TMPropagator

Release 3.5.1

Release Note

28th July, 2023

Document Signature Table

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1 SCOPE

The document is the release note accompanying release 3.5.1 of the TMPropagator. This is a patch release which fixes a single blocking issue.

2 ISSUES FIXED BY THIS RELEASE

The following JIRA issues are considered fixed by this release;

TMPROP-470	Client unable to connect to Servers on version 3.5.0

3 ISSUES STILL OPEN AFTER THIS RELEASE

TMPROP-248	TCH display: cannot sort or navigate by execution time
TMPROP-289	Mission Selection on start up
TMPROP-372	[EPSSG/AR/2876] TM Propagator TC History MMI look and feel not aligned with MCS TC History MMI

4 IMPROVEMENTS AND NEW FEATURES UNRELATED TO NON-CONFORMANCES

4.1 New Features Implemented as a Result of CN12

None

4.2 Other New Features

None.

5 INSTALLATION INSTRUCTIONS

Please see the document *Configuration Manual for Gateway, Server and Dev Machine* for instructions.

As an alternative to a full installation, a minimum number of files can also be updated to apply the fix in this patch as follows:

1. Copy the files “server.dll” and “ServerController.exe” from the directory “server\bin” on the distribution media to the server binaries directory on the target machine.
2. Install the client using the “ClientInstaller.msi” in the root of the distribution media.
3. Follow the instructions below to configure an X.509 certificate for the server.

This version requires an X.509 certificate for the server, which encrypts the transmission of data between client and server and also authenticates the server to the client. There should be a certificate already on the operational servers, because they are required for the HTTPS connections from the client (e.g. for loading pages). Using an existing X.509 certificate installed for the web service has been successfully tested, and these instructions are based on this approach. For servers which do not have a certificate issued by a recognised certificate authority, a self-signed certificate can be created (see https://blog.passwork.pro/7-ways-to-create-self-signed-certificates-on-windows/), although this is not recommended for a production environment.

To configure the server to use an X.509 certificate installed on the server:

1. Open the Internet Information Service (IIS) Manager.
2. Select the server node and then open the “Server Certificates” window by double clicking the icon in the main panel.
3. Double click on the certificate to be used for the TMPropagator server to open the details window. This will be the same certificate used for the web service.
4. In the details window, click on the “Details” tab and then double click the “thumbprint” field. Copy the thumbprint (hash) value which appears into the clipboard.
5. Start the TMPropagator server GUI, and stop the server so that the startup settings can be edited.
6. Click the “Edit” button to edit the startup settings and paste the certificate hash into the corresponding text input.
7. Click “OK” to save the settings and then restart the server.
8. Try to connect with a client. It is possible the connection is successful, but if not, there will be an error message which looks something like this:

```
Exception when connecting to server Server1: Identity check failed for outgoing
message. The expected DNS identity of the remote endpoint was 'www.heavens-
above.com' but the remote endpoint provided DNS claim 'heavens-above.com. If
```

```
this is a legitimate remote endpoint, you can fix the problem by explicitly
specifying DNS identity 'localhost' as the Identity property of EndpointAddress
when creating channel proxy.
```

If this is the case, then an additional setting is also necessary in the file …\Server\InetPub\wwwroot\SourcDefs\ORSFSource.xml
The "Server" element should have an attribute "certificateIdentity" which has to be set to the remote endpoint provided DNS claim. In the example error message this would be "heavens-above.com". Save the file and try again.

9. Clients should now be able to connect, even if they are not in the same Windows domain.

This release has been compiled for the .Net Framework 4.8, and may require this to be installed on the target machines. However, most recent versions of Windows already have this pre-installed.

6 COMPATIBILITY TO PREVIOUS VERSIONS

The server now requires an X.509 certificate and the encryption type has been changed. This means neither the client nor the server are compatible with previous versions, so the client included in this release must be deployed together with the new server.

The Gateway to Server interface has not changed, so the gateway installation can be left as is.

7 SYSTEM REQUIREMENTS

7.1.1 Operating System

The TMPropagator Gateway and Server require Windows Server 2019 or higher as the operating system.

For the clients, Windows 10 or higher is required.

7.1.2 .NET Framework 4.8

All machines where any module of the TMPropagator software is installed requires the .NET Framework 4.8 (or higher) as a prerequisite.

Download and install the latest Microsoft .NET Framework version (4.8 at time of writing) for the machines operating system from the Microsoft web site. It is not necessary, or desirable, to uninstall the previous .Net versions first. This step might not be necessary if .NET 4.8 or higher is already installed. This can be verified by following the procedure given here;

https://docs.microsoft.com/en-us/dotnet/framework/migration-guide/how-to-determine-which-versions-are-installed

7.1.3 Hardware

A minimum of 8 GB memory is recommended for the Gateway and Server machines. This should be increased if many projects are to share the same hardware.

The disk usage depends almost entirely on the telemetry data rate and the desired length of archive. It is suggested to compare the anticipated data rates and archive duration of new projects to older projects when estimating disk space requirements.

The new stream types have also been found to generate considerable quantities of data which increases the size of the archive.

For the clients, any modern PC hardware should be sufficient. A minimum 4 GB memory is recommended.