Welcome to System 1

Version 21.1 [May 2021]
Welcome

Bently Nevada is pleased to present System 1 version 21.1. This release delivers brand new capabilities to the Hydro Machine Monitoring, Emission Monitoring, and OT/IT System Integration use cases.

### Hydro Machine Monitoring
- Hydro Machinery Asset Support
- Air Gap Native Channel Support
- New HMI Symbols
- Rotor Stator Plot
- Air Gap Plot

### Emission Monitoring
- PEMS Integration Support

### OT/IT System Integration
- OPC UA Static Data import

Users upgrading to version 21.1 will benefit from the many capability enhancements to System 1’s Connectivity, Analytics, and Visualization pillars, which are summarized below.

Bently Nevada remains focused on delivering the world’s premier plant-wide machinery management software through bi-annual product releases. For a detailed overview of System 1, please visit the website.

Thank you,

Chris Kramm – System 1 Product Manager

On behalf of your System 1 Leadership and Development Teams
# Table of Contents

1. **SYSTEM 1 V21.1 FEATURE OVERVIEW** ........................................................................................................................................................................... 4

2. **VERSION SUPPORT & OPERATING SYSTEM COMPATIBILITY** ................................................................................................................................. 6

3. **CONNECTIVITY** ........................................................................................................................................................................................................... 7
   3.1 Bently Devices ................................................................................................................................................................................................................ 7
      3.1.1 Orbit 60 Support .......................................................................................................................................................................................... 7
      3.1.2 Hydro Machinery Support ........................................................................................................................................................................... 8
      3.1.3 vbOnline Pro Enhancements .................................................................................................................................................................... 9
      3.1.4 Portable Enhancements .......................................................................................................................................................................... 12
      3.1.5 Ranger Pro Enhancements .................................................................................................................................................................... 13
   3.2 Interfaces ..................................................................................................................................................................................................................... 14
      3.2.1 OPC UA Static Data Import ................................................................................................................................................................. 14
   3.3 Database Management .................................................................................................................................................................................................. 15
      3.3.1 Audit Files Enhancement ....................................................................................................................................................................... 15

4. **ANALYTICS** ....................................................................................................................................................................................................... 17
   4.1 Core Alarming .................................................................................................................................................................................................. 17
      4.1.1 2300 Alarm Data Capture ........................................................................................................................................................................ 17
   4.2 Emission Monitoring .................................................................................................................................................................................................. 17
      4.2.1 PEMS Integration ................................................................................................................................................................................ 17

5. **VISUALIZATION** ................................................................................................................................................................................................... 19
   5.1 HMI Builder ....................................................................................................................................................................................................... 19
      5.1.1 HMI Enhancements ............................................................................................................................................................................... 19
   5.2 Plots ................................................................................................................................................................................................................................. 20
      5.2.1 Rotor Stator Plot .................................................................................................................................................................................................. 20
      5.2.2 Air Gap Plot .................................................................................................................................................................................................. 21
   5.3 Reports .............................................................................................................................................................................................................................. 21
      5.3.1 Route Report – Machine Summary ......................................................................................................................................................... 21
## 1. SYSTEM 1 V21.1 FEATURE OVERVIEW

