S2G Version 2.3.0 - Release Notes

1. NEW RELEASE DESCRIPTION

1.1 Software and Hardware Requirements

The S2G application is available for the following computer platforms:

- Windows XP / 7 (32-bit & 64-bit)
- Mac OS X Intel 10.5 or above (64-bit)
- Linux (64-bit)

The S2G software requires:
- Version 8 of the Java Runtime Environment
- 50 MB of hard disk space
- 1 GB RAM (Windows), 2 GB RAM (Linux, Mac OS X)

1.2 Installation Packages

The S2G distribution consists of the following packages, for each supported computer platform.

	32-bit	64-bit
Mac OS X Intel	-	s2g-macosx.cocoa.x86_64.zip
Mac OS X Intel with JRE 8 embedded (*)		s2g-macosx.cocoa.x86_64.wJRE.zip
Linux	-	s2g-linux.gtk.x86_64.zip
Linux with JRE 8 embedded (*)		s2g-linux.gtk.x86_64.wJRE.zip
Windows	s2g-win32.win32.x86.zip	s2g-win32.win32.x86_64.zip
Windows with JRE 8 embedded (*)	s2g-win32.win32.x86.wJRE.zip	-

(*) These packages are provided with Java 8 embedded in the bundle. This ensures that the application works even if the Java version installed in your system is Java 6 or Java 7

1.3 Installation Hints

In order to install S2G, the distribution package needs to be unzipped into the selected installation directory.

Please check Section 3 of the S2G user manual for further information about the installation steps.

2. NEW FUNCTIONALITIES

This new release provides the following new functionalities with respect to v2.2:

- S2G-AN-149: It is possible to set a colour different from red to highlight errors in Unit List panel
- S2G-AN-153: Reverse mapping files are produced automatically when executing a transformation

- S2G-AN-173: New feature (Tools → Batch report) to generate in batch mode reports for a given set of input files
- S2G-AN-175: New feature (File → Export) to cut parts of a file and extract N units (TF, ISPs)
- S2G-AN-176: Mission schema and DFDL4S underlying library updated to improve compliance with DFDL specification, as follows:
    - Corrections to schemas regarding schema types and length
    - Implemented a check within DFDL4S parser of the compatibility between the types and the lengths.
    - Updated the schemas to make explicit all default values in the dfdl:format construct.
    - Ensured that all supported properties which have a default value in the dfdl:format can be correctly overridden in a specific element.
    - Updated the parser so that a warning message is issued when a property contains a value which is not supported.
    - All implicit properties have been made explicit in the schemas and the parser has been updated to use this definition
    - Replaced the use of length() operator by dfdl:contentLength() functions
    - Corrected the evaluation of XPath expressions
    - Accepted value 'fn:true()' as boolean expression <dfdl:discriminator test="{fn:true()}"/>

3. CLOSED SPRS

The following SPRs have been closed:

- S2G-AN-161: The CRC check is wrongly applied on the Sentinel-1 SAR ISPs. The User Data Field does not contain a Packet Error control field.
- S2G-AN-184: If files with the same name are loaded in S2G, the content is not updated when switching file in Product File List

4. ADDITIONAL COMMENTS AND KNOWN PROBLEMS

4.1 Mission Support

The S2G distribution package already includes mission configuration files (JAR archive containing XML files and schemas) for all supported missions.
All mission configuration files have been updated in v2.3 wrt to previous delivery available (v2.2).

Note that user-defined (custom) schema files based mission configuration files compatible with v2.2.X have to be adjusted to work correctly with v2.3.X

A document describing the Mission Specification schemas in general is available:
- Mission Specification Schemas. Developer's Manual - Ref. S2G-DME-TEC-SUM092-1B

This document includes a dedicated section to guide the user to port the custom schemas from v2.0.X to v 2.2.X
The document has also a dedicated section to guide the user to port the custom schemas from v2.2.X to v 2.3.X

Further updates to the mission configuration files provided in the latest S2G version are made available in the "Mission Files" section of the S2G website (http://eop-cfi.esa.int/index.php/applications/s2g-data-viewer/mission-files)

Note that it is possible to include additional data type definitions in the official mission schema files delivered with the S2G release. This may be typically the case for dedicated ISP data definitions. Please send your request (together with the extended schemas files) to the e-mail address of the S2G helpdesk: *s2g@eopp.esa.int*

4.2   Known Problems

The known problems associated to this S2G release are listed below:

- S2G-AN-159: Only for Mac OS X (with JRE bundled inside deployment package) Launching 'Help --> Open Help' does not open the web browser and issues an error window.
  As a workaround the actual User Manual document is also made available in the 'Help -> Documentation' menu (besides the DFDL for S2G Technical Note).

5. REPORTING PROBLEMS

For any problems or questions please send an e-mail to the S2G helpdesk: *s2g@eopp.esa.int*