



Multiple Application Platform Server

MAPS 6.0 Release Guide

Product version 6.0

Last updated 5/24/2018

Trademark, Publishing Statement, and Copyright Notice

© 1998-2018 Evisions, Inc. All rights reserved.

This software and related documentation are provided under a license agreement containing restrictions on use and disclosure and are protected by intellectual property laws. No part of this document may be reproduced, stored in or introduced into a retrieval system, or transmitted in any form or by any means (electronic, mechanical, photocopying, recording, or otherwise), or for any purpose, without the express written permission of Evisions, Inc.

The information contained herein is subject to change without notice and is not warranted to be error-free. Product features referenced herein for a period of time may not match product contents. Evisions, Inc. does not warrant that the functions contained in the software will meet your requirements or that the operation of the software will be uninterrupted or error free. Evisions, Inc. reserves the right to make changes and/or improvements in the software without notice at any time.

This software and documentation may provide access to or information on content, products, and services from third parties. Evisions, Inc. and its affiliates are not responsible for and expressly disclaim all warranties of any kind with respect to third-party content, products, and services. Evisions, Inc. and its affiliates will not be responsible for any loss, costs, or damages incurred due to your access to or use of third-party content, products, or services. Evisions, Inc. does not endorse the content or developer of any products or web sites mentioned.

All information in this guide is designed for instructional purposes only. Evisions, Inc. makes no guarantees regarding the accuracy or performance of any techniques used in this guide. Software configurations and environments may vary, and some techniques used in this guide may not operate efficiently under all configurations. This guide may contain examples of various technologies or products, which are the sole property and responsibility of their creators.

Trademarks are the property of the respective owners for any products mentioned herein.

Table of Contents

able of Contents		
What's New in MAPS 6.0?	4	
MAPS Updates		
Product versions		
Installation		
Prepare test environment and create backup		
2. Update to MAPS 5.5		
3. Allow update process to complete		
4. Update MAPS Config to 6.0		
5. Restart MAPS Config		
6. Update MAPS Service to 6.0		
Java Launcher Removal	6	
Evisions Application Launcher - Group Policy Installation	6	
Evisions Application Launcher - User Installation	6	
Installation		
Launching MAPS Applications		
Cloud Connector	12	
Introduction	12	
Installation	12	
Confirm MAPS Version		
Locate Web Data Connector or Deploy Script Files		
Deploy Script Files		
Configure MAPS Data Connection		
Using the Cloud Connector Data Connection		
MAPS 6.0 Release Notes	18	
Getting Help	20	

Page 3 of 20

What's New in MAPS 6.0?

Evisions is pleased to announce the release of MAPS version 6.0, which includes the following changes:

- Added Windows Server 2016 to the list of supported operating systems.
- Updated the OpenSSL .dll files packaged with MAPS to version 1.0.2l.
- Added support for several new SFTP encryption ciphers.
- Removed legacy support for the Java launcher, which was replaced by the Evisions Application Launcher.
- Data connections now have a Cloud Connector option that can be used to pull data from 3rd-party web applications.
- Additional enhancements and resolved issues.

We appreciate the feedback received from all of our users. Our products would not be what they are today without your continued support. If you have any comments or suggestions, please do not hesitate to open a HelpDesk ticket and let us know.

MAPS Updates

The upgrade to MAPS 6.0 involves an intermediate update to version 5.5. This version contains no new features but is required due to changes to the product updater. You will need to perform several updates as part of the 6.0 upgrade. Please follow the instructions in the installation section carefully. You will need to restart the MAPS Config application part of the way through the process.

Product versions

The latest versions of MAPS included in this release are:

MAPS service 6.0.0.1806 / MAPS Config 6.0.0.1014 / eLauncher 6.0.0.9

Installation

1. Prepare test environment and create backup

We highly recommend installing updates in a test environment before applying them to your production environment. **Please ensure that you make a new functional backup before proceeding with this update.** To create a full backup of your MAPS environment, go to the **Server** -> **Backups** screen in MAPS and click **Backup Now**.

It is possible to apply updates when users are on the system; however, to avoid the possibility of losing unsaved work we recommend applying updates during off hours.

2. Update to MAPS 5.5

Click the **Check for Updates** button in MAPS Config to view available updates. If you are on a version prior to 5.4.1, please refer to the appropriate release guide(s) for instructions.