**ALL 21.1 FEATURES ARE ONLY SUPPORTED WITH POSTGRESQL AS THE DATA HISTORIAN.**

### Table 1: System 1 v21.1 – Connectivity Capabilities

<table>
<thead>
<tr>
<th>Connectivity</th>
<th>Bently Devices</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orbit 60 Support</td>
<td>System 1 v21.1 supports connection to the new Orbit 60 Series platform and the advanced processing capabilities of the Condition Monitoring Module (CMM). This includes Offline Diagnostic File import, Protection Configuration synchronization, Alarm &amp; Transient Data collection, Alarm and System Health Events import, Software State-Based Alarming, Static Data Historization, and CM Waveform support.</td>
</tr>
<tr>
<td><strong>Orbit 60 release to follow System 1 21.1</strong></td>
<td>3.1.1</td>
</tr>
<tr>
<td>Hydro Machinery Support</td>
<td>System 1 enables monitoring of Hydroelectric Turbines and Generators using the data provided by 3500/46M Air Gap channels. These channels can be mapped to new Hydro Asset Models to support the Hydro Monitoring Use Case.</td>
</tr>
<tr>
<td>Hydro Machinery Support</td>
<td>3.1.2</td>
</tr>
<tr>
<td>vbOnline Pro Software States</td>
<td>System 1 now supports software states for machines mapped with vbOnline Pro channels.</td>
</tr>
<tr>
<td>vbOnline Pro as Modbus Client</td>
<td>The vbOnline Pro device can be configured as a Modbus Client, allowing the device to connect to and historize data from third-party systems. This data can drive Device states on the vbOnline Pro.</td>
</tr>
<tr>
<td>SCOUT Enhancements</td>
<td>To connect to SCOUT devices, users now have the option to manually enter the device IP address (rather than relying on UDP Browse).</td>
</tr>
<tr>
<td>SCOUT Enhancements</td>
<td>3.1.4</td>
</tr>
<tr>
<td>Ranger Pro Enhancements</td>
<td>Configuration enhancements to the Ranger Pro include:</td>
</tr>
<tr>
<td></td>
<td>- Order Ranger Pro device by name</td>
</tr>
<tr>
<td></td>
<td>- Improved progress indicator when importing devices</td>
</tr>
<tr>
<td>Ranger Pro Enhancements</td>
<td>3.1.5</td>
</tr>
<tr>
<td>Interfaces</td>
<td>OPC UA Static Data Import</td>
</tr>
<tr>
<td>Interfaces</td>
<td>System 1 supports the import of static data from third-party systems via the OPC UA Protocol.</td>
</tr>
<tr>
<td>Interfaces</td>
<td>3.2.1</td>
</tr>
<tr>
<td>Data Management</td>
<td>Audit Files Enhancement</td>
</tr>
<tr>
<td>Data Management</td>
<td>System 1 allows users to create audit files that consist of multiple groups and/or machine trains.</td>
</tr>
<tr>
<td>Data Management</td>
<td>3.3.1</td>
</tr>
</tbody>
</table>
### Table 2: System 1 v21.1 – Analytics Capabilities

<table>
<thead>
<tr>
<th>Analytics</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Core Alarming</strong></td>
<td></td>
</tr>
<tr>
<td>2300 Alarm Capture</td>
<td>System 1 now supports trigger-based alarm data capture for 2300.</td>
</tr>
<tr>
<td><strong>Emission Monitoring</strong></td>
<td></td>
</tr>
<tr>
<td>PEMS Integration</td>
<td>System 1 Predictive Emissions Monitoring System (PEMS) is specifically designed for gas turbines. It can predict with high accuracy the level of emissions generated by gas turbines based on ambient conditions, fuel composition, and machine operating conditions, while also considering real-time degradations.</td>
</tr>
<tr>
<td><strong>Decision Support</strong></td>
<td></td>
</tr>
<tr>
<td>Decision Support</td>
<td>Refer to the Decision Support Roadmap for more details.</td>
</tr>
</tbody>
</table>

### Table 3: System 1 v21.1 – Visualization Capabilities

<table>
<thead>
<tr>
<th>Visualization</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>HMI Builder</strong></td>
<td></td>
</tr>
<tr>
<td>HMI Enhancements</td>
<td>The HMI library now includes new symbols for hydro machinery and other general machines.</td>
</tr>
<tr>
<td><strong>Plots</strong></td>
<td></td>
</tr>
<tr>
<td>Rotor Stator Plot</td>
<td>The Rotor Stator Plot compares data from multiple Air Gap sensors, displays the stator shape relative to the rotor shape, and displays the overall rotor shape.</td>
</tr>
<tr>
<td>Air Gap Plot</td>
<td>The Air Gap Plot is specifically designed to display data from hydro generator machines and is an XY Plot of rotor poles versus air gap.</td>
</tr>
<tr>
<td><strong>Reports</strong></td>
<td></td>
</tr>
<tr>
<td>Support Route Report –</td>
<td></td>
</tr>
<tr>
<td>Machine Summary</td>
<td>System 1 v21.1 adds a new route report, Route Report – Machine Summary, which provides a summary of all routes and machines within a Database or Route Folder.</td>
</tr>
</tbody>
</table>
2. VERSION SUPPORT & OPERATING SYSTEM COMPATIBILITY

