

Interface Control Document for Operation Planning Tool for Earth Observation Mission

OPTEMIS ICD

OPTEMIS is Gistda's system which is developed for Earth observation mission planning and scheduling services. The scope and the interconnection of the system with the satellite operation environment is shown in figure 1. The system is implemented based on the developing operation concept according to CCSDS Mission Planning and Scheduling Services [1].

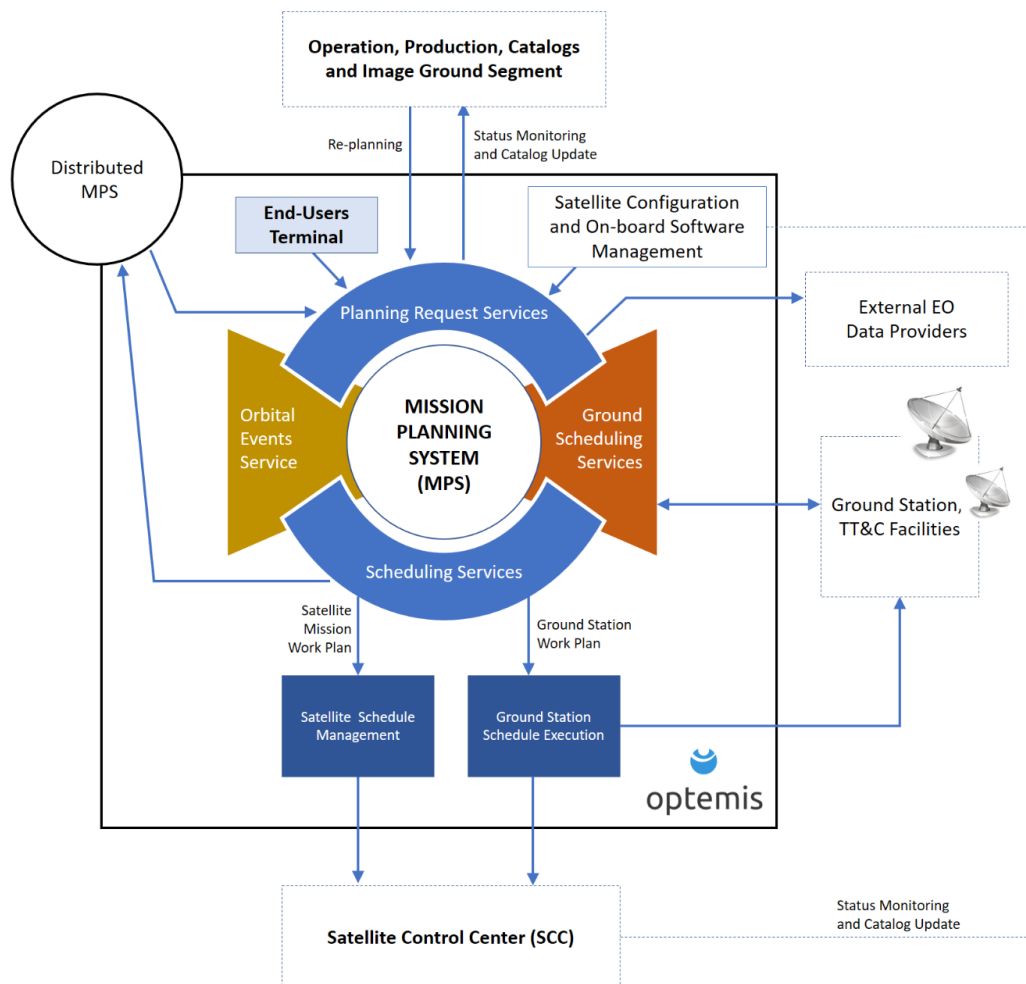


Figure 1: OPTEMIS Overview

For tasking and requesting, end-users and Gistda operators are able to use Optemis as an EO satellite acquisition terminal. For external data provision tasking, the 'Planning Request Services' interfaces which shall be linked to external data EO operator is defined based on Open Geospatial Consortium Sensor Planning Service standard document [2].

The 'Scheduling Services' for both ground and space segment interfaces are designed to be highly modifiable and customizable according to any corresponding satellite/ground system. For Optemis implementation, all of the documents, information concerning satellite bus and payload (as listed in [3]) shall be provided to the MPS development team at each development phases (defined in [4]).

Reference Documents

- [1] CCSDS Mission Planning and Scheduling Services, Concept Paper Concerning Space Data System Standards, 05/2015*
- [2] OGC Sensor Planning Service Interface Standard 2.0 Earth Observation Satellite Tasking Extension, (OGC 10-135, Version 2.0)*
- [3] ECSS Space Project Management, Configuration and Information Management (ECSS-M-ST-40C)*
- [4] ECSS Space Project Management, Project Planning and Implementation (ECSS-M-ST-10C)*