DFDL4S++ Version 2.1.0 - Release Notes

1. RELEASE CHANGE LOG

1.1 New Features/Improvements

- DFDL4S-ANR-0082: Added dedicated build for macOS arm64

1.2 Software Problems

No applicable

2. RELEASE CONTENTS

2.1 Distribution Packages

A DFDL4S (Java library) distribution package consists of one single archive (multi-platform):
- dfdl4s-2.1.0-bin.zip (MD5: e16b36c6d0fce1956f42e130266eba2b)

Note: v2.1.0 is still the latest for Java

A DFDL4S++ (C++ library) distribution package consists of one single archive (one per each supported platform):
- dfdl4s++-2.1.1-linux64.tar.gz (MD5: 7816c2eb5a75ccc62aeaf30a074c7352)
- dfdl4s++-2.1.1-mac-arm64 (MD5: 32397b35d59c559829e3fd6fd890a07a)
- dfdl4s++-2.1.1-mac-x64.tar.gz (MD5: 1aca9078d50baa102a2e1c635fe2d686)
- dfdl4s++-2.1.1-win-x64.tar.gz (MD5: 239440ff5a796612c818811b41d0addc)

To install DFDL4S/DFDL4S++, extract the distribution package into a selected installation directory. Please check the DFDL4S/DFDL4S++ developer manual for further information about the installation steps.

Note: No changes codewise with respect to v2.1.0, only build environment and examples adapted to support the additional platform

2.2 Documentation

For information related to DFDL4S library usage, please refer to the Developer Manual, in particular:
- DFDL4S (Java API): DFDL4S_Developers_Manual_S2G-DME-TEC-SUM078-1O.pdf
- DFDL4S (C++ API): DFDL4S++_Developers_Manual_S2G-DME-TEC-SUM113-1N.pdf

All library documentation can be downloaded from the following location:

https://eop-cfi.esa.int/Repo/PUBLIC/DOCUMENTATION/APPLICATIONS/DFDL4S/

2.3 Software and Hardware Requirements

DFDL4S (Java library) is available for the following computer platforms:

- Linux (64-bit)
- macOS Silicon (arm64) 10.9 or above (64-bit)
- macOS Intel (x86_64) 10.9 or above (64-bit)
- Windows 10 (64-bit)

DFDL4S++ (C++ library) is available for the following computer platforms:

- Linux (64-bit)
    - GNU C++ (v11+) 64-bit
- macOS Silicon (64-bit)
    - Apple LLVM v17.0.0 64-bit
- macOS Intel (64-bit)
    - Apple LLVM v12.0.0 64-bit
- Windows 10 (64-bit)
    - Microsoft Visual Studio 2022 64-bit

For both Java and C++ libraries, the minimum recommended requirements are:

- OpenJDK 11 or higher (Linux x64, macOS x86_64, or Windows x64; available at https://adoptium.net/)
- OpenJDK 23 (macOS arm64; ; available at https://adoptium.net/)
- 10+ Mb of hard disk space
- 2 GB RAM

3. ADDITIONAL INFORMATION AND KNOWN PROBLEMS

3.1 Mission Support

The DFDL4S distribution package already includes example mission configuration files (JAR archive containing XML files and schemas). The latest version of the mission configuration files for all supported missions are available in the "Mission Files" section of the S2G website (http://eop-cfi.esa.int/index.php/applications/s2g-data-viewer/mission-files)
The schema files in the website are compatible with the latest versions of the S2G application and the DFDL4S library.

3.2 DFDL4S Java vs C++ API

There is a small set of features available in DFDL4S' Java API, mostly related to use of Callbacks, that are not currently implemented in C++. See the DFDL4S++ development manual for further details.

4. REPORTING PROBLEMS

For any problems or questions contact the DFDL4S helpdesk: *dfdl4s@eopp.esa.int*