System 1 follows a semi-annual release cadence with targeted releases in May and November of each year. Versions are fully supported for a minimum of two years from the published date of availability (Table 4).

New Versions of System 1 benefit from:

- Compatibility with the latest Microsoft Client & Server Operating Systems
- Client backwards compatibility to previous versions under support (21.1 Client to 19.2 Server DB)
- Database upgrade from previous versions released within last 3 years (18.2 → 21.1)
- Security patch & update testing for the latest available version
- Bug fixes included in the latest available version
- Standard technical support with escalation to engineering as required

Versions no longer supported:

- Standard support is provided for common FAQ type questions, but users are encouraged to update software to latest version to benefit from new features, OS compatibility, and bug fixes.

Table 4: System 1 Version Support & OS Compatibility Matrix

<table>
<thead>
<tr>
<th>System 1 Versions &amp; Support</th>
<th>Windows Server OS</th>
<th>Windows Client OS (64bit)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2019</td>
<td>2016</td>
</tr>
<tr>
<td>Version</td>
<td></td>
<td></td>
</tr>
<tr>
<td>21.1</td>
<td>May 21</td>
<td>May 23</td>
</tr>
<tr>
<td>20.2</td>
<td>Nov 20</td>
<td>Nov 22</td>
</tr>
<tr>
<td>20.1</td>
<td>May 20</td>
<td>May 22</td>
</tr>
<tr>
<td>19.2</td>
<td>Nov 19</td>
<td>Nov 21</td>
</tr>
<tr>
<td>19.1</td>
<td>May 19</td>
<td>May 21</td>
</tr>
<tr>
<td>18.2</td>
<td>Dec 18</td>
<td>Dec 20</td>
</tr>
<tr>
<td>18.1</td>
<td>Jul 18</td>
<td>Jul 20</td>
</tr>
</tbody>
</table>

Windows 10 version compatibility will track Microsoft’s published release and support model. System 1 will be tested and supported on all versions of Windows 10 under support at the time of release.

System 1 v20.2 (Windows 10 v1903, 1909, 2004)
System 1 v20.1 (Windows 10 v1903, 1809, 1803)
System 1 v19.2 (Windows 10 v1903, 1809, 1803)
System 1 v19.1 (Windows 10 v1809, 1803)
System 1 v18.2 (Windows 10 v1803, 1709)
3. CONNECTIVITY

3.1 Bently Devices

3.1.1 Orbit 60 Support

Orbit 60 Support video located in Bently Nevada Tech Support Training Library

Valid M&S Agreement Required

**Orbit 60 release to follow System 1 21.1**

In System 1 v21.1, users with a valid security certificate and Import Protection Configuration (read only) User Rights can add an Orbit 60 device and view data and events from the device. Once an Orbit 60 device has been added to System 1, users will be able to:

- Synchronize the protection configuration changes in System 1. System 1 will then retrieve and store data and events (Alarm and System) in real-time from the Orbit 60 device.
- Configure alarm and transient data capture settings and send them to the Condition Monitoring Module (CMM). System 1 will trigger alarm and transient data collection from the CMM based on the event triggered on the machine train.
- Add and configure synchronous and asynchronous waveforms on Orbit 60 device vibration and thrust position channels and send them to the CMM. Based on waveform properties configured by the user, the CMM will calculate the waveforms and transmit live data back to System 1.
- Add Trended Variables, such as Wf pk-pk, Spectral Bands, and Bearing Fault Bands to Orbit 60 vibration channels. System 1 will compute and store the values in its database.
- Configure software states and use Orbit 60 points to trigger the state (when Orbit 60 points are mapped to machine trains)
- Utilize the System 1 Display workspace to manage the health of machines monitored by the Orbit 60 Device, as well as the Instrumentation health of the device itself (Figure 1).