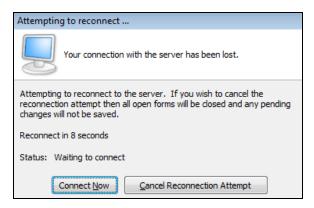
Once you are on version 5.4.1, checking for updates will show you the MAPS 5.5 service and Config:

MAPS service 5.5.0.1657 / MAPS Config 5.5.0.928

You can apply both updates simultaneously.

3. Allow update process to complete

When applying updates to the MAPS service you will be temporarily disconnected from the server:



The update process may take a few minutes to complete. **Do NOT cancel the reconnection attempt or manually restart the server.** You will automatically be reconnected to the server once the update has been applied.

4. Update MAPS Config to 6.0

After the server reconnects, check for updates again to update MAPS Config to 6.0.

5. Restart MAPS Config

You will not be able to see the MAPS 6.0 service until you have restarted the MAPS Config application.

Note: If you typically launch MAPS Config from a shortcut, please run it from the eLauncher to ensure that you are on version 6.0.

6. Update MAPS Service to 6.0

Check for updates once more to download and install the MAPS 6.0 service. You will be temporarily disconnected from the server again. The upgrade will be complete when the service reconnects.

Please Provide Us with Your Feedback!

As always, we welcome any <u>feedback or suggestions</u> you may have. We very much appreciate your thoughts and suggestions, so please keep the great ideas coming!

Java Launcher Removal

With the 6.0 release of MAPS, Evisions has removed the deprecated Java-based application launcher. The Java launcher began deprecation in 2015 due to security issues with the underlying technology that prompted most major browsers to drop support for Java. If your institution is still using the Java launcher, this update will switch to the Evisions Application Launcher, which is a small program that users must install in order to launch the Windows application clients. The first time your users log in, they will be prompted to download and install the Evisions Application Launcher. Users who do not have permission to install software on their machine may need to contact their IT department for assistance with the installation.

In order to ensure a smooth transition, the Evisions Application Launcher can be installed on end users' machines ahead of time via a group policy installation.

History

- July 2015 MAPS 4.5 release Added EAL as an alternative.
- Sept 2015 Chrome browser dropped support for NPAPI.
- June 2016 MAPS 5.1 release Made the EAL the default for new installations.
- March 2017 Firefox browser dropped support for NPAPI.
- Sept 2017 Java 9 release Oracle deprecated the Java browser plugin.
- May 2018 MAPS 6.0 release Removes Java launcher option.

Evisions Application Launcher - Group Policy Installation

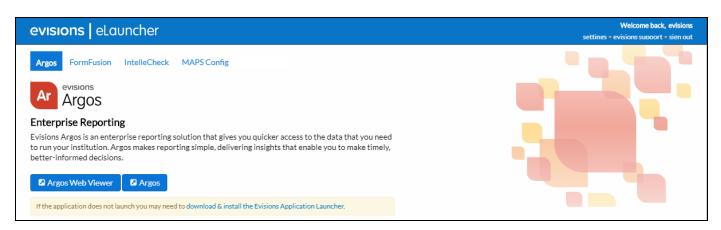
For institutions where end users do not have installation permissions for the machines they use to launch the applications, we have provided an .msi installer that your IT department can use to roll out the new launcher via Group Policy. Once you have upgraded MAPS to at least version 4.5, you can find the **evisions_application_launcher.msi** file on the machine where MAPS is installed. It will be located in the MAPS Service directory under http_files\evisions_application_launcher. The full path will look similar to:

C:\Evisions\MAPS\Service\http_files\evisions_application_launcher\evisions_application_launcher.msi.

Your IT department should ensure that the Microsoft .NET Framework (version 4.0 for XP users, version 4.5 or higher for all Windows versions above XP) is installed on each machine where the Evisions Application Launcher will be installed.

Evisions Application Launcher - User Installation

To launch an application client, navigate to the product you wish to use and then select the launch button for that product. If this is your first time logging in, or your first time logging in since MAPS was set to use the **Evisions Application Launcher** (EAL), you will be prompted to install it. Follow the prompts on your screen to continue.



