EARTH OBSERVATION MISSION CFI SOFTWARE

Release Notes – C libraries - Version 4.3.1

1 INTRODUCTION

Version 4.3.1 is a maintenance release required to resolve anomalies listed in section 4.

The libraries are identical to those released with version 4.3, with the exception of the POINTING library that has been modified to deal with the anomalies mentioned above.

More precisely, the header file of such library has been modified in order to ensure full backward compatibility: source code written for a previous version of CFI Software shall compile also on a later version.

2 RELEASE DESCRIPTION

2.1 Software

The following table lists the released libraries, their version and issue date:

Library Name	Version	Issue Date
File Handling	4.3	06/02/12
Data Handling	4.3	06/02/12
Lib	4.3	06/02/12
Orbit	4.3	06/02/12
Pointing	**4.3.1**	**14/03/12**
Visibility	4.3	06/02/12

The libraries installation packages are available for download at the following URL (registration required):

http://eop-cfi.esa.int/eo_cfi_distribution/CURRENT/4.3.1

2.2 Documentation

The applicable Software User Manuals are the same as per version 4.3:

- EO_FILE_HANDLING SUM issue 4.3
- EO_DATA_HANDLING SUM issue 4.3
- EO_LIB SUM issue 4.3
- EO_ORBIT SUM issue 4.3
- EO_POINTING SUM issue 4.3
- EO_VISIBILITY SUM issue 4.3
- GENERAL SUM issue 4.3
- Mission Convention Document issue 4.3
- Quick Start Guide issue 4.3

The documentation is available for download at the following URL:

http://eop-cfi.esa.int/CFI/EO_CFI_DOCS/4.3

More information on the Earth Observation CFI Software can be found at: the following URL:

http://eop-cfi.esa.int/eo_cfi_distribution

2.3 Supported platforms

The following platforms are supported by this release of the CFI:

- **LINUX32_LEGACY**
  - LINUX 32-bits (Legacy)
  - Platform Requirements: x86 based PC, Linux Operating System (Kernel version 2.6.x)
  - Software Requirements: gcc compiler version 4.2.x, glibc (C Library) version 2.7

- **LINUX64_LEGACY**
  - LINUX 64-bits (Legacy)
  - Platform Requirements: x86_64 based PC, Linux Operating System (Kernel version 2.6.x)
  - Software Requirements: gcc compiler version 4.2.x, glibc (C Library) version 2.7

- **LINUX64**
  - LINUX 64-bits
  - Platform Requirements: x86_64 based PC, Linux Operating System (Kernel version 2.6.x)
  - Software Requirements: gcc compiler version 4.5.x, glibc (C Library) version 2.12

- **WINDOWS**
  - Microsoft WINDOWS PC (32-bits)
  - Platform Requirements: x86 based PC, Microsoft Windows XP Operating Systems.
  - Software Requirements: Microsoft Visual C++ Compiler (Visual Studio 2008)

- **MACIN64**
  - MACOSX on Intel (64-bits)
  - Platform Requirements: x86_64 based Mac Computer, Mac OS X version 10.5.x
  - Software Requirements: gcc compiler version 4.2.x

2.4 Installation packages

The CFI libraries are provided as zip packages:

- **EOCFI-4.3.1-CLIB-LINUX32_LEGACY.zip**
- **EOCFI-4.3.1-CLIB-LINUX64_LEGACY.zip**
- **EOCFI-4.3.1-CLIB-LINUX64.zip**
- **EOCFI-4.3.1-CLIB-MACIN64.zip**
- **EOCFI-4.3.1-CLIB-WINDOWS.zip**

DEM datasets are distributed separately and are available for download at the following URL:

http://eop-cfi.esa.int/eo_cfi_distribution/DEM

2.5 Installation Hints

The CFI libraries can be installed by expanding the installation package in any directory.

For specific hints related to the usage of the libraries, please consult Section 6 "CFI LIBRARIES INSTALLATION" of the General SUM and Section 6 "LIBRARY USAGE" of each Library User Manual.

In order to be able to use the XML validation function in the explorer_data_handling library, it is necessary to install the xerces libraries and the SAX2Count binary. The PATH environment variable shall be pointing at the SAX2Count location.

As of version 4.3, dynamic linking to libxml2 external libraries is no longer required.

3 NEW FEATURES

No new features have been introduced. This release is functionally equivalent to version 4.3.

4 CLOSED ANOMALIES (SOFTWARE PROBLEMS)

The following Software Problems have been fixed:

ANR Nr.	Description
486	Pointing Library: target functions (e.g. xp_target_inter): programs using target functions and enumeration XP_Target_ray_enum (e.g. iray=XP_NO_REF) may not compile. The anomaly has been corrected by re-introducing XP_Target_ray_enum in the Pointing library header file (explorer_poiniting.h).