# **TND10 General Information**

# HMI

#### Background

The built-in HMI in T&D 8.1 was based on InduSoft Web Studio. For cost reasons, it is not included in TND10. Salt Creek Software is able to sell the InduSoft products at a discount when purchased with TND10.

# InduSoft Web Studio (IWS) vs. Aveva Edge

InduSoft is now part of larger company called Aveva. The InduSoft product is being re-branded as Aveva Edge. Currently IWS and Aveva Edge are identical, both functionally and cost-wise. However, Edge will be the preferred product going forward and there is only one more release of IWS scheduled. You can continue to use the IWS product, but on new projects or new conversions from T&D 8.1 project, Aveva Edge is preferred.

## Upgrade to latest version

The HMI component from T&D 8.1 projects can be upgraded to the latest version of IWS or Aveva Edge. The conversion process involves removing the embedded proprietary T&D 8.1 information, which can only be done by Aveva. To upgrade the HMI, zip up the HMI directory of the T&D project and send it to <a href="mailto:support@tnd10.com">support@tnd10.com</a>.

## Automatically Start/Stop HMI

TND10 can be configured to automatically start and stop the IWS or Aveva Edge application.

To configure HMI Auto Start:

- 1. Open the TND10 project and select the Project | Settings menu.
- 2. Select the correct HMI option (None, InduSoft Web Studio or Aveva Edge).
- 3. Rebuild and save the project.

To configure HMI Auto Stop, the HMI project needs to be modified. The TND10 OPC Server provides flag called TND\_STOPPED. The value of this tag is '0' (false) if the T&D runtime is running. If the T&D runtime is shutdown, the value of this tag changes to '1' (true). This flag can be used by the HMI project to shut itself down. Here are the steps to configure the HMI application to use this tag:

- 1. Open the HMI project in the IWS or Edge development tool
- 2. Add TND\_STOPPED to the tag data base
  - a. Navigate to {Global | Project Tags | Datasheet View}.
  - b. Add TND\_STOPPED to the list and change its type to Boolean.
- 3. Add TND\_STOPPED to the OPC configuration
  - a. Navigate to {Comm | OPC XML/DA | TND10}.

- b. Add "TND\_STOPPED" to the list of tags.
- c. Enter "Flag.TND\_STOPPED" for the tag's Browse Path.
- 4. Add a new script to handle the shutdown
  - a. Navigate to the Task tab, right click on the Script item and Insert a new script.
  - b. Enter "Shutdown" in the script's Description field.
  - c. Enter "\$TND\_STOPPED" in the script's Execution field.
  - d. Enter the following text into the body of the script

' Shut down viewer if TND10 has stopped
\$TND\_STOPPED = 0
\$Shutdown()

- e. Close the script and accept the default Sheet Number
- 5. Modify the Startup script
  - a. Navigate to the Task tab and open the Startup Script under the Scrip item.
  - b. Enter the following text into the body of the script

Close splash screen immediately when project starts
\$CloseSplashWindow()
Ensure TND\_STOPPED is false when project starts
\$TND\_STOPPED = 0