

Spirit^{IT} eXLerate

Measurement supervisory software

Spirit^{IT} eXLerate v4.2.6 (February 2021)

Spirit^{IT} eXLerate v4.2.6 is released in February 2021. It contains a couple of bug fixes and improvements. See the eXLerate Change Log for the complete list of changes.

Changes

Retentive data storage

The retentive data for applications is now stored in separate database tables, fixing issue with Windows Standard users and improving the system stability and performance. The registry data is converted into the database tables for all applications found in the Windows registry, an additional backup is stored on disk and the data is removed from the registry.

Password encryption

All passwords are now stored with a stronger encryption method.

Upon upgrading from a previous eXLerate v4 version, change user names and passwords as these might be reset due to the new encryption method.

Compatibility

eXLerate is compatible with Microsoft Windows 10, Windows Server and Microsoft Office versions that are supported by the Microsoft support and servicing timelines on the date the eXLerate version is released. See <https://docs.microsoft.com/en-us/lifecycle/products/> for details on Microsoft support and servicing timelines.

Spirit^{IT} eXLerate v4.2 (May 2019)

Spirit^{IT} eXLerate v4.2 is released in May 2019. It contains the changes mentioned below and a couple of bug fixes. See the eXLerate Change Log for the complete list of changes.

Changes

eXLerate kiosk mode runs with Windows Standard user

Once installed and initially set-up, eXLerate allows to run applications as Windows Standard User. This increases system security for eXLerate applications running in kiosk mode on runtime environments. For the installation of the program and initial system set-up, administrator rights still may be required.

Local eXLerate system database

Since version 4.2, eXLerate supports the system database (events) to reside in an local database server instead of the embedded MySQL 4.1 database. The advantage of the local system database is that it increases the maintainability for updating the database server with patches for bug fixes.

Report generator

Stability of the Report Generator is improved. No separate taskbar icon for the report generator will be displayed anymore. Any problem of the report generator will be reported via the Control Center.

Microsoft Office 365 / Office 2019

This release eXLerate is tested and compatible with Microsoft Office 2019 and Office 365. Previous Microsoft Excel versions 2016, 2013 and 2010 are also still supported.

Spirit^{IT} eXLerate v4.1 (September 2018)

Spirit^{IT} eXLerate - v4.1 was released in September 2018. Besides the changes mentioned below, this release also contains bug fixes. For the complete list of changes, please contact ABB.

Changes

Moving Averages

The function to calculate moving averages is updated in the eXLerate function library.

Compatibility

Windows 10 and Windows Server 2016

Spirit^{IT} eXLerate is tested and compatible with the latest Microsoft Windows 10 and Microsoft Windows Server 2016 operating systems (Windows 7, Windows 8.1 and Windows Server 2008 R2 are also supported).

Microsoft Excel 2019

This release of Spirit^{IT} eXLerate is compatible with Microsoft Excel 2019 (provisional support). Spirit^{IT} eXLerate also still supports Microsoft Excel 2010, Microsoft Excel 2013 and Microsoft Excel 2016.

Spirit^{IT} eXLerate v4.0.1 (August 2017)

Password encryption

This version of Spirit^{IT} eXLerate introduces an option to improve security by storing user passwords in an encrypted form. As this encryption is non-symmetrical, enabling this option will make it impossible to recover any forgotten passwords.

Spirit^{IT} eXLerate v4.0 (December 2016)

Spirit^{IT} eXLerate - v4.0 was released in December 2016. Besides the features and changes mentioned below, this release also contains almost 20 improvements and bug fixes. For the complete list of changes, please contact ABB.

New features/changes

Windows 10 and Windows Server 2012 R2

It is now possible to run Spirit^{IT} eXLerate on the Microsoft Windows 10 and Microsoft Windows Server 2012 R2 operating systems (Windows 7, Windows 8 and Windows Server 2008 R2 are also supported).

Spirit^{IT} eXLerate requires Microsoft .NET Framework 3.5 to be installed. The Spirit^{IT} eXLerate installer will help to install this prerequisite.

Microsoft Excel 2016

This release of Spirit^{IT} eXLerate introduces support for Microsoft Excel 2016. Spirit^{IT} eXLerate has been tested to work with Microsoft Excel 2016. Among the previous versions of Microsoft Excel, Spirit^{IT} eXLerate supports Microsoft Excel 2010 and Microsoft Excel 2013.

Dedicated access button for event log

This release of Spirit^{IT} eXLerate introduces a new way to access the Event log. In previous versions of Spirit^{IT} eXLerate, the Event log was accessible as an application shortcut in the Control Center. Now you can access the Event log through a dedicated button.

