InAlarm	R/W	FALSE	8:08:31 PM	00C0		ArchestraOPC
10_Analogs.DischargeHiAlm.InAlarm	R/W	FALSE	8:08:31 PM	00C0		ArchestraOPC
10_Analogs.DischargeLoAlm.InAlarm	R/W	FALSE	8:08:31 PM	00C0		ArchestraOPC
10_Analogs.FlowLoAlm.InAlarm	R/W	FALSE	8:08:31 PM	00C0		ArchestraOPC
10_Analogs.SuctionHiAlm.InAlarm	R/W	FALSE	8:08:31 PM	00C0		ArchestraOPC
10_Analogs.SuctionLoAlm.InAlarm	R/W	FALSE	8:08:31 PM	00C0		ArchestraOPC
10_Generator.Fail.InAlarm	R/W	FALSE	8:08:31 PM	00C0		ArchestraOPC
10_Generator.Run.InAlarm	R/W	FALSE	8:08:31 PM	00C0		ArchestraOPC
10_Pump1.Fail.InAlarm	R/W	FALSE	8:08:31 PM	00C0		ArchestraOPC
10_Pump1.Fault.InAlarm	R/W	FALSE	8:08:31 PM	00C0		ArchestraOPC
10_Pump1.Flow_LoAlm.InAlarm	R/W	FALSE	8:08:31 PM	00C0		ArchestraOPC

Wonderware InTouch

InTouch Runtime must be running

InTouch doesn't have a server that runs in the background. Therefore users need to make sure that the InTouch Runtime is running on the node that the gateway is configured to connect to. This node is visible in the properties of the InTouchOPC topic created FSGateway or OIGateway.



Wonderware System Platform

System Platform has an AppEngine that hosts the objects monitored by TopView. As long as the AppEngine is deployed, TopView should be able to read the tags.

Note: When using System Platform with InTouch, InTouch is a "user interface" to the AppEngine and does not need to be running for TopView to see the tags.

Gateway username/password

- Verify the username and password entered for the ArchestraOPC gateway connection for OIGateway/FSGateway.

Deployed objects

- Make sure that the objects are deployed

Archestra Object Viewer

An excellent troubleshooting tool is the Archestra "Object Viewer". It shows all data available organized by object with each data point's currently value and comm status

