



EOS-FES Earth Observation Systems Front End Server

Provides automation and management tools for antenna system and EOS DB data reception

The EOS Front End Server (FES) provides all the automation and management tools required to capture and process remotely sensed earth observation data. The EOS-FES is a complete package preloaded 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 Earth Observation System antenna systems. Provides a central point of control and status to users and external software.

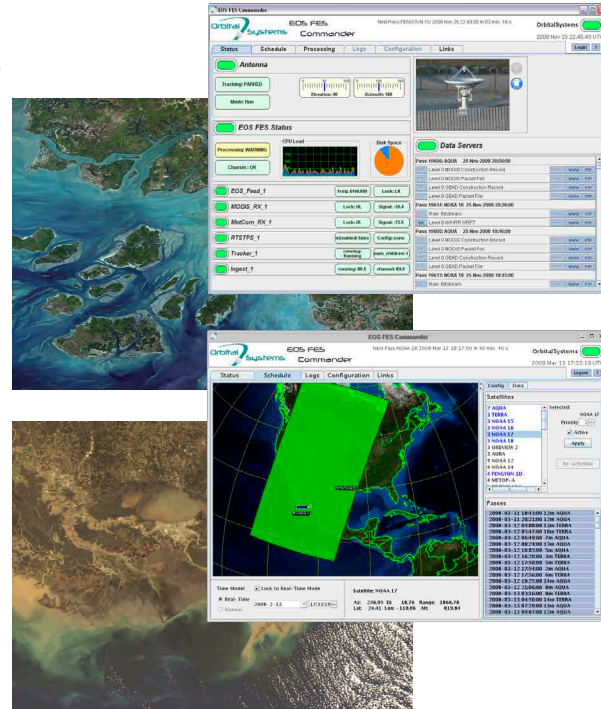


A Complete Software Package

- Controls antenna, status displays, 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 keeping development and product costs low. NASA DRL software RT-STPS and Simulcast are built in
- Preloaded 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
- Supports FY3 processing to level 1B for all instruments, where available

High Quality Hardware

- Standard configuration HP DL 360e G8 server to reduce testing and support costs
- 1.8 GHz Intel XEON 4-core CPU, with 8GB main memory, 300GB of RAID and 1 hard disk
- 1U rack enclosure
- **Optional** half rack case with keyboard, monitor, KVM switch and 5 KVA UPS
- Hardware maintenance available from HP globally



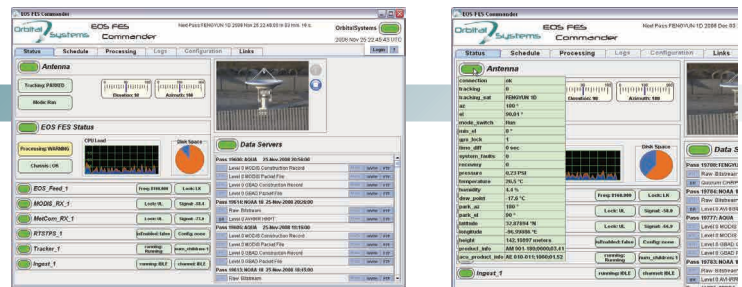
Applications

- Manages reception for Earth Observation Systems - Direct Broadcast (EOS-DB), tracking LEO and MEO satellites:
 - TERRA
 - AQUA
 - NPP
 - FY3
 - JPSS1 (when available)
 - METOP
 - NOAA POES
 - FY1
 - FY3
 - DMSP
- Manages satellite pass control and ingest of satellite Direct Broadcast data up through level 0 industry standard format data files

EOS-FES Earth Observation Systems Front End Server

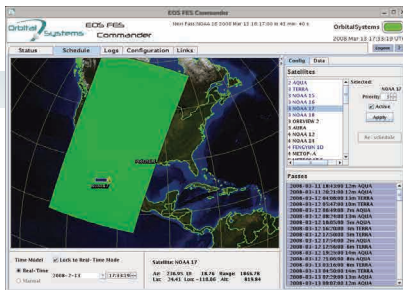
Status

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



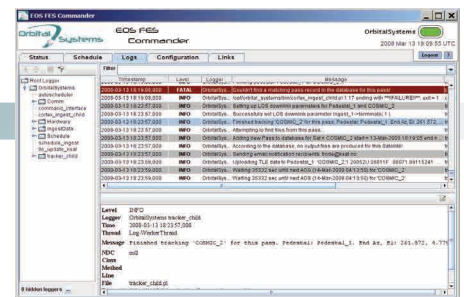
Schedule

- 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



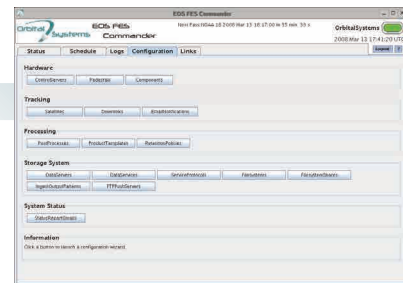
Status

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



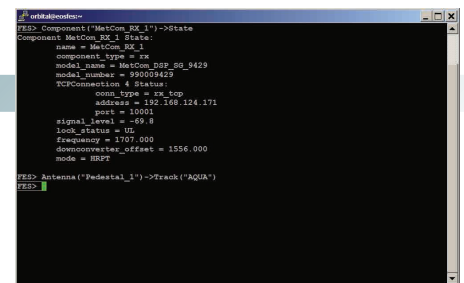
Configure

- 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



Status

- 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



High Quality Hardware

- 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

Prices and specifications are subject to change without notice.
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