Updated UI

The user interface of Spirit^{IT} eXLerate is updated to the new style inspired by Microsoft Office 2016 and ABB's styling rules.

eXLerate 2010 – v3.4 (October 2013)

eXLerate 2010 - 3.4 was released in October 2013. Besides the features and changes mentioned below, this release also contains two improvements and five bug fixes. For a complete list of changes, please contact ABB.

New features/changes

Windows 8 and Windows Server 2012

It is now possible to install and use eXLerate on the Microsoft Windows 8 and Microsoft Windows Server 2012 operating systems. Support has been added to the installer to help you with the installation of the Microsoft .NET Framework, which is a pre-requisite for running eXLerate.

Microsoft Excel 2013

This release of eXLerate introduces preliminary support for Microsoft Excel 2013. eXLerate has been tested to work with Microsoft Excel 2013, however there are a number of known issues when using eXLerate to develop applications in combination with Microsoft Excel 2013. We encourage users to report any issues that they may encounter when using eXLerate in combination with Microsoft Excel 2013.

eXLerate 2010 – v3.3 (May 2013)

eXLerate 2010 - 3.3 was released in May 2013. Besides the features and changes mentioned below, this release also contains over 25 improvements and bug fixes. For a complete list of changes, please contact ABB.

New Features/Changes

Redundancy

A new function ``exIsServerSynchronizing(...)`` has been made available for use in VBA as well as direct use on a worksheet. Using this function, it is possible to obtain the current status of any connected duty or standby computer. This can be used to prevent shutting down eXLerate while a synchronization operation is in progress.

Reporting

The generation and synchronization of Reports no longer requires the use of Windows shared folders. It is now possible to generate a report on a remote computer using the ``exGenerateReport(...)`` function, and view the generated report locally entirely from eXLerate. Functions have been made available in VBA for listing and requesting reports from a remote computer.

Drivers

A new Modbus server implementation has been added as the default Modbus server in eXLerate. The new implementation provides better performance compared to the old Modbus Server, as well as improved reliability in situations where the Modbus server experiences many re-connection events. This new server is designed as a drop-in replacement for the existing Modbus server, so no changes to existing applications are required. By installing this new eXLerate release you will automatically make use of the new Modbus server. If you do still require the use of the old Modbus server, it is still available under the name `'ModbusServerV1'`.

Database engine

Querying the eXLerate database using the VBA `'SQLCmd.Execute(...)'` statement could under certain conditions cause instability. Even though the `'SQLCmd.Execute(...)'` statement is a blocking VBA operation, eXLerate would still continue to update the user interface during execution of the SQL query. If the user simultaneously performed actions which caused VBA code to execute (e.g. pressing buttons or

switching sheets) this could cause eXLerate to enter an inconsistent state, leading to instability. This issue has now been resolved; however it may require some changes to existing applications in order to guarantee an optimal user experience, as the user interface will no longer be updated while performing queries through the 'SQLCmd.Execute(...)' statement. If your application performs (relatively) long running SQL queries (through the use of the VBA 'SQLCmd.Execute(...)' statement) triggered by user actions, you are advised to use the asynchronous SQL interface instead. Please see the Advanced reference manual II, Chapter 7, section "Executing asynchronous SQL statements" for more information on how to do this.

eXLerate 2010 – v3.2 (November 2012)

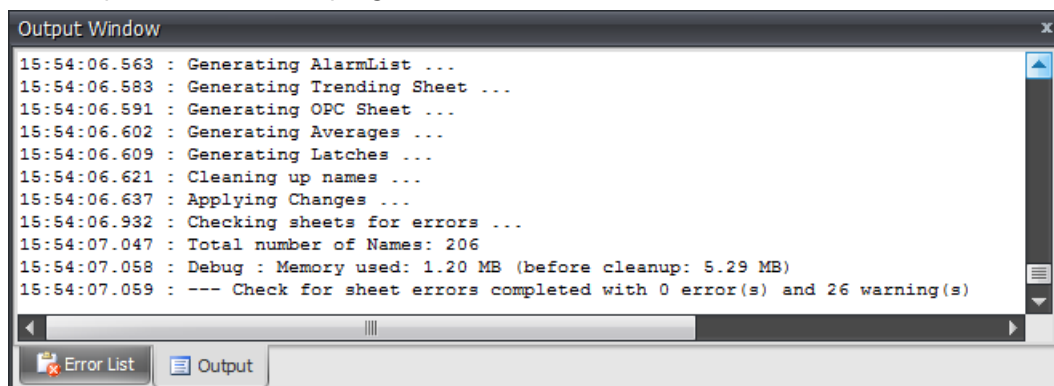
eXLerate 2010 - 3.2 was released in November 2012. Besides the features and changes mentioned below, this release also contains over 25 minor improvements and bug-fixes. For a complete list of changes, contact ABB.

