

THE EOS FRONT END SERVER (FES) PROVIDES ALL THE AUTOMATION AND MANAGEMENT TOOLS NEEDED TO CAPTURE AND PROCESS REMOTELY SENSED EARTH OBSERVATION DATA. THE EOS FES IS A COMPLETE PACKAGE PRE-LOADED WITH SOFTWARE, ALLOWING CUSTOMERS TO QUICKLY GET THEIR ANTENNA SYSTEM UP AND RUNNING. WITH THE EOS FES EVERY STEP IN THE DATA CAPTURE PROCESS IS USER-FRIENDLY, AUTOMATED AND RELIABLE, PROVIDING CRITICAL DATA 24/7.

EOS-FES Features

Orbital Systems' EOS FES software controls all of the hardware components of the Orbital Systems Earth Observing System antenna systems, and provides a central point of control and status to users and external software.

A Complete Software Package

- Controls antenna, displays status, does scheduling, ingest, processing to level 0, quicklooks, post processing, and file management.
- Integrated status and management GUI that supports remote access from any PC.
- Linux operating system (CentOS version with no license fees).
- Uses open standards file formats and open source software to ensure compatibility with application processing software and to keep development and product costs low. NASA DRL software RT-STPS and Simulcast are built in.
- Pre-loaded on server hardware.
- Unlimited term software license and updates for the first year. After the first year, updates are available for a modest annual fee.
- From an IT perspective, the EOS FES should be treated as a "black box" where complete software updates are provided solely by Orbital Systems to ensure all versions of open source software are working together compatibly.
- Supports AAPP processing of level 0 data to level 1A/1B for some L band satellites when customer has applicable user license.

High Quality Hardware

- Standard configuration HP DL385 G5 server to reduce testing and support costs for all users.
- 2.1 GHz AMD Quad-Core Operteron, with 4 GB main memory and 146 GB of RAID 1 hard disk, all in a 2U rack case.
- Hardware maintenance available from HP globally.

EOS Front End Server



Applications

- Manages reception system for all common EOS satellites including MODIS, Terra and Aqua, NOAA POES, METOP, FY 1 and future NPP, NPOESS and FY3.
- Produces ingest data from Quorum Communication receivers and from IN-SNEC Cortex series receivers

Orbital Systems, Ltd.

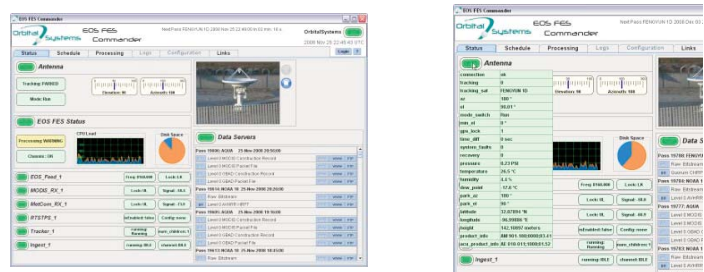
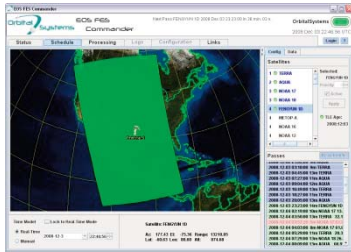
3807 Carbon Road
Irving, TX 75038-3415
+1 972 915-3669
+1 972 915-3699 (FAX)

<http://www.orbitalsystems.com>

Key Capabilities

Status

View comprehensive real-time system operation status and performance data at a glance.

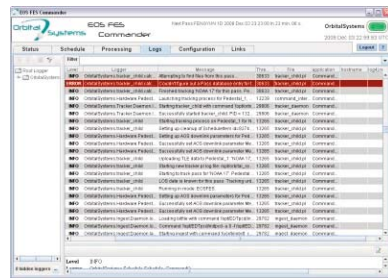
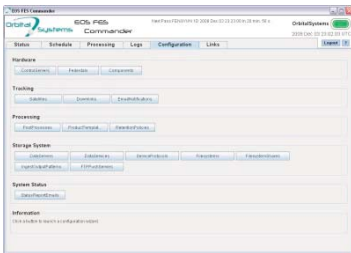


Schedule

Intelligent automatic acquisition scheduler allows users to automate data acquisitions based on any data quality or coverage priority. Easily schedule antenna feed, receivers, downconverters, and tracking for each pass and obtain and update antenna ephemeris for all tracked satellites daily.

Log

Central logging of operations and errors for all system hardware and software components.

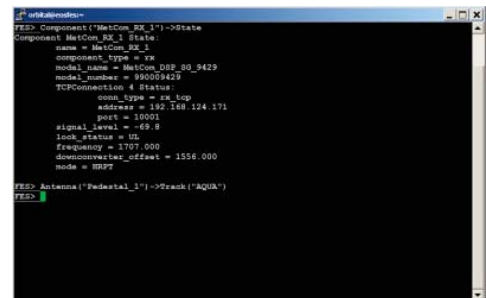


Configure

Dynamic configuration system allows easy addition and modification of hardware and software setups for individual satellites, including parameters for RF equipment, data ingest, post processing and external data services.

System Operations

Powerful command line tools and a customized command interface make manual system operation, performance evaluation, and error diagnosis intuitive, simple and quick. Web-enabled remote service protocols and open architecture of all software system components allow for quick and easy development of custom software for any task related to system control or automation.



Other Capabilities

- Commander Application is run remotely from up to five remote PCs or Linux Workstations.
- NASA DRL's open source RT-STPS performs framing, Reed Solomon and writes standard level 0 files.
- NASA DRL's Simulcast Server is also embedded and can be accessed with the NASA Simulcast Client software.
- Post pass processing management.
- Integrated quick looks and streaming simulcast client.
- Fully interactive map based schedule management.
- Integrated on-line help system.