



uNIS

uNIS is the gateway between the Spacecraft Control System and Ground Stations, providing means for Telemetry and Telecommands transfer using the CCSDS Space Link Extension services (SLE). uNIS is also used for ground testing applications between the main test system and the TM/TC Front-end Equipment.

FEATURES

CCSDE SLE Standard:

Based on the Consultative Committee for Space Data Systems for cross support recommendations, SLE protocol services related to Telemetry and Telecommand (CCSDS 911.1-B-2, CCSDS 911.2-B-1, CCSDS 912.1-B-2).

SLE Services:

The following services are supported:

- Return All Frames (RAF),
- Return Channel Frames (RCF),
- Forward Command Link Transmission Unit (CLTU).

Service Role:

uNIS implements the SLE User role, the ground station being the SLE Provider.

SLE Services definition:

Service Instance Configuration File (SICF) follows the JPL/ESA interagency standard format.

SCS Interface:

- Data interface: NIS protocol (ESA protocol for TC forwarding, TM and Administrative message delivery).
- Monitor and Control interface: Tcl protocol. Allows easy integration in automation and scripted based control systems.

Automated M&C:

SLE service instances can be seamlessly controlled via TOPE automated script from SCS5, CCS5 & TSC products.

Ground Station Network:

Supports multiple ground stations, during LEOP and routine operations.



OPERATING SYSTEMS

Windows®: works on all recent versions. Automated installer. Tested on Windows 10.

Linux® works on all recent distributions, installed as RPM. Tested on RHEL and SLES

SOFTWARE PLATFORM

C++ based on Qt 5.13 commercial. Software subject to regular automated test & quality metrics.

uNIS uses the ESA SLE API package. An ESA license is also required to use the product.

SUPPORT

The standard license price includes 1 year warranty & email support. Standard training packages available on request.

WIKI and access to bug-tracking system are available to licensed customers.

More information can be found at:

<https://www.terma.com/space/ground-segment/terma-ground-segment-suite/>