#### Effective December 2019

# Release Notes





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# **Operating Requirements**

#### Hardware Requirements

To run Foreseer, you'll need a server class machine with

- A minimum of two quad-core processors
- 16 GB of RAM
- 100 GB of free drive space.

#### Supported Operating Systems

| Windows Desktop Operating Systems | Message Manager | Outpost |
|-----------------------------------|-----------------|---------|
| Windows 10 Professional, x64      | Х               | Х       |
| Windows 10 Enterprise, x64        | Х               | Х       |

| Windows Server Operating Systems  | Server & Message Manager |
|-----------------------------------|--------------------------|
| Windows Server 2012 R2 Std        | Х                        |
| Windows Server 2012 R2 Datacenter | Х                        |
| Windows Server 2016               | Х                        |
| Windows Server 2019               | Х                        |

#### Supported Database Platforms

- SQL Server 2012 Express w/ Advanced Services, Standard, Enterprise, Enterprise Core, SP2
- SQL Server 2014 Express w/ Advanced Services, Standard, Enterprise
- SQL Server 2016 Express w/ Advanced Services, Standard, Enterprise
- SQL Server 2017 Express w/ Advanced Services, Standard, Enterprise

#### Supported Browsers

| Applications | IE 11           | Edge           | Chrome       | Safari              | IPAD          |
|--------------|-----------------|----------------|--------------|---------------------|---------------|
| WebConfig    | 11.1451.16299.0 | 44.17763.831.0 | 78.0.3904.97 | V12.0.3 (14606.4.5) | Not Supported |
| WebAdmin     | 11.1451.16299.0 | 44.17763.831.0 | 78.0.3904.97 | V12.0.3 (14606.4.5) | V12.3.1       |
| WebViews     | 11.1451.16299.0 | 44.17763.831.0 | 78.0.3904.97 | V12.0.3 (14606.4.5) | V12.3.1       |

# **New Features**

#### Cybersecurity Updates

Foreseer 7.2 has the following cybersecurity updates:

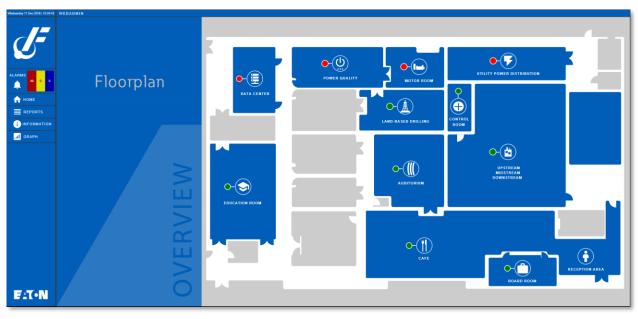
- Apache 2.4.41 that addresses many security issues
- TLS 1.2 for SQL Server connection
- OpenSSL 1.1.1 with TLS 1.3 support
- TLS 1.2 Web server support
- Updated Python to version 3.8

#### New User Interface Templates

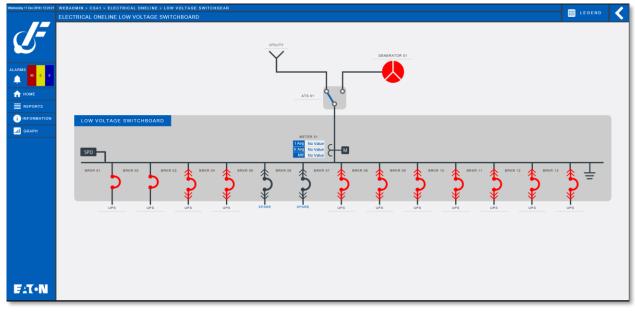
This release includes new Foreseer Flat 2.0 WebViews templates designed to improve the user interface for a more updated, modern look and feel. Examples of this new interface include:

