

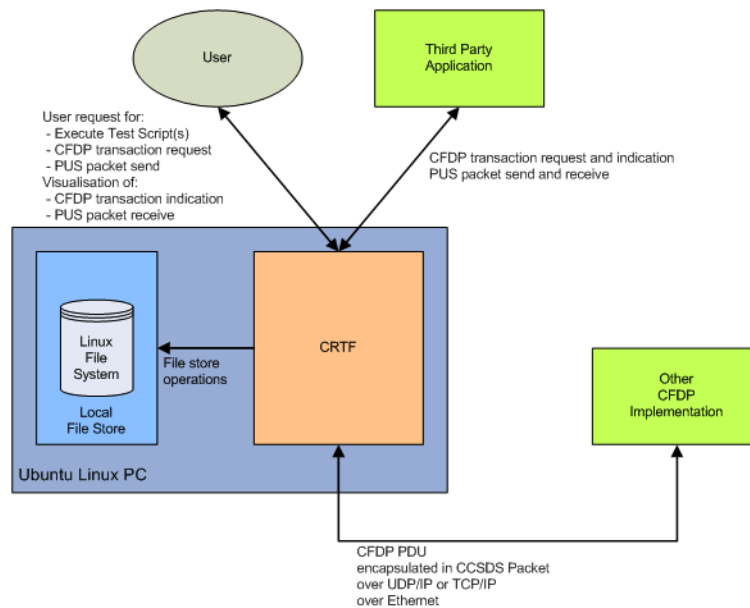
Title: CFDP Reference and Test Facility (CRTF)

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Abstract:



As part of the ASIV project under TERMA, SCISYS has developed and delivered to ESA a CFDP Reference and Test Facility (CRTF), based around the ESOC Java implementation of CFDP.

The intended usage of the CRTF is:

- Reference implementation covering class 1 and 2 procedures and all options.
- Test system against which other implementations can be verified using nominal and off-nominal conditions, e.g. to verify that a Mass Memory supporting CFDP passes the CCSDS CFDP interoperability tests.
- Support system used to emulate mission specific configurations, i.e. CCSDS packet transfer with emulated space link bandwidth, latency, error rates, together with selected CFDP options.
- Part of end-to-end test and development environment, connected to ground based implementation at ESOC, used to prepare for future file-based operations, including proposed PUS file transfer and onboard file store management services
- As a standalone Linux based system.

The CRTF has a GUI, script and CORBA front ends allowing for ad-hoc/user-driven and scripted testing as well as use by third-party applications.