FileEditViewOptionsHelp

Object Viewer

Attribute Reference: 10_Pump1.Fail.Output.Value.valueGo

App_Engine	Attribute Name	Value	Timestamp	Quality	Status	Security	Category	Locked	Type	Id	Internal Primitive Name	Has SetHand...	Checkpoint...	is Dynamic	is Subscrib...	is shared
10_Glenwood (Water.10,Gl)	Fail	false	5/10/2018 1:08:41:491 PM	00Bad	Ok	Operate	Writable_USC_L...	Unlocked	Boolean	107	UserDefined	true	true	true	false	false
10_Analogs (10_Analog)	Fail.Acked	true		COGood	Ok	ReadOnly	Calculated	Unlocked	Boolean	107	ConditionAlarm	false	true	false	false	false
10_Generators (10_Gene)	Fail.AckMg			COGood	Ok	FreeAccess	Writable_US	Unlocked	String	106	ConditionAlarm	true	true	false	false	false
10_Pump1 (10_Pump1)	Fail.ActiveAlarmState	true		COGood	Ok	ReadOnly	Writable_C_Loc...	Unlocked	CustomEnum	102	BooleanAlarms	false	false	false	false	false
10_Pump2 (10_Pump2)	Fail.ArmCntrlBySeverity	0.0,0.0	5/10/2018 1:08:31:945 PM	COGood	Ok	ReadOnly	Calculated	Unlocked	Integer	122	BooleanUtilities.Fail	false	false	false	false	false
10_Pump3 (10_Pump3)	Fail.ArmInhibit	false		COGood	Ok	Operate	Writable_US	Unlocked	Boolean	118	ConditionAlarm	true	true	false	false	false
10_Pump4 (10_Pump4)	Fail.ArmMode	Enable		COGood	Ok	ReadOnly	CalculatedRetent...	Unlocked	CustomEnum	116	ConditionAlarm	false	true	false	false	false
10_Pump5 (10_Pump5)	Fail.ArmModeCmd	Enable		COGood	Ok	Operate	Writable_US	Unlocked	CustomEnum	117	ConditionAlarm	true	true	false	false	false
10_Setpoints (10_Setpo)	Fail.ArmMostUrgentAcked	true	5/10/2018 1:08:31:960 PM	COGood	Ok	ReadOnly	Calculated	Unlocked	Boolean	121	BooleanUtilities.Fail	false	false	false	false	false
10_Setpoints_Level_H48	Fail.ArmMostUrgentAlarm	false	5/10/2018 1:08:31:945 PM	COGood	Ok	ReadOnly	Calculated	Unlocked	Boolean	124	BooleanUtilities.Fail	false	false	false	false	false
10_Setpoints_Level_H48	Fail.ArmMostUrgentSeverity	0	5/10/2018 1:08:31:945 PM	COGood	Ok	ReadOnly	Calculated	Unlocked	CustomEnum	120	BooleanUtilities.Fail	false	false	false	false	false
10_Setpoints_Level_Wa	Fail.ArmMostUrgentShelved			COGood	Ok	ReadOnly	Calculated	Unlocked	Integer	119	BooleanUtilities.Fail	false	false	false	false	false
11_EastHewitt (Water.11,Es)	Fail.ArmShelvedCmd	Duration(s): Reasons: ""		COGood	Ok	FreeAccess	Writable_USC	Unlocked	String	119	ConditionAlarm	true	true	false	false	false
12_WalkerHill (Water.12,W)	Fail.ArmShelved			COGood	Ok	ReadOnly	CalculatedRetent...	Unlocked	Boolean	120	ConditionAlarm	false	true	false	false	false
13_H48Crest (Water.13,H48)	Fail.ArmShelvedNode			COGood	Ok	ReadOnly	CalculatedRetent...	Unlocked	String	123	ConditionAlarm	false	true	false	false	false
14_GranteeFallsPS (Water.14)	Fail.ArmShelvedReason			COGood	Ok	ReadOnly	CalculatedRetent...	Unlocked	String	123	ConditionAlarm	false	true	false	false	false
15_SuperwoodPS (Water.15)	Fail.ArmShelvedStartTime			COGood	Ok	ReadOnly	CalculatedRetent...	Unlocked	Time	121	ConditionAlarm	false	true	false	false	false
16_BowenPS (Water.16,B)	Fail.ArmShelvedStopTime			COGood	Ok	ReadOnly	CalculatedRetent...	Unlocked	Time	122	ConditionAlarm	false	true	false	false	false
17_GranteeFallsPS (Water.17)	Fail.ArmShelvedUser			COGood	Ok	ReadOnly	CalculatedRetent...	Unlocked	String	124	ConditionAlarm	false	true	false	false	false
18_BowenPS (Water.18)	Fail.Bad.Condition	true		COGood	Ok	ReadOnly	CalculatedRetent...	Unlocked	Boolean	111	BooleanUtilities.Fail	false	true	false	false	false
19_WilliamsRDM (Water.19)	Fail.BooleanAlarm.TimeDeadba...	00:00:00.0000000		COGood	Ok	Tune	Writable_USC_L...	Unlocked	ElapsedTime	106	BooleanAlarms	false	true	false	false	false
