



EUMETSAT
TMPropagator


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TMPropagator

Release 2.12.4

Release Note

26th April, 2016

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Document Signature Table

| | Name | Signature | Date |
|-------------|---------|----------------|-----------------------------|
| Prepared by | C. Peat | <i>C. Peat</i> | 26 th April 2016 |
| Approved by | C. Peat | <i>C. Peat</i> | 26 th April 2016 |



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1 SCOPE

The document is the release note accompanying release 2.12.4 of the TMPropagator (formerly the OSE Real-Time Facility). This release is a minor update to release 2.12 which fixes the outstanding NCRs.

2 NON-CONFORMANCES FIXED BY THIS RELEASE

The following NCRs are considered fixed by this release, the numbers correspond to the NCR database;

EUM/MuMi/NCR/1578 Server Controller crash in one of the Sen-3 TM Servers

When the Gateway first connects to the server, it is expected to send the stream name as the first message. The server code had no try/catch block to catch an exception reading this stream name and if the message was corrupted, this caused the server to crash. All subsequent message receptions were in a try/catch block so any exceptions were caught.

The Server has been updated to catch any exception thrown when reading the stream name and breaking the connection, rather than crashing. The gateway will attempt to reconnect again at the configured reconnection interval.


EUM/MuMi/NCR/1500 Units not displayed in ANDs generated with the New Page Editor

The New Page Editor generated so-called “StaticAlpha” fields which are filled with data from the database at runtime. The editor output the substring “!unit” to indicate the field should be filled with the units of the parameter, but the correct string should have been “!units”.

The editor has now been updated to produce the correct string.

EUM/MuMi/NCR/1334 Formatting of real numbers in ANDs does not use scientific notation

This NCR was largely fixed in release 2.12.3, but the necessary update to the mimics editor was not made and it was not possible to select the new “general” format specifier for fixed alpha fields within mimic displays. This has now been corrected.

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EUM/MuMi/NCR/1333 Error message closing the TMPropagator client

This NCR was largely closed in release 2.12.3, but has recurred a few times. Extra checking during closing of the client is now performed, and a one second delay has been included to allow network connections to properly close before the client shuts down. In addition, the popups displaying exceptions to the user are disabled after the client has disconnected from the server, so even if an exception should occur, it will not be displayed and the client will close silently.

3 NON-CONFORMANCES STILL OPEN AFTER THIS RELEASE


EUM/MuMi/NCR/691 Performance issues in Sentinel-3 test scenarios

No issues found in on-site testing on the TMPropagator side. Further tests on the MCS side ongoing.

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4 IMPROVEMENTS AND NEW FEATURES UNRELATED TO NON-CONFORMANCES

- The Gateway can be configured to periodically send a registration request for a non-existent parameter. The purpose of this is to keep the connection between Gateway and MCS alive. It was found that the firewalls were breaking the connection if no messages were transmitted between Gateway and MCS for an extended period of time. The parameter name and request interval can be configured in the Gateway GUI on a per stream basis. There are also counters showing the number of these “keep-alive” requests and the number of responses received from the MCS.
- Stale parameters are no longer added to the local line plot caches when received during a playback. This prevents the parameter history apparently changing when viewing the parameter in a line plot.
- It was found that the Sentinel-3 orbit displays remained frozen between ground station passes because no telemetry updates are received and so the current time was not being updated. The server can now be optionally configured per stream to send the current UTC instead of the last received real-time sample time by checking the “Send UTC for orbit displays” box in the stream configuration editor. This applies only to the “S-band” stream mode. If the user has selected “X-band” mode, the UTC is ignored to prevent the line plots jumping between current UTC and current X-band sample time. Even if the “Send UTC” flag is set, the server only sends the UTC if the S-band activity flag is not set. This avoids the line plots showing the current UTC when the S-band data might be in the past, which would result in the plots being empty.
- The Gateway has been found to crash the MCS by reconnecting too quickly after a connection is lost. The Gateway has been updated to always wait at least the configured reconnection interval before attempting to reconnect. Before this modification, the wait interval was zero up to the reconfiguration interval.

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5 INSTALLATION INSTRUCTIONS

This section provides a short summary of the installation procedure for this delivery. Or full details, please see the document *Configuration Manual for Gateway, Server and Dev Machine*.

IMPORTANT NOTE – The client to server interface has NOT been modified in this release, so the new server and client software can be deployed in any order.

5.1 .NET Framework 4

All machines where any module of the TMPropagator software is installed requires the .NET Framework 4 as a prerequisite.

Download and install the appropriate Microsoft .NET Framework version 4.0 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 4.0 is already installed. This can be verified by looking in the Windows\Microsoft.Net\Framework directory. If there is a sub-directory called v4.0 then the correct version is already installed. Windows 7 and Windows 8 are delivered with .NET 4 already installed.

5.2 Test Server Tool


The test server tool can be installed on the same machine as the gateway, or on a different machine, The latter will better represent normal operations because the MCS/SCOS/CF is always on a different host to the gateway.

1. Copy the directory `\TestServerTool` to a directory of choice on the target machine.
2. Create a desktop icon pointing to the executable file `Test_Server_Tool.exe`
3. Edit the configuration file `config.xml` and set the attribute `fileDirectory` to point to the test data sub-folder (e.g. `<install-dir>\testdata`).
4. Start the tool using the desktop shortcut and configure the rest of the options using the GUI.

5.3 Gateway

The following procedure describes the steps necessary to update the gateway.

1. Make a backup copy of the ORSF directory.
2. Copy the all the files in the `\Gateway` sub-folder on the release to the ORSF folder, overwriting any existing ones.
3. Create a desktop shortcut pointing to the executable file `...ORSF\bin\GatewayController.exe`.

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4. Copy all the database files from the distribution directory `\Server\dbfiles` to the `...ORSF\dbFiles\` folder on the Gateway machine (the database files are included only in the Server subfolder of the release to save space).

5.4 Server

The following procedure describes the steps necessary to update the server.

1. Make a backup copy of the ORSF directory, if it already exists on the target machine.
2. Copy the *bin*, *config*, and *dbFiles* from the *Server* folder on the distribution medium to the *ORSF* directory on the target machine, overwriting any existing ones.
3. Note that all the offline tools, such as the page importers and directory generator are now in the *bin* folder, and not in their own sub-folders as was the case in previous releases.
4. Create a desktop icon for the executable `...ORSF\bin\ServerController.exe`.
5. The *InetPub* sub-folder contains all the project pages, and usually, it is not necessary to copy them to the target machine, unless this is a new installation.

5.5 SATMON Client and editors

1. Copy the file *Satmon_Client.msi* from the `Inetpub/wwwroot/download` directory on the distribution media to the download directory on the server.
2. Edit the `download.htm` page to point to the installer file.
3. Edit the download page to tell users that the .NET 4.0 framework is a prerequisite for all the client applications, and preferably add a link to the Microsoft download page.
4. Clients must install the new client by downloading and running this installer in the usual way.
5. It is suggested to add a message to the download page, or elsewhere on the web site, which briefly lists the new features available, possibly by cutting and pasting from this release note.