|             | EATON METER PXM8000   | WAVEFORM TCP                                   |   |                              |   |   |                                  |   |   | PRIMARY W  | AVEFOR                                    |
|-------------|---|--|---|------------------------------|---|---|----------------------------------|---|---|--|---|
|             | MODEL   | Select To Enter Text                           | PRODUCT ID  |                              |   | POWER   |                                  | POWER TOTAL   |   | POWER FACTOR   |   |
|             | SERIAL NUMBER   |  | CAUSE OF STATUS   |                              | Unknown   |   |                                  |   |   |  |   |
|             | LOCATION  | Select To Enter Text                           | SYSTEM CONFIGURATION<br>POWER FACTOR LABEL<br>POWER QUADRANT<br>PHASE ROTATION              |                              | e 4 Wire (Y 3CT)<br>actor Lagging(+)<br>Quadrant 4<br>A-B-C | <ul> <li>kVA PHASE A</li> <li>kVA PHASE B</li> <li>kVA PHASE C</li> <li>kW PHASE A</li> </ul>         | 0.0000                           | KVAR TOTAL     KVA TOTAL     KW TOTAL     KVA   | 0.0000  | POWER FACTOR SYSTEM APPARENT     POWER FACTOR PHASE A APPARENT     POWER FACTOR PHASE B APPARENT     POWER FACTOR PHASE C APPARENT | 0.0000<br>0.0000<br>0.0000<br>0.0000      |
|             | VOLTAG  |  |   | URRENT                       |   | <ul> <li>kW PHASE B</li> <li>kW PHASE C</li> </ul>  | 0.0000                           |   | 1500 2000   | POWER FACTOR SYSTEM DISP   | 0.0000                                    |
| ••          | 150 300   | 450  | A B   | - 2000 C                     | - 2000  | KW PHASE C     KVAR PHASE B     KVAR PHASE B     KVAR PHASE C   | 0.0000                           | kW  |   | POWER FACTOR PHASE A DISP     POWER FACTOR PHASE B DISP     POWER FACTOR PHASE C DISP  | 0.0000<br>0.0000<br>0.0000                |
| RTS         | - E -   |  |   | -                            |   |   |                                  | POWER QUALITY   |   |  |   |
| MATION<br>H | 0 VOLTAGE<br>300  | 600  | <br>1500<br><br>-   | - 1500<br>                   | -<br>- 1500<br>-<br>-                                       | APPARENT ENERGY   | 0.0000                           | POWER QUALITY LAST 10 MINS     POWER QUALITY LAST 24 HOURS     POWER QUALITY MEAN                                   | 0.00000 0.000000 | THD     VOLTAGE THD AVERAGE     CURRENT THD AVERAGE  | 0.0000                                    |
|             | 150   | 450  |   | -                            | -   | REAL ENERGY   |                                  | ITIC FACTOR   |   | CURRENT NEUTRAL THD  | 0.0000                                    |
|             | 150<br>VOLTAGE  |  | -<br>- 1000<br>-<br>-   | -<br>- 1000<br>-<br>-        | -<br>- 1000<br>-<br>-                                       | KW TOTAL DEMAND     KW FORWARD DEMAND     KW REVERSE DEMAND     KW REVERSE DEMAND     KW NET DEMAND   | 0.0000 0<br>0.0000 0<br>0.0000 0 | ITIC FACTOR PHASE A     ITIC FACTOR PHASE B     ITIC FACTOR PHASE C   | 0.0000  | VOLTAGE PHASE A-8 THD<br>VOLTAGE PHASE B-C THD<br>VOLTAGE PHASE C-A THD<br>VOLTAGE PHASE A-N THD<br>VOLTAGE PHASE B-N THD          | 0.0000 0.0000 0.0000 0.0000 0.0000        |
|             | 300   |  |   | -                            | -   | TOTAL ENERGY  | 0.0000                           | K-FACTOR  |   | VOLTAGE PHASE C-N THD  | 0.0000                                    |
|             | 150 VOLTAGE   | 450  | - 500<br>-<br>-<br>-<br>-<br>-<br>-<br>0  | 500<br><br><br><br><br><br>0 | 500<br><br><br><br><br><br>0                                | FORWARD ENERGY     REVERSE ENERGY     REACTIVE ENERGY     KVAR TOTAL DEMAND     VVAR DELIVERED DEMAND | 0.0000                           | K-FACTOR     K-FACTOR PHASE A     K-FACTOR PHASE A     K-FACTOR PHASE B     K-FACTOR PHASE C     K-FACTOR SYTEM MAX | 0.0000   <br>0.0000   <br>0.0000   <br>0.0000   <br>0.0000  | CURRENT PHASE & THD CURRENT PHASE & THD CURRENT PHASE C THD  | 0.0000<br>0.0000<br>0.0000                |
|             | VOLTAGE PHASE A-B   | 480.00   | CURRENT PHASE A   |                              | 500.00  | <ul> <li>kvar received demand</li> <li>kvar net demand</li> </ul>                                     | 0.0000                           | CREST FACTOR  |   | STATUS   |   |
|             | VOLTAGE PHASE B-C VOLTAGE PHASE C-A VOLTAGE PHASE A-N VOLTAGE PHASE B-N VOLTAGE PHASE C-N | 480.00<br>480.00<br>0.0000<br>0.0000<br>0.0000 | CURRENT PHASE B<br>CURRENT PHASE C<br>CURRENT AVERAGE<br>CURRENT AVERAGE<br>CURRENT NEUTRAI | E<br>E DEMAND<br>L           | 1000.00   <br>1500.00   <br>0.0000   <br>0.0000             | <ul> <li>KVARIH LEADING</li> <li>KVARIH LAGGING</li> <li>KVARIH NET</li> </ul>                        | 0.0000                           | CREST FACTOR PHASE A     CREST FACTOR PHASE B     CREST FACTOR PHASE C     CREST FACTOR SYSTEM MAX                  | 0.0000<br>0.0000<br>0.0000<br>0.0000  | PRIMARY STATUS O<br>EVENT COUNT<br>SAG LEVEL<br>SWELL LEVEL  | Operational<br>0.0000<br>0.0000<br>0.0000 |
|             | VOLTAGE AVERAGE L-L     VOLTAGE AVERAGE L-N   | 0.0000   | CURRENT GROUND  |                              | 0.0000  |   |                                  | FREQUENCY   |   | COMMUNICATIONS   |   |
| ·N          | VOLTAGE N-G   | 0.0000   |   |                              |   |   |                                  | FREQUENCY   | 0.0000  | DEVICE COMMUNICATIONS  | Online                                    |

