

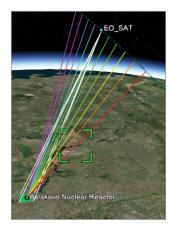
Collection Planning Suite

INTEGRATED SOURCE MANAGEMENT

Riverside Research's Collection Planning Suite (CPS) is a web-based modeling and simulation environment and an automated constellation planning tool for space-based GEOINT. The CPS is operating in the National Geospatial-Intelligence Agency enterprise today.

CONSTELLATION PLANNING

The CPS cloud-compliant framework supports satellite collection research and analysis, feasibility studies, strategy development, and daily planning for a multi-phenomenology constellation. It is also ICD 503 compliant and supports multi-classification constellations in a single instantiation.



Using system models, the CPS can easily modify and manage existing or quickly integrate new GEOINT data providers.

The CPS creates optimized collection plans using a super-set of the community Collection Requirement parameters including priority, geometry, solar/lunar lighting, and cyclic parameters, and accounts for real-time weather, local terrain, threats, and other conditions.

Service-oriented CPS can integrate into most system-of-systems via documented web services for collection requirements, execution status, exploitation status, Tip-and-Cue, and other data.

Planners and researchers can visualize the collection plans on an interactive, IC ITE compliant 4D WebGL globe complete with terrain, imagery, maps, and other GIS and Celestial layers, in order to accurately represent ground and space-based targets.

MODULAR SYSTEM COMPONENTS



For more information, contact: <u>applicationdev@riversideresearch.org</u>

Collection Planning Suite

riversideresearch.org/what-we-do/tools/collection-planning-suite-cps

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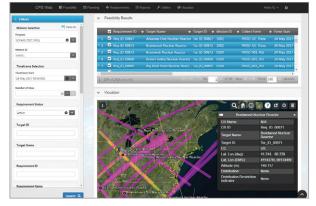


Custom Reports, Statistics, and Analytics

COLLECTION PLANNING & RESEARCH

- Automates single satellite or constellation planning
- Orchestrates sources by performance, strategy, and conditions
- Design and tailor collection strategy to exceed info needs
- Uses tip-and-cue capability for time-dominant operations
- Conduct pre- and post-launch studies to measure performance
- Determine feasibility before submitting a requirement
- Perform collection gap and overflight planning
- Orchestrate special collections on space-based targets
- Manage CRs internally or from an external source
- Robust set of CR parameters and constraints
- Orchestrate multi-level classification and concealed CRs

10 ENTERPRISE SERVICES



Collection Feasibility and 4D WebGL Visualization

SYSTEM FEATURES

- AWS/C2S compliant; scalable and elastic features
- Windows Server application; mobile friendly
- Oracle database; extensible to other type databases
- ICD 503 multi-level security compliance
- Authenticates using PKI, IAA, and/or LDAP
- Role-based controls for all functionality
- Agnostic models reflect system capabilities and limitations
- Add, modify, and manage models without code changes
- Source models support all phenomenologies
- Easily integrates into your system of systems
- Accepts data from and supplies to external partners (e.g., CRs, weather)
- Supports an interactive 4D globe and map
- Uses WebGL technology—4D without a client plug-in
- IC ITE compliant application



12 YEARS OF SUCCESS (TRL-9)

As an operational, license-free, TRL-9 system, CPS provides NGA, the Department of Energy, NASIC, the United States Intelligence Community, and others with collection feasibility analysis, planning, reporting, and calculators. Across small-sat, SAP/CAP, commercial, and foreign constellations, CPS can streamline planning time to 15 minutes.



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