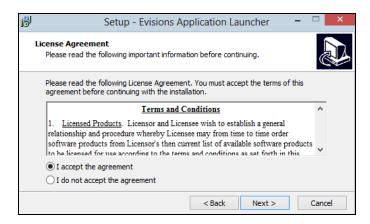
Note: If your institution has installed the EAL for you via Group Policy, you will not see the installation prompt and the software should launch automatically when you select the button. You can skip to the section on <u>Launching MAPS Applications</u>. Otherwise, you may need to contact your IT department for assistance if you are unable to install software on your machine.

Installation

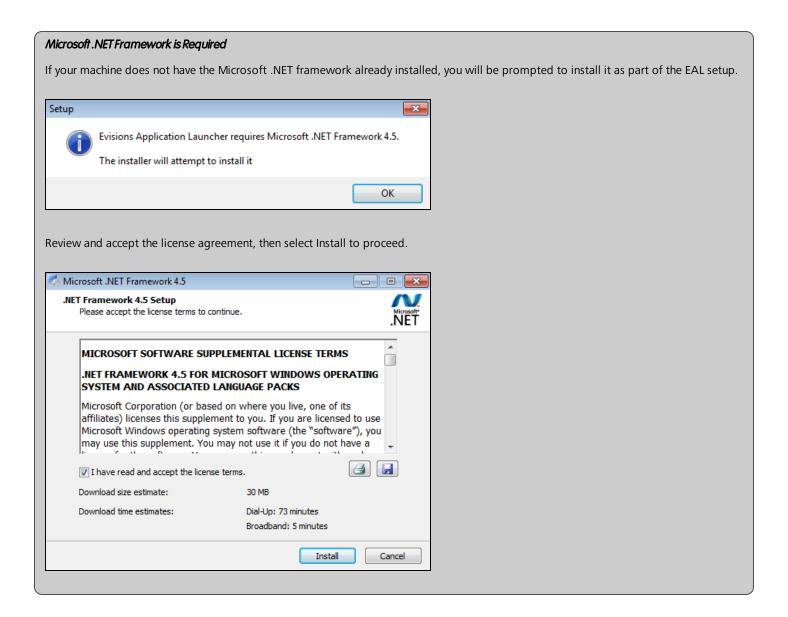
Select the link to download the setup.exe file. When it has finished downloading, double-click on it to run the installer

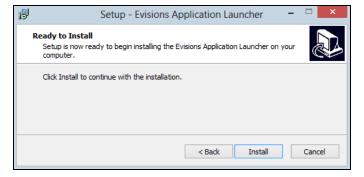


Follow the prompts on the screen. Select Next to continue.



Review and accept the license agreement, then select Next.





Select Install to continue.

If you are installing the Microsoft .NET Framework at the same time, it will install alongside the Evisions Application Launcher.

Microsoft .NET Framework 4.5

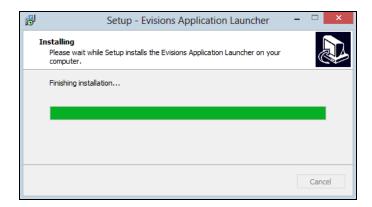
Installation Progress
Please walt while the .NET Framework is being installed.

Download progress:

Installation progress:

Installation progress:

Cancel

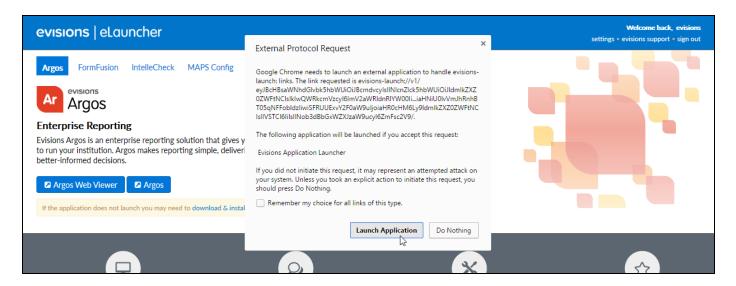


Once the installation is complete, select Finish to close the installer.