20_CavitiesMM (Water.20)	Fail.Category	Discrete		COGood	Ok	Tune	Writable_USC_L...	Unlocked	CustomEnum	105	ConditionAlarm	false	true	false	false	false
21_SundayLake (Water.21,S)	Fail.Condition	false	5/10/2018 1:08:31:945 PM	COGood	Ok	ReadOnly	Calculated	Unlocked	Boolean	101	BooleanAlarms	true	false	false	false	false
22_MayCreek (Water.22,M)	Fail.ConditionCached	-1		COGood	Ok	ReadOnly	Calculated	Unlocked	CustomStruct	107	BooleanAlarms	false	false	false	false	false
23_LakeRoesigerPS (Water.23,L)	Fail.Dec	Glenwood Pump 1 Fail to Start		COGood	Ok	ReadOnly	Writable_C_Loc...	Unlocked	InternationalSt...	116	BooleanUtilities.Fail	false	false	false	false	false
24_LakeRoesigerPS (Water.24)	Fail.DescAttrName	Glenwood Pump Station Pump ...		COGood	Ok	FreeAccess	Writable_USC_L...	Unlocked	String	110	ConditionAlarm	true	true	false	false	false
25_Dutchbill2MM (Water.25,D)	Fail.InAlarm	false	5/10/2018 1:08:31:945 PM	COGood	Ok	ReadOnly	Calculated	Unlocked	Boolean	100	ConditionAlarm	false	false	false	true	false
26_Dutchbill2MM (Water.26)	Fail.Input.DataType	MBBoolean		COGood	Ok	ReadOnly	Writable_C_Loc...	Unlocked	DataType	102	Fail Input	false	false	false	false	false
27_GFPongeeMM (Water.27)	Fail.Input.InputSource	DASIMBTPCACE_FIU10_P1.Fail		COGood	Ok	Configure	Writable_USC_L...	Unlocked	ReferenceType	103	Fail Input	true	true	false	false	false
28_GFPongeeMM (Water.28)	Fail.Input.ReadStatus	Operational error: Conversion n...		COGood	Ok	ReadOnly	Calculated	Unlocked	StatusType	100	Fail Input	false	false	false	false	false
29_GFPongeeMM (Water.29)	Fail.Input.Value	false	5/10/2018 1:08:41:491 PM	00Bad	Ok	ReadOnly	Calculated	Unlocked	Boolean	101	Fail Input	false	false	false	false	false
30_ArdsongateMM (Water.30)	Fail.InvertValue	false		COGood	Ok	ReadOnly	Writable_C_Loc...	Unlocked	Boolean	110	BooleanUtilities.Fail	false	false	false	false	false
31_StomilakePS (Water.31)	Fail.LogDataChangeEvent	false		COGood	Ok	Tune	Writable_USC_L...	Unlocked	Boolean	106	BooleanUtilities.Fail	true	true	false	false	false
32_StomilakePS (Water.32)	Fail.Mg	false		COGood	Ok	ReadOnly	Calculated	Unlocked	CustomEnum	113	BooleanUtilities.Fail	false	false	false	false	false
33_MachiasPS (Water.33,M)	Fail.OffMg	False		COGood	Ok	ReadOnly	Writable_C_Loc...	Unlocked	String	109	BooleanUtilities.Fail	false	false	false	false	false
34_VSTHSTM (Water.34)	Fail.OnMg	True		COGood	Ok	ReadOnly	Writable_USC_L...	Unlocked	String	108	BooleanUtilities.Fail	false	false	false	false	false
35_LakeCassidyPS (Water.35)	Fail.Output.DataType	MBBoolean		COGood	Ok	ReadOnly	Writable_C_Loc...	Unlocked	DataType	102	Fail Output	false	false	false	false	false
36_SundayLakeBooster (W)	Fail.Output.OutputDest	Me PlaceholderDiscrete		COGood	Ok	Configure	Writable_USC_L...	Unlocked	ReferenceType	103	Fail Output	true	true	false	false	false
37_MachiasPS (Water.37,M)	Fail.Output.Value	false	5/10/2018 1:08:31:945 PM	COGood	Ok	ReadOnly	Calculated	Unlocked	Boolean	101	Fail Output	true	false	false	false	false
38_SundayLakeBooster (W)	Fail.Output.WhiteStatus	false		COGood	Ok	ReadOnly	Writable_S	Unlocked	StatusType	100	Fail Output	false	true	false	false	false
39_LakeCassidyPS (Water.39)	Fail.Priority	1		COGood	Ok	Tune	Writable_USC_L...	Unlocked	Integer	104	ConditionAlarm	true	true	false	false	false
40_TimesAlarmAcked	Fail.TimeAlarmAcked			COGood	Ok	ReadOnly	Calculated	Unlocked	Time	103	ConditionAlarm	false	false	false	false	false
41_TimesAlarmOff	Fail.TimeAlarmOff			COGood	Ok	ReadOnly	Calculated	Unlocked	Time	102	ConditionAlarm	false	false	false	false	false

