

Analytical Services is a cloud-based, Software as a Service (SaaS) used to model, analyze, and visualize space, defense, and intelligence systems.

Features

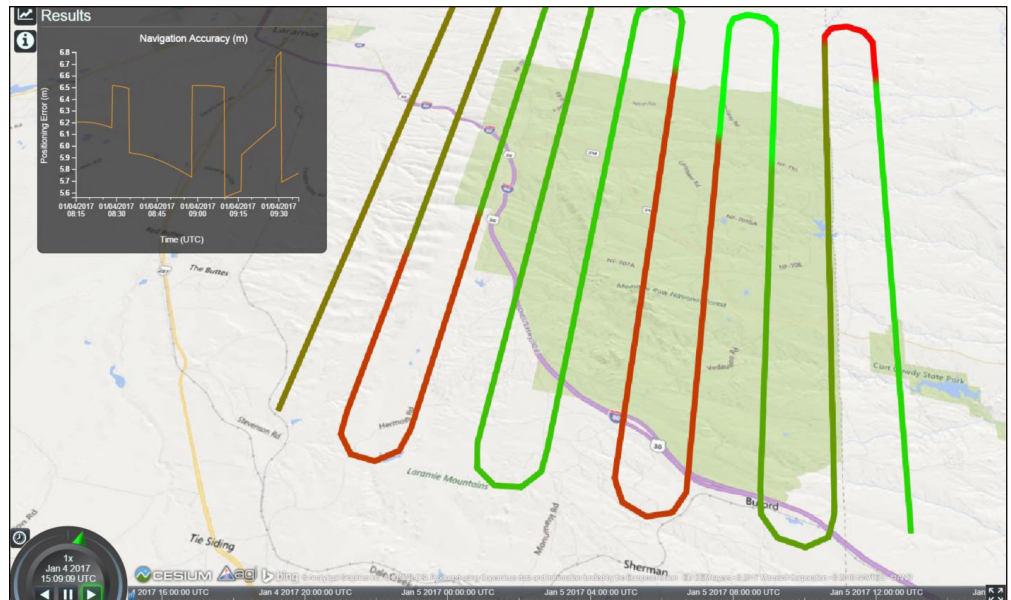
Routing. Model satellite and aircraft routes using industry standard propagators. Route types include:

- Orbits
- Simple Flight
- Great Arc
- Raster

Intervisibility. Calculate access between sensors on aircraft and satellites as well as satellite passes over locations. Access is determined for any location or route type.

Overflight. Evaluate satellite and aircraft overflight to a region using predefined objects from a catalog or define a custom configured object.

Aviation. Assess drone flights against static and time-dependent air space restrictions. Features include assessing both line-of-sight and beyond line-of-sight routes, using varying route definitions.



Navigation. Compute GPS navigation accuracy and dilution of precision over points, lines, and polygons. The best available GPS data is used to provide the most accurate information.

Cesium visualization. Generate CZML for many service outputs to display the analysis in a Cesium-based globe or map.

Sample applications

The following applications were built using the capabilities available in Analytical Services.

SpaceBook® Satellite Viewer

ComSpOC™- generated data products are made accessible via SpaceBook®, a SOA-based data and analysis service. It enables users to filter through thousands of resident space objects (RSOs) by owner, mission, orbit and other parameters to quickly view a picture of what is going on in space.

Satellite Pass and Overflight Services

This application enables you to:

- View several satellite's orbits over time.
- View a list of countries a satellite flies over, with entry and exit times.
- See when select satellites are within view of your location.
- Control light/dark constraints for your location and the satellite.

- Visualize the pass in Cesium.

GPS Services

This application enables you to:

- Perform navigation accuracy calculations over a wide-range of options, sites, routes, and search patterns.
- View today's maximum navigation accuracy over the entire world, with varying granularity.
- View today's current navigation accuracy using an animated heat map.
- View all current GPS satellites, including their block type and current health status.

Fully documented

Complete documentation is provided for all the services, including samples of inputs and outputs as well as online videos catered to getting started and how to develop using a browser plugin, JavaScript or .NET.