Under Devices Hierarchy, users will also be able to import the Offline Diagnostic File (ODF) generated from the CMM installed on the Orbit 60 device. The ODF contains protection configuration, events (Alarm & System), and alarm and transient data stored in the CMM. Once the ODF is imported successfully in System 1, diagnostic experts can leverage System 1 features to troubleshoot machine related issues.
3.1.2 Hydro Machinery Support

Hydro Machinery Support video located in Bently Nevada Tech Support Training Library

Valid M&S Agreement Required

System 1 supports comprehensive monitoring of hydroelectric turbines and generators, with extensive configuration and display-based capabilities.

Configuration Capabilities

- One of the key capabilities of the Bently Nevada solution is the ability to monitor Air Gap, which is a measure of the distance between rotor (a part of the generator that has a rim) and poles. The Air Gap measurement is taken from a 3500/46M Hydro monitor. System 1 v21.1 supports the import of 3500/46M Hydro and Multimode Hydro Air Gap Channels as native channels. All properties that exist for these channels in 3500 can now be viewed within System 1.

- Along with 3500 Device Import, System 1 also supports migration of these channels from System 1 6.x through the Database Migration tool. (NOTE: In versions prior to v21.1, these channels were migrated from System 1 6.x and supported as Custom Channels).

- Users can map these channels to the newly added Hydro Turbine Generator Machine available within the Asset Library.
Display Capabilities

- Hydro Machinery health can be viewed within the Status workspace, with a standard Machine Train diagram (Figure 2) or customized HMI views (see Section 5.1.1)

- System 1 provides diagnostic capabilities for Hydro Machinery with the addition of two plots:
  1. Rotor Stator Plot (see Section 5.2.1)
  2. Air Gap Plot (see Section 5.2.2)

![Figure 2: Machine Train Overview of Hydro Turbine Generator](image-url)

3.1.3 vbOnline Pro Enhancements

vbOnline Pro enhancement video located in Bently Nevada Tech Support Training Library

Valid M&S Agreement Required

Software State Support

In prior versions of System 1, vbOnline Pro device users could configure Device States, which have the limitation of only including device calculated measurements as part of the trigger definition (e.g., Speed, Direct). With System 1 v21.1, Software States are also supported. These states allow users to create trigger
definitions that combine measurements available in System 1 (e.g., OPC or Modbus process measurements) with those collected directly by the vbOnline Pro device. In addition, Software States enable state-based setpoint support for vbOnline Pro measurements (Figure 3).

**vbOnline Pro as Modbus Client**

To import data directly into vbOnline Pro devices from third-party systems, Modbus over Ethernet protocol is now supported, with vbOnline Pro acting as the Client/Master and the Modbus device acting as the Server. With the vbOnline Pro Premium+ license, the user can connect to 5 Modbus Servers, each with 15 points, for a total of 75 measurements. In addition, these measurements can be used to trigger Device States.

To connect to a Modbus TCP device:

1. Select a vbOnline Pro Device in the Devices hierarchy and navigate to the General tab
2. Select the number of Modbus servers from the “Add Modbus Servers” dropdown (Figure 4)
3. Select the added Modbus Server under the vbOnline Pro Device in the Devices hierarchy and enter the Modbus Server properties (Figure 5).

![Figure 5: Modbus Server Properties in Configure Workspace](image)

4. To efficiently create and modify Modbus points, export the “Modbus Items” csv file from System 1. Modify the points in the template and import the template file back into the database (Figure 6).