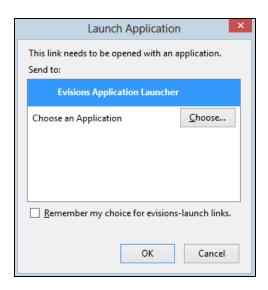


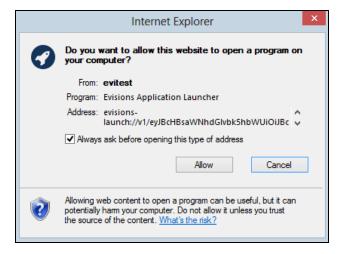
Launching MAPS Applications

Now that the EAL is installed, you can proceed with launching the application. Select the product's launch button again. You may see a prompt informing you that the browser is trying to run an external program, and asking whether you wish to proceed.



The prompt looks slightly different in different browsers:

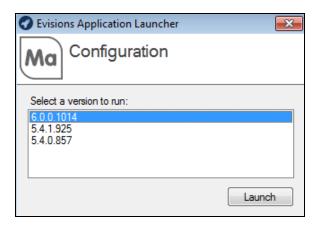




If you do not wish to see this prompt every time you launch a MAPS application, check or uncheck the box as desired. Then, select the button to allow the launcher to run.

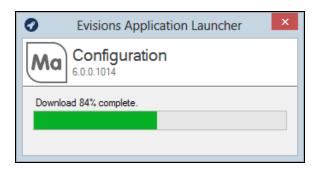
Providing you have the latest version of the application installed, and there is only one version available on the server, the application will then launch as usual.

If there are multiple versions of the application available, you will see a prompt asking you to choose a version to run.

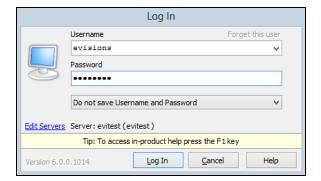


Select the desired version, then click **Launch**.

If the application or application version you selected is not already installed on your computer, it will download now.



When finished, the application will launch.



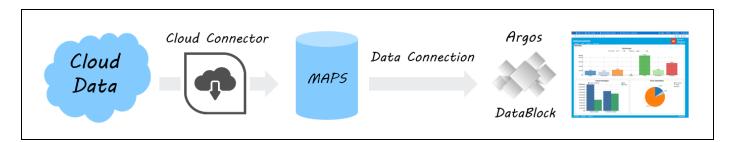
Cloud Connector

Introduction

The Cloud Connector provides a way for you to load data from third-party web applications into Argos or other MAPS applications. ADO, Oracle, and MSSQL data connections only support access to SQL-based data sources, and require the ability to log in directly to the database. With the Cloud Connector, you can connect to any data source that provides a RESTful API.

The data source you want to connect to might provide only an API interface, or they may also have created a preexisting **web data connector** for this purpose. A web data connector is an HTML file that includes JavaScript code that makes the API call to retrieve data from the external source, and then returns it in JSON format that MAPS can understand. The HTML file is hosted on a web server or other location that is visible to MAPS via a URL.

If the data source provides its own HTML interface, you can simply use its URL to create the data connection. If access is via API, a web data connector must be written to make the API call and return the data to MAPS. Once a script has been created, you then set up a Cloud Connector data connection in MAPS, which can be used in the MAPS applications just like any other data connection.



Installation

Confirm MAPS Version

You will need to be on MAPS 6.0 or later in order to use the Cloud Connector. You should refer to the MAPS Release Documentation if an upgrade is required.

Locate Web Data Connector or Deploy Script Files

The next step is to determine where your data will be coming from, and locate an existing web data connector or create the HTML and JavaScript or other files needed to return the data in JSON format.

- If the third-party source you are connecting to provides their own web data connector that returns data in JSON format, you can simply use that URL to configure the Cloud Connector.
- If a connector is not already available or does not return the data you require, you have the option to create the necessary HTML and JavaScript files yourself.
- Alternatively, Evisions Professional Services can provide a quote for developing a connector that meets your needs.

Test Scripts

Here are some examples of third-party connectors that you can use to test the Cloud Connector.

- OpenStreetMap data: http://jdomingu.github.io/osm-features-wdc/
- USGS Earthquake data: https://tableau.github.io/webdataconnector/Examples/html/earthquakeMultitable.html
- Game of Thrones data: https://stephdietzel.github.io/ConnectorOfIceAndFire/connect.html

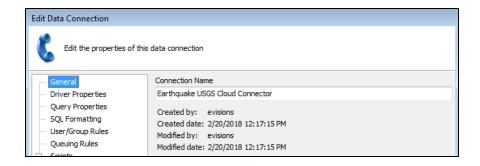
Deploy Script Files

Unless you are using an existing connector provided by a third party, you will need to host the HTML and JavaScript files in a location that is available from any machines from which you may be configuring the Cloud Connector.