Device View



Floorplan



Oneline

#### Alarm Group Name Property

Create enhanced user fields for alarm notification, filtering, grouping, and sorting.

• Foreseer now can set an Alarm Group Name property through the Install from List functionality using Web Config. This includes the ability to set or change Alarm Group Name properties for multiple devices with a CSV formatted file.

### Alarm Management Sorting and Filtering

Enhance the current Alarm Management Screen to provide more robust sorting and filtering options.

- Foreseer now adds an optional setting in the Alarm Management Screen to connect Alarm Management with the WebViews Folder Tree defined in the server.
- The user can add a Device Type Property to the Alarm Management Screen.
- Add the ability to Add Device Type as a new column in the Alarm Management window
- Simplify the Alarm Filter feature by moving filtering directly to the Alarm Management screen.

### Alarm Management User Profile

Enhance the user experience by providing users a method to save and retrieve alarm management customization for filtering, sorting, and column display.

- User profile will contain configuration information for Alarm Management Settings.
- User will be able to save the profiles to a custom user profile file.
- User will have the option to designate the profile as his or her default profile.
- User will be able to load a saved profile from any WebViews/WebConfig session connected active for the server where the profile was saved.

#### Audible Alarms Notifications

Enhance audible alarm notification to provide more user customization of audible alarm notification. Originally located in the style\_ie.css file, these have been moved into WebConfig.

Audible alarm notifications utilize the alarm.mp3 file found in the WWW\Support\Sounds directory. You may use your own custom .mp3 and .wav files for individual alarm priority levels. Please refer to the Web Configuration Guide -MN152050EN for more information.

#### **Device Location Property**

The Device Location property is a string-based property. It will be displayed in a separate column in the Alarm View and will allow filtering/sorting based on the property. This property can be seen using WebConfig.

• Device location will be an informational property. It is not a mandatory property for device installation, or any other changes related to device functionality.

### **Device Type Property**

The Device Type property is a string-based property. This framework is required for additional development required to support the alarm filtering and sorting. This property can be seen using WebConfig.

- The property will not be a required property.
- There will be four methods for setting the property. See the help document for more details

#### Navigation from Alarm Management to Alarm WebView

Users can navigate to the channel located in the WebViews folder/tree by selecting any alarm from the Alarm Management window using the Open in WebViews option from the menu or the alarm details dialog.

| Defect     | Description  |
|------------|--|
| FOR-115    | Foreseer V7 Persistent issue   |
| FOR-145    | Message Manager 5.5 stops sending notifications                      |
| FOR-393    | Procedural - ensure that only TLS 1.2 is used with WebViews          |
| FOR-407    | Checkboxes rendering in Chrome differently than IE/Edge, some        |
|            | render with sizes off by a few pixels                                |
| FOR-503    | Phasor for PXM incorrect   |
| FOR-504    | enableDevice() and disableDevice() UDE functions cause Foreseer to   |
|            | log audit entries on each scan interval                              |
| FOR-505    | Certain special characters from UDEs can cause audit history reports |
|            | to spin out of control   |
| FOR-508    | Multiple Graph widgets landed on a WebView will not display data     |
|            | when called  |
| FOR-583    | v7.1 Fix Tree issue  |
| FOR-649    | False watchdog alarm in log file                                     |
| FOR-663    | TLS1.2 support for SQL connection encryption                         |
| FOR-739    | DAE loses connection to Primary or Redundant                         |
| FOR-740    | Issue identified that the target web site is using Bootstrap and     |
|            | detected that it is out of date.                                     |
| FOR-741    | Identified a cookie not marked as secure and transmitted over HTTPS. |
| FOR-742    | Identified a cookie not marked as secure and transmitted over HTTPS. |
| FOR-744    | Need 6-ModBus2.dll built for v6.4 and v7                             |
| FOR-747    | Checkboxes rendering double-overlaid (one on top of another) on      |
|            | macOS  |
| FOR-748    | Newly dropped checkbox sizes differ from upgraded previous ones      |
| FOR-752    | WebViews Folder Buttons lose transparency when upgrading from        |
|            | v6.3.172 to v7.x   |
| FOR-818    | Channel Message Settings for a remote channel does not persist       |
| FOR-984    | Schedule ARQ Backups taking hours to complete on systems with        |
|            | nearly 4000 devices  |
| FOR-1121   | CM4000 waveform issue  |
| FOR-1122   | Driver - CH-EMINTClient.dll for v7.1 not retrieving DT1150 Values    |
| FOR-1217   | Documentation for PXSrightAppAdmin and PXSauthAPPADMIN               |
| 50 D 400 4 |  |

