Welcome to System 1

Version 22.2 [Nov. 2022]
Welcome

Bently Nevada is pleased to present System 1 version 22.2, with new capabilities (Figure 1-1) Users upgrading to version 22.2 will benefit from the many capability enhancements to effective outcomes, which are summarized below.

Figure 1-1 System 1 22.2 Features

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,

Tarannum Sarang, Product Manager

On behalf of your System 1 Leadership and Development Teams
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1. SYSTEM 1 V22.2 FEATURE OVERVIEW

ALL 22.2 FEATURES ARE ONLY SUPPORTED WITH POSTGRESQL AS THE DATA HISTORIAN.

**Table 1: System 1 v22.2 – Edge Devices Monitoring**

<table>
<thead>
<tr>
<th>Edge Devices Monitoring</th>
<th>Bently Devices</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ranger Pro – Replace</td>
<td>Authorized users can now replace existing sensors without interrupting the</td>
</tr>
<tr>
<td>Ranger Pro Device in</td>
<td>historical trend data.</td>
</tr>
<tr>
<td>System 1</td>
<td></td>
</tr>
<tr>
<td>SCOUT 200 – Receive</td>
<td>System 1 can receive balance jobs from SCOUT200 through the Instrument and</td>
</tr>
<tr>
<td>Balance jobs in System 1</td>
<td>Remote mode. The Balance jobs tab displays all the Balance jobs performed on</td>
</tr>
<tr>
<td></td>
<td>the selected machine in the hierarchy.</td>
</tr>
</tbody>
</table>

**Table 2: System 1 v22.2 – Improved Security and Productivity**

<table>
<thead>
<tr>
<th>Improved Security and Productivity</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>User Management</strong></td>
<td></td>
</tr>
<tr>
<td>Adaptive Profiles – User</td>
<td>Add user-defined roles in System 1 using Server Security. User-</td>
</tr>
<tr>
<td>Defined Roles</td>
<td>defined roles are available in addition to the default user roles.</td>
</tr>
<tr>
<td><strong>Report</strong></td>
<td></td>
</tr>
<tr>
<td>Configuration Reports</td>
<td>Generate configuration reports to export measurements and state</td>
</tr>
<tr>
<td></td>
<td>configuration information for all machines.</td>
</tr>
</tbody>
</table>

**Table 3: System 1 v22.2 – Enhanced Diagnostics**

<table>
<thead>
<tr>
<th>Enhanced Diagnostics</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Plots</strong></td>
<td></td>
</tr>
<tr>
<td>Display Speed Labels</td>
<td>System 1 displays the Speed and Date Time labels on Comparison</td>
</tr>
<tr>
<td>on Comparison Curves</td>
<td>curves for Polar and SCL Plot.</td>
</tr>
<tr>
<td>Individually Edit Plot Curve Time Range</td>
<td>Edit the Time Range of a specific curve from within the Bode, Polar, SCL, and XvsY Plots.</td>
</tr>
<tr>
<td>---------------------------------------</td>
<td>---------------------------------------------------------------------------------</td>
</tr>
<tr>
<td></td>
<td>5.2</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 (Refer System 1 Datasheet).

New Versions of System 1 benefit from:

- Compatibility with the latest Microsoft Client & Server Operating Systems
- Client backwards compatibility to previous versions under support (22.2 Client to 21.1 Server DB)
- Database upgrade from previous versions released within last 3 years (20.1→22.2)
- Security patch and 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 the latest version to benefit from new features, OS (Operating System) compatibility, and bug fixes.
3. EDGE DEVICES MONITORING

3.1 Ranger Pro Enhancements

3.1.1 Replace Ranger Pro Device in System 1

Ranger Pro Enhancements video located in Bently Nevada Tech Support Training Library

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System 1 22.2 allows users to select Ranger Pro sensors from the database and replace them with different or new Ranger Pro sensors. When the sensors are replaced, the existing configuration mappings and historical data trends are retained. This toolset allows users to decommission existing devices and replace them with new devices in case of any type of sensor failure.

![Image of Ranger Pro device replacement tool]

Figure 3-1: Select a new ranger pro device to replace the existing one to be decommissioned
3.2 SCOUT 200

3.2.1 Receive Balance jobs in System 1

SCOUT200 Enhancement video located in Bently Nevada Tech Support Training Library

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System 1 v22.2 can now receive balance jobs from SCOUT200 via both Instrument Mode and Remote Comms (in addition to the existing File mode). The balance job data is received along with vibration data during the normal Receive process. System 1 displays balance jobs in the Balance Job tab under the Case History tab, for the selected machine.
4. IMPROVED SECURITY & PRODUCTIVITY

4.1 User Management

4.1.1 Adaptive Profiles – User Defined Roles

User Management video located in Bently Nevada Tech Support Training Library

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System 1 22.2 allows users to add user-defined roles, in addition to the default roles available. Users with the server administrator privilege can add these roles. To add or edit user roles, launch the Database Manager and select Tools > Server Security. Under the Roles tab, click + to add a user-defined role and assign the required permissions to the role.