5. Synchronize the device to update the device configuration.

![Figure 6: Import Modbus Points](image)
3.1.4 Portable Enhancements

Portable Enhancements video located in Bently Nevada Tech Support Training Library

Valid M&S Agreement Required

In the Portables Send/Receive dialog, the user now has the option to connect to a SCOUT device by manually entering its IP Address. Previously System 1 relied on searching the network, which was limited to the same subnet and was sometime unreliable on busy networks. When clicking on the “Select Instrument” dropdown within the Send Configuration dialog, simply choose “Enter IP Address manually” (Figure 7). The IP address is conveniently displayed in the SCOUT200 app (Figure 8). Upon successful connection, the IP address is visible in the “Select Instrument” dropdown menu (Figure 9).

---

**Figure 7: Enter IP Address manually option in Send/Receive Dialog**

**Figure 8: IP Address is displayed in the SCOUT200 app**
Other enhancements specifically for Portables can be found at

- Route Report - Machine Summary, in the Reports section at the end of this document
- Ability to receive data into System 1 when Config is locked by another user.
- Four other SCOUT200 app-specific enhancements, in the separate “SCOUT200_WhatsNew_21.1” document.

### 3.1.5 Ranger Pro Enhancements

In System 1 v21.1, users are provided with additional feedback of the import status of their Ranger Pro devices. The original progress bar now displays a secondary progress bar during the “Processing Configuration” step, further updating users on the state of this step (Figure 8). This enhancement helps notify the user that the process has not stalled, as this step can be time-consuming based on the number of devices being imported.

Additionally, v21.1 now automatically sorts Ranger Pro devices in the Devices Hierarchy in ascending alphanumeric order based on the device name. This action updates when users make any edits to the name of a device, whether from within System 1 itself or externally from a gateway. Since many Ranger Pro devices are first identified by their serial number, this makes finding a specific device in the Devices Hierarchy much more efficient.
3.2 Interfaces

3.2.1 OPC UA Static Data Import

OPC UA Static Data Import video located in Bently Nevada Tech Support Training Library

Valid M&S Agreement Required

System 1 now supports the import of static data from third-party hardware using the OPC UA protocol. A third-party OPC UA server can be added to System 1 and connected through secured modes of authentication.

Users can export the OPC UA server address space in a csv file (Figure 9) and, using the address space information from the csv file, bulk import the OPC UA static tags in System 1 through the OPC UA import csv template (Figure 10). Then, users can modify the data storage details within the OPC UA Process Group properties.

Data collected through OPC UA is stored in the System 1 Database and is available for trending and alarming, if setpoints are configured.

---

**Figure 9: Export OPC UA Device Address Space Option**

**Figure 10: OPC UA Server with Tags in System 1**
3.3 Database Management

3.3.1 Audit Files Enhancement

NOTE: This is only supported for databases with PostgreSQL as the data historian

Audit Files Enhancement video located in Bently Nevada Tech Support Training Library

Valid M&S Agreement Required

System 1 v21.1 allows users to select multiple locations in a database to create an audit file, by following the below steps:

- Launch the “Machine Audit File” dialog on a hierarchy location by selecting “Create Audit File from Group, Machine, or Machine-Train”
- Click the “Select Locations” option within the Machine Audit File dialog (Figure 11) to select the Groups, Machine Trains, or Devices from the Hierarchy view (Figure 12)

![Figure 11: Select Locations Option in Machine Audit File Dialog](image-url)
Figure 12: Select Locations Screen, Launched from Machine Audit Files Dialog
4. ANALYTICS

4.1 Core Alarming

4.1.1 2300 Alarm Data Capture

2300 Alarm Data Capture video located in Bently Nevada Tech Support Training Library

Valid M&S Agreement Required

The latest 2300 Device Firmware (v3.2) supports alarm data capture. This firmware supports a single collection group, with alarm data captured for all measurements and channels. Alarm events are captured when:

- A Protection (Level 4 or Level 3) alarm is triggered on a 2300 Device point
- A Condition Monitoring (software) alarm is triggered on a 2300 Device point
- A Condition Monitoring or Protection alarm is triggered on 3500, 3701, or OPC points on a machine train with a mapped 2300 Device point

High resolution alarm data is collected for trend and waveform variables.