AttributeReferenceValueTimestampQualityStatus

10_Pump1.Failfalse5/10/2018 1:08:41:491 ...00BadOk

10_Pump1.InAlarmfalse5/10/2018 1:08:31:945 ...COGoodOk

Activate Windows

Go to System in Control Panel to activate Windows.

Watch List 1

FILE: User Benchmark

Mode: User

Wonderware Edge

Edge Project Runtime must be running

Make sure that the Edge Project is running.

Writing to output tags

If you are receiving errors writing to output tags from TopView

General

See if you can use a tool from your SCADA vendor to write a value to the tag. This may expose a general issue within the SCADA where tags cannot be written to. Once this issue is resolved with your vendor you can attempt the write from TopView again.

Wonderware System Platform

- Make sure that your objects are deployed. You can use the Object Viewer to see the status of any deployed objects and scripts.
- Verify that the OrchestraOPC user name and password (SMC > OIGateway/FSGateway) are configured with a user who has write permissions

OI Gateway

Specific version of OIGateway are required to write values to System Platform. See “

OI Gateway notes” for more information.

Gateway Connection Issues

Citect

- Ensure that Citect SCADA is running in server mode, not client mode

ClearSCADA/GEO SCADA

You may receive errors when you try to connect to the ClearSCADA OPC Server or if you try to browse tags using TopView's Tag Search.

First, make sure that "Advanced OPC Driver" is part of your license. If this is licensed, the OPC errors may include:

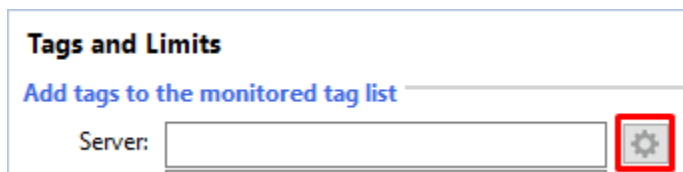
- Error message: *Error creating group : AddGroup failed with error*
- Error message: *Exception connecting to DA server...*
- Unable to browse for Tags in the "Root Group" folder using Tag Search
- Unable to write to tags (e.g. for alarm acknowledge)
- Cannot connect when TopView Engine running as a Windows Service (*may also be restricted by a ClearSCADA demo license*)

OPC Private Security

The ClearSCADA OPC Server can be configured with security to allow everyone or specific users.

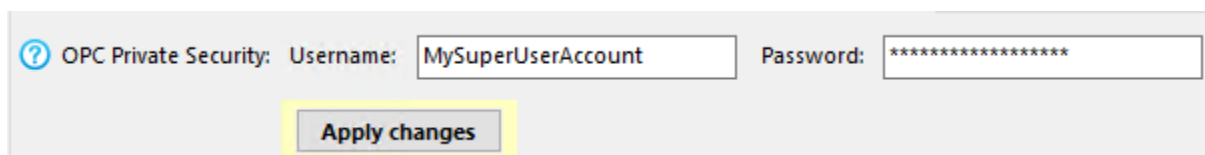
You can configure a user/password in the OPC Server Alias dialog in TopView. The user/password should be a ClearSCADA user, and we recommend using the super user or an administrator user. The user must have "Alarm acknowledge" permission.

In the TopView Configurator, select Tags and Limits from the left menu, then click the gear button to the right of the Server text box:



Select your OPC Server Alias (default is "ClearSCADA")

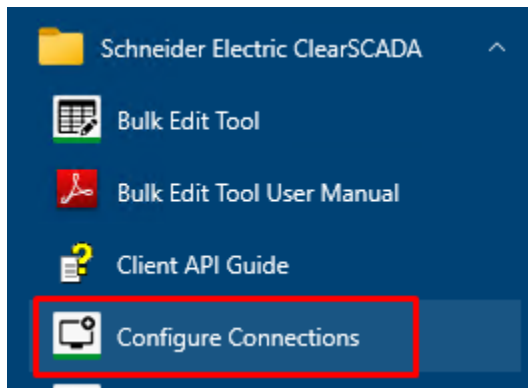
Enter the ClearSCADA username and password, then click [Apply changes]



ClearSCADA Client Settings

Make sure that connections are not restricted to specific machines.

Windows Start button:



Select the system and click [Properties]

For Type=ClearSCADA Server and Type=OPC Data Server, make sure the Workstation is blank

Workstation Name