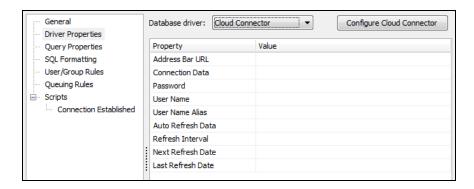
- One option is to place the script files in the http_files directory of the MAPS Service folder, using the same web server that hosts the eLauncher files. In this case, the URL to the connector would look something like https://myMAPSserver/connector.html where connector.html is the name of the HTML file placed in your http files directory.
- You may wish to change this path to include a subdirectory.
- You can host the files elsewhere if it is more convenient.

Configure MAPS Data Connection

On the Data Connections screen in the MAPS Config, create a new data connection. Under General, enter a name for the connection to identify this Cloud Connector.



Go to the Driver Properties section and select the Cloud Connector database driver from the dropdown.



Click the **Configure Cloud Connector** button that appears to the right of the Database Driver dropdown. This will open a new window where you enter the Connector URL. This URL is the web address to the HTML file that you set up in the previous step. If you are using a third-party connector, this is the URL that they provide.



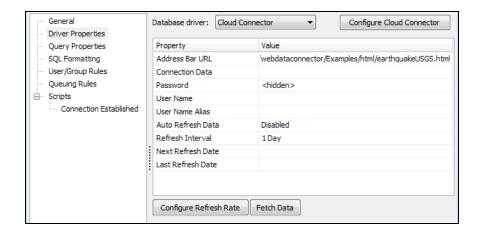
After entering the URL, click the **Connect** button to attempt to establish a connection.

If successful, you will see the HTML page for the web data connector.





In the examples above, selecting "Get Earthquake Data" or "Get Weather Forecast" will make a request to the third-party connector, which then returns a JSON file to MAPS. The JSON file contains the information that MAPS needs to make API calls to the connector using any specified parameters.

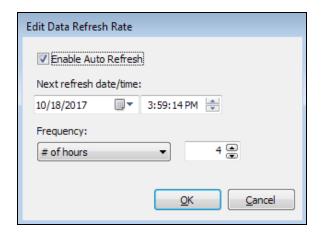


To retrieve data using the connection, select the **Fetch Data** button under the list of properties. This will create a SQLite database on the MAPS server that contains the data returned by the API call. If successful, you will see the message "Fetch Data Completed".

MAPS Server Files

The JSON and SQLite files for each Cloud Connector are stored in the ..\MAPS\Service\WDC\Connectors folder on the MAPS server.

- If you need to make changes to the URL or parameters you entered, you can use the **Reconfigure Cloud Connector** button at any point to launch the Configuration dialog again.
- If you want this connection to automatically refresh the data from time to time, use the Configure Refresh Rate button to edit the refresh properties.

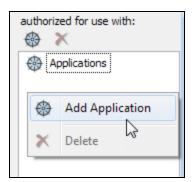


First, check the **Enable Auto Refresh** box to enable automatic refreshing. Then, enter the next date and time you wish the data to update, and the frequency that you want it to update (every *x* minutes, hours, days, weeks, months, or years). The data source's API will be called periodically at the scheduled times to pull in the latest data.

You can leave the other data connection properties set to their defaults.

- **SQL Formatting** You must leave the SQL Format set to its default of ANSI SQL-92. This option is typically used to specify the type checking when using Free Type gueries in Argos, however for the Cloud Connector no type checking is performed.
- User/Group Rules As with any data connection, you will need to configure which users and groups should have access to the connection. For each user or group, the Cloud Connector uses the connection username and password regardless of what credential source is specified. However, you can still select "Not allowed to connect" for users or groups who should not be able to use this connection. Note that the options to allow insert/update, delete, and non-DML scripts are always disabled for Cloud Connector data connections since the Cloud Connector is only retrieving a snapshot of the data, not performing actions on it.
- Other options such as queuing rules or scripts can be configured as desired.