New features/changes

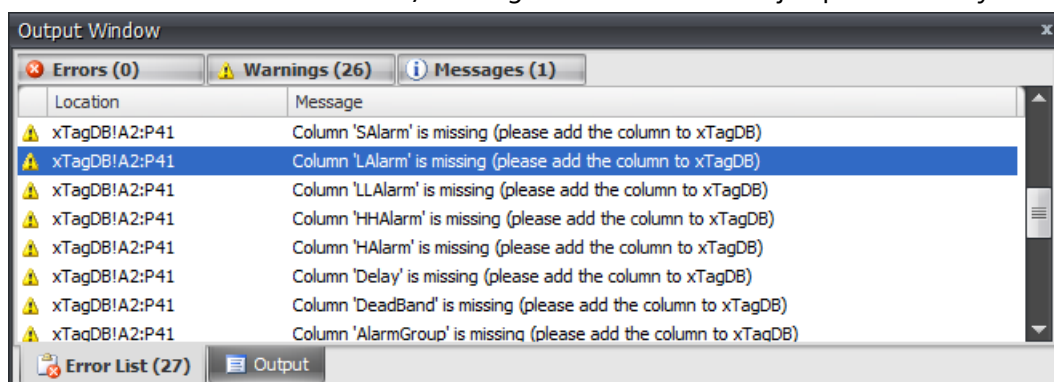
Updated wizards

The Tag & Object wizard and Calculation wizard has been redesigned from the ground up:

- Huge speed improvement (only the changes are processed).
- More and better error/warning messages.
- Automatic adjustment of table range-names to fit the actual table content.
- Clicking on an error/warning jumps to the cell.
- The Output-tab shows the progress of the Wizard.

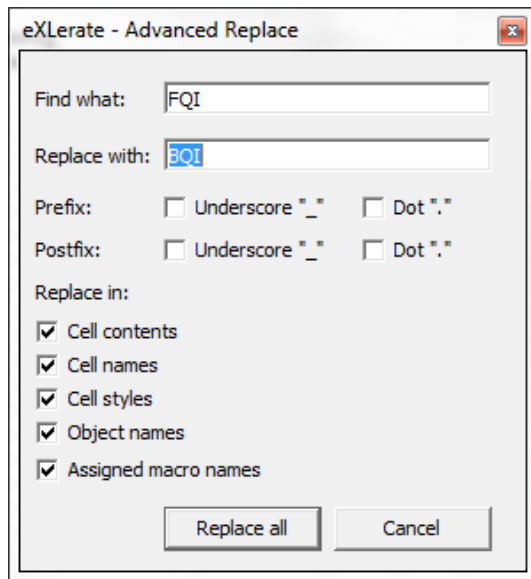


- The Error List-tab shows all errors/warnings which when clicked jump to the faulty cell.

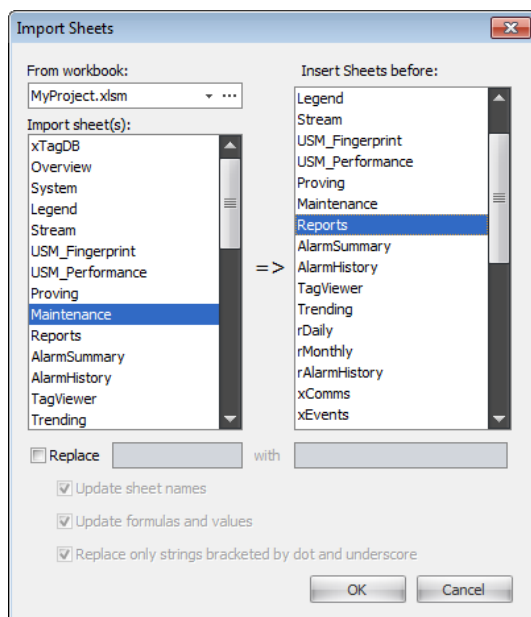


Engineering tools

- Added 'Advanced replace' option in order to quickly find & replace cells, names, styles, object (e.g. shapes) and macro-names.



- Added 'Import sheets' option in order to import sheets into your application without getting and name conflicts.



- Added additional error checking on all tables.