Excessive .sess files in WWW\React folder

# **Issues Resolved**

FOR-1224

| FOR-1228 | PXM2280/2290 waveform download |
|----------|--------------------------------|
| FOR-1230 | Foreseer v7.1.180 WebAdmin bug |

# **Known Issues**

| Defect   | Description   |
|----------|---|
| FOR-2060 | Stock style.ie comments refer to the color Purple for "Value 5", but    |
|          | uses a color closer to a base blue hex color (0x0000ff)                 |
| FOR-2059 | In Foreseer Graph's Add Channel feature, performing a ctrl + click to   |
|          | de-select an already selected channel will not work. Close the Add      |
|          | Channel window and re-launch and select the needed channels.            |
| FOR-2057 | Using short cut keys (tab + enter) on alarm management filter opens     |
|          | the multiple columns filter.  |
| FOR-2053 | Chrome Specific – Graph Cursor doesn't show any value in the graph      |
|          | canvas  |
| FOR-2039 | The use of the Tab key in the Alarm Management window with              |
|          | filtering enabled may not produce navigable results.                    |
| FOR-2034 | Alarm Management – User Profile-sessions not getting updated            |
| FOR-2032 | Applying changes to Device Location, Alarm Group, or Device Type        |
|          | properties while Alarm Management window is open requires refresh       |
|          | to see such changes.  |
| FOR-2028 | Alarm Management 7.2 Filter – Acknowledge keyword is not listed in      |
|          | the state filter immediately when alarms are acknowledged.              |
| FOR-1928 | Alarm Management – values in columns are sorted by order of string.     |
| FOR-1924 | WebConfig – Channel Panel – Previous channel value is persisted         |
|          | when the value is set to blank and channel displays "No Value". This is |
|          | for a Text channel only.  |
| FOR-1923 | Alarm management 7.2- User Profile- If user is upgraded in browser      |
|          | than the user profile module should show the current user's profiles    |
| FOR-1883 | Intermittent issue where Alarm Filter icon becomes invisible while      |
|          | performing toggle operation in Edge browser environments.               |
| FOR-1878 | Alarm Management in Internet Explorer and Edge – Only one alarm         |
|          | window can be opened even when 2 different URLs are accessed.           |
| FOR-1796 | Open in WebView functionality from Alarm Details not working on         |
|          | Safari and iPad   |
| FOR-1795 | Chrome and Safari browsers - When logged into WebViews with no          |
|          | authentication enabled in Foreseer (PXSauthNONE), the audible alarm     |
|          | notification will not play until the user initially interacts with the  |
|          | environment. This behavior is the result of browsers modifying their    |
| 5004600  | auto-play policies for media.   |
| FOR-1698 | A descriptive error message should display when browser cookies are     |
| 500.0050 | disabled, and the user tries to open WebAdmin/WebConfig/WebViews        |
| FOR-2052 | When the automatically silence alarm properties is disabled,            |

| WebViews will switch to a sound even for an alarm with lower priority |
|---|
| compared to threshold.  |

# Third Party License

#### OpenSSL

This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit (<u>https://www.openssl.org/</u>)

### Apache

This product includes software developed by the Apache for use in the Apache HTTP Server (<u>https://httpd.apache.org/ABOUT\_APACHE.html</u>)

#### Python

This product includes software developed by the Python Software Foundation (<u>https://www.python.org/about/</u>)

#### Zlib

This product includes software developed by the Zlib project. (https://www.zlib.net/zlib\_license.html)

#### Release Notes - Foreseer 7.2.210

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