4.2 Emission Monitoring

4.2.1 PEMS Integration

PEMS Integration video located in Bently Nevada Tech Support Training Library

Valid M&S Agreement Required

The System 1 Predictive Emissions Monitoring System (PEMS) is specifically designed for gas turbines and predicts the level of emissions based on ambient conditions, fuel composition, and machine operating conditions while considering real-time degradations.

The PEMS solution requires the System 1 and Bently Performance software applications. Together, these two packages provide an accurate estimate of cumulative CO2 generated over user-specified time periods, such as consecutive monthly time intervals.

To configure PEMS, check “Enable PEMS Points” in the machine Configure workspace (Figure 13) and utilize Mapping Mode to map performance inputs (collected via OPC or Modbus) and outputs (provided by the PEMS template package). Like all other System 1 data sources, PEMS measurements can be viewed in the Display workspace within the HMI, trigger alarm events, and be correlated with other asset data for enhanced diagnostic insights (Figure 14).
Figure 13: Enable PEMS Points Property in General Workspace of Configure

Figure 14: PEMS Data in the HMI Display Workspace
5. VISUALIZATION

5.1 HMI Builder

Hydro Machinery Support video located in Bently Nevada Tech Support Training Library

Valid M&S Agreement Required

5.1.1 HMI Enhancements

New HMI symbols have been added for the Hydro and General Machinery use cases (Figure 15). These symbols can be used to create Mechanical, Process, and Lube Oil HMI views for Hydro Monitoring (Figure 16).

Figure 15: Hydro and General Machinery Symbols

Figure 16: Hydro Turbine Lube Oil HMI View
5.2 Plots

Hydro Machinery Support video located in Bently Nevada Tech Support Training Library

Valid M&S Agreement Required

5.2.1 Rotor Stator Plot

The Rotor Stator Plot is designed to display data from Hydro Generator machines. It is a multiple channel plot that displays:

1. Stator shape relative to Rotor shape in case of Profile Sets
2. Individual Stator and Rotor shapes from one or more sensors or from the average of all sensors

The Rotor Stator Plot also displays the minimum, maximum, and average Air Gap with corresponding Pole and Tooth number, with the green area representing the Nominal Air Gap. The locations of all sensors are visible on the plot, represented by triangles in the same color as the curve (Figure 17).

NOTE: There must be an even number of stator mounted probes to use this plot, with a minimum of four probes required.

![Figure 17: Rotor Stator Plot](image-url)
5.2.2 Air Gap Plot

The Air Gap Plot displays data from Hydro Generator machines. It displays the rotor poles versus the air gap for a single channel or the rotor poles versus the minimum air gap on all channels. This plot uses a synchronous waveform measurement from Hydro Air Gap or Multimode Hydro Air Gap Channels (Figure 18).

![Figure 18: Air Gap Plot](image)

5.3 Reports

5.3.1 Route Report – Machine Summary

Portable Enhancements video located in Bently Nevada Tech Support Training Library

Valid M&S Agreement Required

System 1 v21.1 adds a new report, Route Report – Machine Summary (Figure 20). This report summarizes the collection status of all routes and machines within a Database or Route Folder, highlighting the machines which are overdue for collection. It can be generated at the Database or Route Folder node of the hierarchy, in Config > Route mode.

