How to Configure the CIMPLICITY HMI OPC Server
GE HMI/SCADA – CIMPLICITY

Outline

The GE HMI/SCADA – CIMPLICITY product has a built in OPC Compliant Server that is capable of publishing CIMPLICITY point data to an OPC Client. This document is intended to demonstrate how to configure the CIMPLICITY OPC Server so that successful communications can be obtained. This document is directed towards CIMPLICITY 7.0 but is valid for versions 4.0 or higher.

Requirements

<table>
<thead>
<tr>
<th>Product</th>
<th>Version</th>
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</thead>
<tbody>
<tr>
<td>GE HMI/SCADA CIMPLICITY</td>
<td>4.0 (or newer)</td>
</tr>
<tr>
<td>CIMPLICITY OPC Server License*</td>
<td>Not required</td>
</tr>
<tr>
<td></td>
<td>for CIMPLICITY 7.0 (or newer)</td>
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How it works

When a CIMPLICITY project is running it is generally updating point data with values as conditions change in the devices/servers that it is talking to. This data can then be fed up to the CIMPLICITY OPC Server via a Point Management interface that allows the OPC Server to receive these value updates, This then allows the OPC Server to propagate the updates to interested OPC Client(s).

Step 1: Verify the CIMPLICITY Project is Running

The first step in the configuration is to make sure that your CIMPLICITY project is currently running. This should be evident by going into CIMPLICITY Options via the Windows Start menu and see if your project is listed in the running projects list on the Projects tab.
Step 2: Setup the OPC Server Security

After confirming that the project is running, the CIMPLICITY OPC Server must be manually launched in order to configure the security permissions on it. The CIMPLICITY OPC Server can be started by going to Start->Programs->Proficy HMI/SCADA – CIMPLICITY->OPC Server.

Note: The OPC Server only has to be started in order to configure it. When an OPC client connects to the OPC Server then it will automatically launch the OPC Server.
Once the CIMPICITOPC Server is open then go to Edit->“Server Configuration...”. A new dialog will be displayed titled “OPC Server Configuration”.

![OPC Server Configuration dialog](image1)

**Figure 4** – The OPC Server Configuration dialog prior to configuring a project connection.

Click on the “Add” button along the right hand side of the dialog. A new dialog will appear called “Project Properties”. In this dialog choose the project from the dropdown and put in the CIMPICITY username and password to be used for the OPC Server. Typically this is a highly privileged user who has access to all of the points in the project (i.e. Administrator).

![Project Properties dialog](image2)

**Figure 5** – Configuring the project connection.

When complete, click on the “OK” button to close the dialog. On the Server Configuration Dialog highlight the entry that you just added and click on the “Show this Name Space” button. This will allow the OPC Client applications to browse the OPC Server. In addition, make sure there is a check in the box that says to “Reconcile Cache...”. This tells the OPC Server to make sure it stays up to date when the Project is stopped and started. When all of these configuration steps are complete, it should look as follows.
You can now click "OK".

In the main CIMPICITY OPC Server application window, it should show a green dot next to the project name in the list. This indicates that it has successfully connected to the project and retrieved the latest point list.

Now close the CIMPICITY OPC Server. At this point it is ready to accept connections from OPC Clients.
Step 3: Connect an OPC Client to the OPC Server

Connect up with your preferred OPC Client application. The CIMPLICITY OPC Server should launch, and the OPC Client should now be able to browse the points on the project that you have configured in the CIMPLICITY OPC Server.