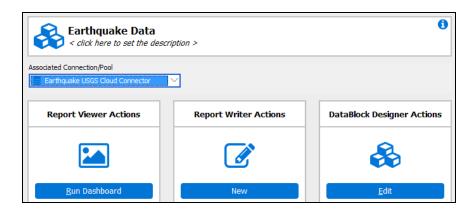
Finally, don't forget to authorize the new data connection for use with the MAPS applications (Argos, etc.).



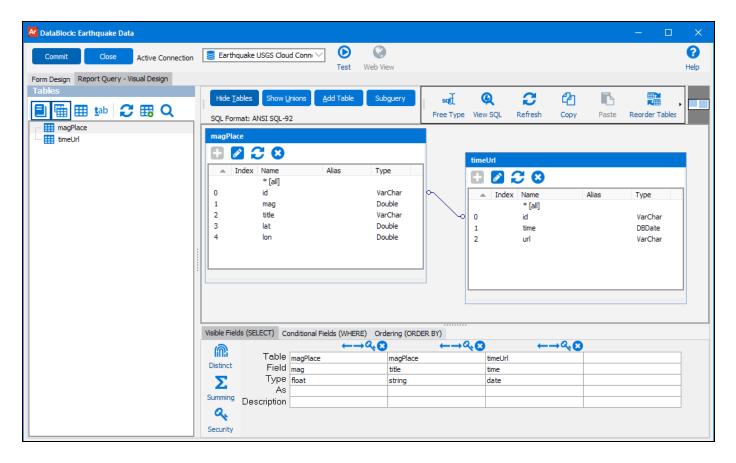
The Cloud Connector is now ready for use.

Using the Cloud Connector Data Connection

The Cloud Connector you created can be used in the MAPS applications just like any other data connection. For example, to use this connection as the default connection for an Argos DataBlock, first select your DataBlock, and then choose the Cloud Connector connection from the Associated Connection/Pool drop-down.



You can use the connection data anywhere that you use SQL in Argos, such as for the report query and in dashboard objects such as list boxes, drop-downs, and charts. If you are using the Visual Designer, the Show Tables button will display the list of tables that were returned by the connection. You can then easily add the desired tables and fields to your query.



Running a report based on the query we just entered shows the data that has been brought over from the Cloud Connector:

Earthquake Magnitude

Location	Magnitude	Time
M 4.7 - 226km NNE of Chichi-shima, Japan	4.7	5/14/2016
M 4.9 - 98km E of Ile Hunter, New Caledonia	4.9	5/14/2016
M 4.5 - 69km SW of Padangsidempuan, Indonesia	4.5	5/14/2016
M 5.3 - 296km SW of Kuripan, Indonesia	5.3	5/14/2016
M 4.5 - 217km SE of Hihifo, Tonga	4.5	5/14/2016
M 4.9 - Northern East Pacific Rise	4.9	5/14/2016
M 5.8 - Northern East Pacific Rise	5.8	5/14/2016
M 4.6 - 69km SSE of Bristol Island, South Sandwich Islands	4.6	5/14/2016
M 4.5 - 52km ESE of Semisopochnoi Island, Alaska	4.5	5/14/2016
M 4.5 - 155km SE of Lata, Solomon Islands	4.5	5/14/2016
M 4.6 - 40km WSW of Tobelo, Indonesia	4.6	5/13/2016
M 4.6 - 30km NE of Hualian, Taiwan	4.6	5/13/2016
M 4.5 - 27km NE of Hualian, Taiwan	4.5	5/13/2016
M 4.5 - 42km SW of Tobelo, Indonesia	4.5	5/13/2016
M 4.5 - 92km S of Firuzabad, Iran	4.5	5/13/2016
M 4.7 - Central Mid-Atlantic Ridge	4.7	5/13/2016
M 4.8 - 12km SSW of Zandak, Russia	4.8	5/13/2016
M 4.5 - 143km ESE of Pondaguitan, Philippines	4.5	5/13/2016
M 4.5 - South of the Fiji Islands	4.5	5/13/2016
M 4.9 - 103km W of Makurazaki, Japan	4.9	5/13/2016
M 4.5 - South of the Fiji Islands	4.5	5/13/2016

Date Formatting

When the Cloud Connector returns a date type field, MAPS is capable of parsing dates using either Julian or ISO 8601 formatting. If the date is in a different format, it may display as "12/30/1899" or possibly another incorrect date. If needed, you can use SQL to convert dates to a more appropriate format. For example, in the Visual Designer you can create a calculated field to cast the date as a varchar and then treat it as a string or perform further conversion as desired.