Reporting

Added client/server synchronization to the 'exGenerateReport(...)' function. Now, when this function is executed on either a client or the standby server, the report is generated on the duty-server and synchronized to all other servers.

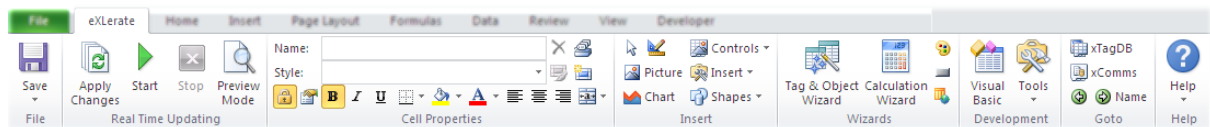
eXLerate 2010 – v3.1 (December 2011)

eXLerate 2010 builds upon the proven base of eXLerate 2003 and adds support for the latest Microsoft Windows & Office platforms. Besides the features and changes mentioned below, this release also contains more than 200 minor improvements and bug-fixes. For a complete list of changes contact ABB.

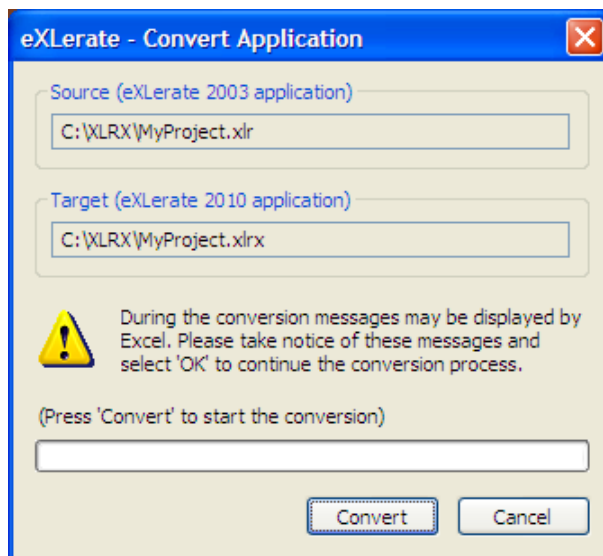
New features/changes

Support for Office 2007 & 2010

- Added support for Office 2007 & 2010 (32 bit only). (see 'Supported Platforms & Recommendations')
- All new Ribbon interface:



- New file format '.xlrx', which is based on the Excel '.xslm' file-format and results in smaller application files.
- Migration wizard for converting '.xlr' files to '.xlrx' files:



Support for latest Windows editions

Added support for Windows Vista, Windows 7 and Windows Server 2008 (R2). Both 32-bit and 64-bit editions are supported. (see 'Supported Platforms & Recommendations')

Terminal services (Remote desktop services)

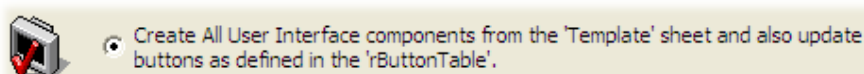
Terminal Services support makes it possible to run multiple (client) sessions of eXLerate on a single PC. For instance, you may run an eXLerate Server and an eXLerate Client on the same machine and the Client can be accessed remotely using Remote Desktop technology. Please contact ABB for the possibilities of this feature.

Math functions (Flow-Xpert)

Flow-Xpert is the continued development of the xlMath library and is now integrated into eXLerate. Worksheet- and VBA functions as well as the documentation are easily accessible from within the eXLerate environment. The xlMath-functions (xl-prefix) are still provided for backwards compatibility but new applications are urged to use the more comprehensive Flow-Xpert (fx-prefix) library.

Wizards

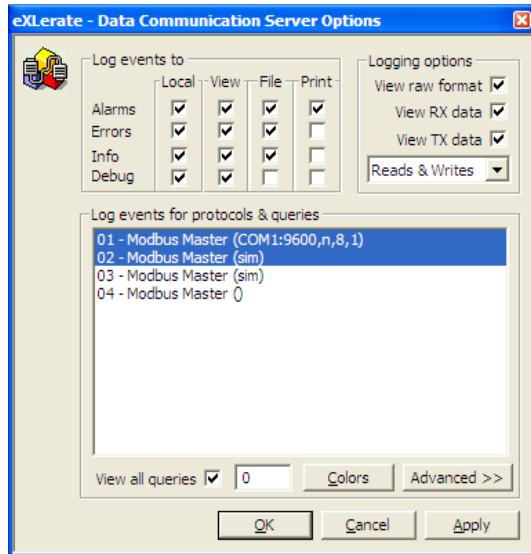
- Improved performance on various wizards.
- New button wizard option to copy all shapes from the Template sheet to all display sheets:



Communication drivers

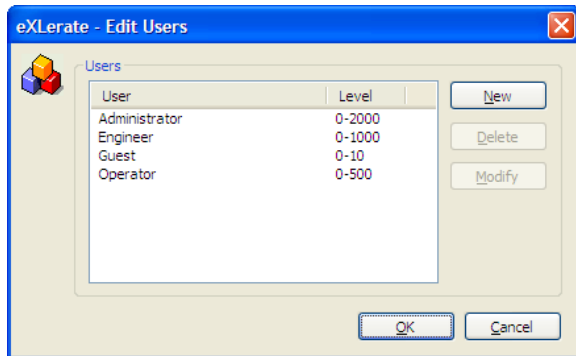
- Added new Flow-X Client protocol which makes it easy to read and write tags to and from the Flow-X flow computer using only tag-names.

- Simplified communication driver options dialog:



User management

Redesigned user Interface for managing users:



Listview control

- Added new generic exListView control:

Column 1	Column 2	Column 3	Column 4
8	FT_205_4A_DAILY_GROSS_VOLUME	Stream 1	Daily Total Gross volume
10	FT_205_4A_DAILY_MASS	Stream 1	Daily Total Mass volume
9	FT_205_4A_DAILY_STANDARD_VOLUME	Stream 1	Daily Total Standard volume
2	FT_205_4A_DT	Stream 1	Density value of Flow meter FT-204-4A
5	FT_205_4A_FLOW_GROSS_VOLUME	Stream 1	Gross volume of flow rate
7	FT_205_4A_FLOW_MASS	Stream 1	Mass flowrate
6	FT_205_4A_FLOW_STANDARD_VOLUME	Stream 1	Standard volume of flow rate
19	FT_205_4A_SNR_PATH_1	Stream 1	Signal to Noise Ratio of Path 1
20	FT_205_4A_SNR_PATH_2	Stream 1	Signal to Noise Ratio of Path 2
21	FT_205_4A_SNR_PATH_3	Stream 1	Signal to Noise Ratio of Path 3
22	FT_205_4A_SNR_PATH_4	Stream 1	Signal to Noise Ratio of Path 4
1	FT_205_4A_STATUS	Stream 1	Status of Flow meter FT-204-4A
11	FT_205_4A_VOG_PATH_1	Stream 1	Velocity of Gas of Path 1
12	FT_205_4A_VOG_PATH_2	Stream 1	Velocity of Gas of Path 2
13	FT_205_4A_VOG_PATH_3	Stream 1	Velocity of Gas of Path 3

- Supported features: Sorting, Sub-cell font formatting & colors, fully configurable through VBA object model.

Supported platforms & recommendations

Microsoft Windows (32 & 64 bit)

- Windows XP (SP3) (32 bit)
- Windows Vista (SP2) (32 & 64 bit)
- Windows 7 (SP1) (32 & 64 bit)
- Windows 8 (32 & 64 bit)

- Windows Server 2003 (SP2) (32 & 64 bit)
- Windows Server 2008 (SP2) (32 & 64 bit)
- Windows Server 2008 R2 (SP1) (64 bit)
- Windows Server 2012 (32 & 64 bit)

Microsoft Office / Excel (32 bit)

- Office 2003 (SP3)
- Office 2007 (SP2)
- Office 2010 (SP1) (only 32 bit editions are supported)
- Office 2013 (only 32 bit editions are supported)

Recommendations

- Always make sure you have the latest Microsoft Updates & Service Packs installed on your machine.
- Disable automatic updates in Windows and instead update your systems manually during scheduled maintenance visits. This will ensure that your system remains up-to-date and secure and will prevent unscheduled reboots or system hiccups due to Windows update running in the background.
- The required CPU-speed, RAM and disk-size depend heavily on the type and size of the application that is being used. An application with only a few tags and communication protocols will require less CPU-power and RAM than a heavy duty application with tens of thousands of tags. When choosing your hardware, make sure that your application can run comfortably on it. A good rule of thumb is that your CPU should be only 50% utilized during normal operation and that you have at least 2x as much RAM as is allocated.
- Recommended minimal hardware specifications:
 - CPU \geq 2 GHz
 - Dual Core CPU
 - RAM \geq 2 GB (4 GB or more recommended)
 - Disk \geq 8 GB free (additional disk space is required for e.g. trend files, database, log files, reports.)