NOTE: The existing Route Report is still available, renamed as Route Report – Point Details. It can be generated at the Route node and provides a detailed Route Status including a list of all missed points.
System 1 Route Report - Machine Summary

**Enterprise:** Final Reports DB  
**Work Request No.:**  
**Work Order No.:**

**17 May 2021**

**Folder:** Fans Route Folder  
**Route:** Fans Route 1  
**Interval [Days]:** 10  
**Tolerance [Days]:** 2  
**Total Machines:** 4

<table>
<thead>
<tr>
<th>Machine Name</th>
<th>Tag Name</th>
<th>Collection Status</th>
<th>Last Collection</th>
<th>Next Due</th>
<th>Alarm Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>1E-1201-M01 Lean Solvent Cooler Fan 1</td>
<td>MotorFanSetBeltDriven</td>
<td>Due</td>
<td>06 May 2021</td>
<td>26 May 2021</td>
<td>2</td>
</tr>
<tr>
<td>OC-2401A-E02-M01A BOG Comp LO Clr Fan</td>
<td>GenericMotorFanSet</td>
<td>Scheduled</td>
<td>15 May 2021</td>
<td>26 May 2021</td>
<td>4</td>
</tr>
<tr>
<td>0DG-3101-E04-C03A-F01A Dsl Gen 1 Rad Fan A</td>
<td>MotorFanSetBeltDriven</td>
<td></td>
<td></td>
<td>26 May 2021</td>
<td></td>
</tr>
</tbody>
</table>

*Figure 19: Route Report – Machine Summary*
ONLY APPLICABLE WHEN UPGRADING FROM VERSIONS PRIOR TO 20.2

Installation

Before installing System 1 21.1, you must uninstall the version prior to 20.2 of System 1.

⚠️ Change to Program ID impacting OPC Data Collection

As part of the Baker Hughes separation from General Electric (GE), OPC DA import settings have been renamed. To maintain data collection from OPC connections, please take the following actions:

<table>
<thead>
<tr>
<th>Property</th>
<th>Prior Versions</th>
<th>Version 20.2 and above</th>
<th>Required Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program ID</td>
<td>GE.BentlyNevada.Sys1OPCServer.2</td>
<td>System1OPCServer.1</td>
<td>Change Program ID in client to “System1OPCServer.1”</td>
</tr>
<tr>
<td>DCOM Config Name</td>
<td>System 1 OPC Server</td>
<td>System 1 OPC DA Service</td>
<td></td>
</tr>
</tbody>
</table>

Before Uninstalling System 1

1. Take a screenshot of DCOM setting for “System 1 OPC Server” for the following tabs:
   - General
   - Security (Launch and Activation/Access/Configuration permissions)
   - Identity

After Installing System 1 v20.2 and above

Reapply the DCOM settings to “System 1 OPC DA Service”

For Bently Performance (BP) installations, open the BP template key and change the Program ID from “Input OPC Server” to “System1OPCServer.1” (as shown in below image).

For more details, please refer to System 1 Help.
Bently Nevada, System 1, Trendmaster, ADAPT, vbSeries, RangerPro, ADRE, and Orbit Logo are registered trademarks of Bently Nevada, a Baker Hughes Business, in the United States and other countries. The Baker Hughes logo is a trademark of Baker Hughes Company. All other product and company names are trademarks of their respective holders. Use of the trademarks does not imply any affiliation with or endorsement by the respective holders.

Baker Hughes provides this information on an “as is” basis for general information purposes. Baker Hughes does not make any representation as to the accuracy or completeness of the information and makes no warranties of any kind, specific, implied or oral, to the fullest extent permissible by law, including those of merchant ability and fitness for a particular purpose or use. Baker Hughes here by disclaims any and all liability for any direct, indirect, consequential or special damages, claims for lost profits, or third-party claims arising from the use of the information, whether a claim is asserted in contract, tort, or otherwise. Baker Hughes reserves the right to make changes in specifications and features shown herein, or discontinue the product described at any time without notice or obligation. Contact your Baker Hughes representative for the most current information.

The information contained in this document is the property of Baker Hughes and its affiliates; and is subject to change without prior notice. It is being supplied as a service to our customers and may not be altered or its content repackaged without the express written consent of Baker Hughes. This product or associated products may be covered by one or more patents. See Bently.com/legal.

1631 Bently Parkway South, Minden, Nevada USA 89423

Phone: 1.775.782.3611 (US) or Bently.com/support

Bently.com