![Server Security](image)

*Figure 4-1: Adding a new custom user role from Server Security*

Note: A user cannot rename or delete default user roles (Administrator, Advanced, or Basic).

To add a new user to the role, in the opened databases, select Tools > User Management > Users tab, click + and assign the role while creating the new user. To assign existing users to this role, change the role assignment using the Roles dropdown list on the Users tab.
4.2 Report

4.2.1 Configuration Reports

Reports video located in Bently Nevada Tech Support Training Library

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System 1 22.2 provides the ability to generate Configuration report, which contains System 1 Configuration information for all machines.

The configuration report button is available in the Configure workspace. When the user clicks the configuration report button, System 1 exports these configurations in CSV format:

- Tended Variables Configuration
- Spectrums & Waveforms Configuration
- Machine State Configuration

Figure 4-2: Report generated for spectrums and waveforms configuration
5. ENHANCED DIAGNOSTICS

5.1 Plots Enhancements

5.1.1 Display Speed Labels on Comparison Curves

Plots Enhancements video located in Bently Nevada Tech Support Training Library

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System 1 22.2 now displays Speed and Date Time labels on the Polar and SCL plots for the comparison curve, in addition to the primary curve. Before System 1 22.2, Speed and Date Time labels on each sample within the Polar and SCL plots were only displayed for the primary curve.

![Figure 5-1 Speed Labels displayed on Comparison curve for Polar and SCL Plots](image1)

To enable the labels on the Comparison curve, right-click on the plotting area and choose “Comparison Labels”. Labels on the Comparison curve are displayed only for the first selected Comparison curve.
5.1.2 Individually Edit Plot Curve Time Range

Plots Enhancements video located in Bently Nevada Tech Support Training Library

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In the previous release, System 1 supported comparison of data from different time ranges in the same plot through Comparison Data Set. In System 1 22.2, users can now compare data from different time ranges, even for curves for which Comparison Data set is not stored, by editing the time range of each individual curve within that Plot. This capability is supported in Bode, Polar, SCL, and XvsY Plots.

To edit the time range for each individual curve, from the Plot header, either click the Time Range field or right-click on the Plot header and choose “Set Custom Span”.

To reset the configured Time range back to the mini-Trend Time range, right-click plot header and select “Apply Mini-Trend Time Range”.

Figure 5-2 Edit Time range from Bode Plot
DECISION SUPPORT IS NOW AVAILABLE TO DOWNLOAD

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Beginning with the System 1 version 22.2, Decision Support Developer is now included with all new orders of System 1. Decision Support and System 1 both remain as separate products. However, they will be delivered through the same download folder in Flexera. Decision Support is now part of the System 1 package, and therefore does not require a separate license for installation. This excludes the Decision Support Analytics (formerly known as InsightPaks) and the DS Analytics library, which also remains as a separate commercial product. For more information on this change, contact your sales manager.
ONLY APPLICABLE WHEN UPGRADING FROM VERSIONS PRIOR TO 22.1

! License Changes !

If you upgrade from System 1 21.2 or prior, the existing licenses are not visible in the Licenses tab because of the Publisher Name change to “Baker Hughes”. Therefore, **before you install the latest System 1 version**, return your existing licenses to the Licensing Portal. **After the upgrade**, register the License Server again using your existing activation code and relicense System 1. For more details, refer to the System 1 Licensing User Guide.

! Postgres version upgrade !

System 1 version 22.1 onwards support Postgres 14 as the historian. Databases on Postgres 11 need to be upgraded to Postgres 14.
While upgrading to Postgres 14, it is recommended to create a backup before installing the latest System 1 version.
When you upgrade to PostgreSQL14 on System 1 22.1 or later, rollback installation to earlier System 1 versions is not allowed. Rollback is only possible by restoring VSS/Acronis backup.
To upgrade the historian from Postgres 11 database to Postgres 14, launch the Database Manager tool and click “Upgrade PostgreSQL Database”.

! Proficy Obsolescence !

Proficy is no longer supported as historian. Users need to migrate their database from Proficy to Postgres. Users must migrate Proficy databases to PostgreSQL to upgrade to System 1 22.1 or later.
This is applicable for customers who have an older System 1 version with Proficy databases. This does not impact customers who already have PostgreSQL databases as historians.

For more details, please refer to System 1 Help.
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