

Foreseer

Release Notes



Operating Requirements

Hardware Requirements

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

Device and Channel Capacity	Configuration
Devices: 1-500 Channels: 1-50,000 SQL Server exists on same server	RAM (DDR4 or above): 16 GB Processors: 16 Core Disk Space: 2 TB
Devices: 1-500 Channels: 1-50,000 SQL Server exists on different server	RAM (DDR4 or above): 16 GB Processors: 16 Core Disk Space: 128 GB
Devices: 501-5,000 Channels: 50,001-500,000 SQL Server exists on same server	RAM (DDR4 or above): 32 GB Processors: 16 Core Disk Space: 6 TB
Devices: 501-5,000 Channels: 50,001-500,000 SQL Server exists on different server	RAM (DDR4 or above): 32 GB Processors: 16 Core Disk Space: 128 GB
Devices: 5,001-10,000 Channels: 500,001-1,000,000 SQL Server exists on same server	RAM (DDR4 or above): 64 GB Processors: 32 Core Disk Space: 10 TB
Devices: 5,001-10,000 Channels: 500,001-1,000,000 SQL Server exists on different server	RAM (DDR4 or above): 64 GB Processors: 32 Core Disk Space: 128 GB

ASSUMPTIONS

- Data retention is 5 years
- Each device has 100 Channels (60 Analog & 40 Digital)
- Processors: Intel family server editions (XEON family or better)
- Network speeds for AMQP implementations are required to be more than 100 Mbps, slower speed can cause a delayed upload

To optimize performance, an SSD is highly recommended.

Supported Operating Systems

Windows Desktop Operating Systems	Message Manager	Outpost
Windows 10 Professional, x64	✓	✓
Windows 10 Enterprise, x64	✓	✓

Windows Operating Systems	Server / Message Manager
Windows Server 2016	✓
Windows Server 2019	✓
Windows Server 2022	✓

Supported Database Platforms

- SQL Server 2017 Express w/ Advanced Services, Standard, Enterprise
- SQL Server 2019 Express w/ Advanced Services, Standard, Enterprise
- SQL Server 2022 Express w/ Advanced Services, Standard, Enterprise

Express versions of SQL Server are NOT supported when leveraging the Device & Channel Capacity Expansion feature above 5000 devices and 512,000 channels.

Supported Browsers

Applications	Edge	Chrome
WebConfig	137.0.3296.52	137.0.7151.55
WebAdmin	137.0.3296.52	137.0.7151.55
WebViews	137.0.3296.52	137.0.7151.55

Features

The features included with this release of Foreseer are:

Enhance Audit History Contents and File Formats

This release of Foreseer now supports expansive Audit History capabilities with change tracking for configuration actions within the EPMS system. The following user actions are now automatically recorded in the Audit History:

- **Successful Login Records** - Includes entries for each successful user login.
- **Failed Login Records** - Captures instances of failed login attempts.
- **Single User Session Conflicts** - Logs failed login attempts due to an active Single User Session when the UseSingleSession feature is enabled.
- **Explicit Logout Records** - Records when a user explicitly logs out using the Logout button.
- **Session Timeout Logouts** - Includes entries for users logged out due to session timeouts.
- **Login Source Identification** - Clearly defines whether the login or login attempt was made to WebViews, WebAdmin, or WebConfig.
- **Detailed Record Information** - Each record includes a date/time stamp, action description, username, and the source origin (IP address, hostname, etc.) of the request.
- **Comprehensive Coverage** - Ensures recording of login attempts across Active Directory, LDAP, and Single Sign-On sessions.

Users can now export the Audit History Report in the following formats:

- TXT (Text format)
- CSV (Comma-Separated Values)
- TSV (Tab-Separated Values)

Scheduled Creation and Network Storage of Audit History Reports

This feature allows the user to generate an Audit History Report on a daily or weekly basis. Once the report is generated, it will be copied to a download path location of the customer's choosing. These Audit History Reports are capable of being generated on a daily and or weekly time based schedules. Included with this feature will be the capability that will allow the user to set and modify the following parameters:

- **Report Format** - specifies the report output format which should include Text, CSV, and TSV.
- **Time** - specifies the time upon which the report will be automatically generated.

- **Days of Week** - specifies the days of the week that the report will be automatically generated.
- **Report Location** - specifies the local or network path where the report will be copied to upon successful generation.
- **Lookback Period** - specifies the time period of Audit History details that should be included in the report. Valid options should be 1 Day through 7 Days maximum.

System Improvements

This release of Foreseer continues to offer regular performance improvements through a reliable, and dependable software release cadence designed to increase the speed and efficiency of the Foreseer application.

Cybersecurity Improvements

The Foreseer software continues to offer regular Cybersecurity improvements through a reliable, and dependable software release cadence, including:

- Updated revisions of Apache Web Server, and underlying open-source libraries such as OpenSSL, Python, and other well known proven libraries.

Issues Resolved

Defect	Description
FOR-36562	DeviceConfig Does Not Recognize 1 mil ChannelCap.bin file
FOR-36465	SNMP Trap Bug
FOR-36065	Trusted Web Clients documentation
FOR-35771	WebAdmin Save Error Info Popup
FOR-35710	WebConfig option to run Channel Data Report displays "Select Device(s)" and then "Select Single Device".
FOR-34321	"Invisible" Links in Help Documentation
FOR-34274	User added notes do not include User Name/IP address
FOR-34232	Channel Properties Box cannot be moved in WebViews
FOR-34205	AMQP error with no basic info or feedback in logging
FOR-33601	Act as part of the operating system permission
FOR-32916	The System Up-Down report is incorrect
FOR-32713	Foreseer BMS fails to connect to the database if the SQL server was not started or available during application start
FOR-32712	LDAP not respecting UseSingleSessionRestriction.yes
FOR-32508	The session cookie values are included as part of the filename
FOR-32321	Channel Data Report channels may not report in the same order for different devices of the same VI
FOR-32227	User Defined Fields containing a colon () get converted to a period (.)
FOR-32226	Value-Mapped Line duplicate rule error message box missing
FOR-32094	Alarm UDF's have a token per state and are unusable as implemented
FOR-31909	Message Manager SMTP header always specifies HTML
FOR-29637	Syntax error when inserting "setEquation" function in UDE channel properties dialog
FOR-29499	Subject Line not included in Message Manager Test Calls
FOR-29469	Adding Axis to channels in graph breaks channel options
FOR-29034	UseRemoteInterface.yes purpose and clarity
FOR-28494	System Configuration Report communications column string wraparound
FOR-27525	Interval Data Report columns are not always consistent with channels added either by direct entry or loading via save button
FOR-27519	Derived channel UDE has different allowed input length between UI and VI
FOR-21857	When a lot of changes are made to FBMS the UR DB fails to be fixed
FOR-15033	Test Equation button not properly evaluating UDE's to Foreseer Code Standards
FOR-13539	7.6, 7.7 Graphs Result in 'No Data' when Foreseer Server Configured using Windows Account in Server Properties
FOR-5087	Queuing of Alarms Command

Known Issues

Defect	Description	Work Around
FOR-32911	WebViews section of WebConfig will not work after using search feature	To work around this issue, expand all trees.
FOR-31989	Graph window requesting invalid time when client and server are in different time zones	To work around this issue, pull one channel at a time.

Open Issues

Defect	Description
None	

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To review updated information on the third-party components used in Foreseer, please refer to the License Notices.txt file present at the root of the Foreseer application installation directory.

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