ISO 8601 dates can be in any of the following formats:

- \blacksquare YYYY
- ■YYYY-MM
- ■YYYY-MM-DD
- ■YYYY-MM-DDThh:mmTZD
- ■YYYY-MM-DDThh:mm:ssTZD
- ■YYYY-MM-DDThh:mm:ss.sTZD

'TZD' stands for Time Zone Designator, and begins with a plus or minus using one of the following formats:

- **■**+-hh
- ■+-hh:mm

MAPS 6.0 Release Notes

MAPS Service 6.0.0.1806 / MAPS Config 6.0.0.1014 / eLauncher 6.0.0.9

MAPS

Enhancements

Area	Description	Issue number
Database	Unsent emails and their attachments are now stored in the MAPS database instead of in an Emails folder on the server.	MAPS-1665
Database	Added an ApplicationEdition table to the MAPS database to support future 64-bit versions of the MAPS applications. The existing ApplicationVersion table has been renamed to ApplicationEditionVersion.	MAPS-1634
Data Warehouse	The ActivityDate fields in the Audit and AuditSummary tables of the Data Warehouse have been updated from type DATE to DATETIME to reflect the fact that they contain both a date and a time component.	MAPS-1672
Data connections	Added a Cloud Connector option to data connections, which can be used to import data from 3rd-party web applications. Refer to the Argos Connect documentation or Argos 6.0 Release Guide for more information.	MAPS-1594
eLauncher	Increased the contrast of the text in the eLauncher that prompts users to download and install the Evisions Application Launcher.	MAPS-1677
eLauncher	The Java launcher, which began deprecation in 2015 due to security issues with the underlying technology, has now been removed as an option in MAPS. Users who have not yet logged in using the Evisions Application Launcher will be prompted to install it the first time they attempt to launch a MAPS application after the upgrade.	MAPS-1120
Security	Updated the OpenSSL .dll files packaged with MAPS to version 1.0.2l.	MAPS-1627
Server	Added Windows Server 2016 to the list of supported operating systems.	MAPS-1483

Resolved Issues

Area	Description	Issue number
Config	Navigating to the Inspector section of MAPS Config was resulting in the error "Invalid floating point operation" in cases where the MAPS server and the local machine where the client was running were using different regional number symbols.	MAPS-1645
Diagnostics	Under the Web Server section of the MAPS Diagnostics screen, "Use HTTPS" was showing the value for HTTP instead of HTTPS.	MAPS-1662
eLauncher	After changing your password in the eLauncher, the title of the Change Password dialog was showing as "[object Object]".	MAPS-1514
FTP	Applied the latest updates from SecureBlackBox to provide support for a wider number of encryption ciphers. This resolves an issue some clients were having when attempting to connect to BrickFTP and some other SFTP servers.	MAPS-1785
LDAP	When attempting to bulk update LDAP users via an import file that included changes to the users' LDAP server names and DNs, MAPS was not updating the LDAP information unless the Source field was also included in the input file.	MAPS-1427

Area	Description	Issue number
Product Updater	When checking for updates in MAPS, the update process would sometimes fail intermittently, producing various SOAP or "Bad Gateway" error messages.	MAPS-1087
Queries	When using a native Oracle connection, trailing spaces were being trimmed from the ends of string values returned from dropdown objects on the dashboard.	MAPS-1702

Getting Help

For information on using the software, please refer to the in-product Help, which contains detailed information on all aspects of the product.

If you are having problems with the installation or configuration, you can search our knowledge base of common issues and their resolutions at http://helpdesk.evisions.com. If you are unable to find the solution, submit a HelpDesk request with a detailed explanation of the problem you are experiencing.

Please do not hesitate to contact the Evisions HelpDesk if any questions or problems arise. We are here to help you and want to ensure your success.

If you find that areas of this documentation could benefit from additional detail or clarification, please let us know. We are constantly trying to improve the installation process to make it as easy as possible.