Order Logic is a web application for satellite imagery collection order management.

- Browse, view, create, and edit imagery orders
- Monitor imagery collection and processing status
- Estimate collection feasibility
- Single and multi-satellite functionality
- User-specified collection constraints
- Configurable satellite parameters

Order Logic can aid imagery collection efforts for disaster response, geospatial intelligence, municipal land use, international relief missions, space situational awareness and more.

Order Logic Ops Concept Overview

- Define target via map or file import
- Review constraints and parameters
- Submit area of interest for feasibility results
- Review feasibility report for collection details
- Adjust parameters and resubmit as needed
- Request imagery based on confirmed feasibility

Collection Feasibility Computations

Using statistical weather forecasts and long-term orbital dynamics, Order Logic provides the likelihood of collection and down-link per the constraints and timeline.

- Order Logic computes required strips and total scan time based on imaging mode
- Order Logic computes constrained collection opportunities based on geographic location and orbital model
- Order priority, statistical cloud cover and competition from other orders near the area of interest are taken into account to determine both minimum and maximum expected time to collect

Order Logic Collection Request

Configurable Constraints and Parameters

- Users select satellite options and specify collection constraints including collection timeframe, cloud cover limits, imaging mode, view angles, and required resolution
- Simple GUI for administrators to add and edit satellites, sensors, ground stations and feasibility formula constants

Multiple Satellites, Multiple Areas, Multiple Users

- Collaborative collection of the area of interest by multiple selected satellites
- Feasibility for multiple areas of interest can be calculated simultaneously

Web architecture supports multiple concurrent users using web-browsers or mobile devices.
**Customizable Permissions and Workflow**

Order Logic allows customization of permissions with respect to users, data, and workflow. This configurability can be used to limit editable and viewable fields or data for certain users while giving other users more privilege and insight. Workflows can be specified to require checkpoints and authorizations throughout the ordering process.

**Complete Collection Planning Solution**

Order Logic can be used on its own or seamlessly integrated with Orbit Logic’s satellite imagery Collection Planning architecture for everything from tasking via mobile apps, to web-based requests and status, to coordinated constellation collection planning.

**Order Logic Collection Order Details**

**Recorder and Down-link Impact**

With limited onboard storage and down-link opportunities, recorder management becomes an important factor in timelines for the return of imagery.

- Onboard storage and down-link opportunities included in feasibility calculations
- Configure onboard storage space
- Define down-link rate and compression ratios
- Specify and configure available ground stations
- Stipulate ground station options for each image

Take the guesswork out of imagery collection timelines with **Order Logic**.