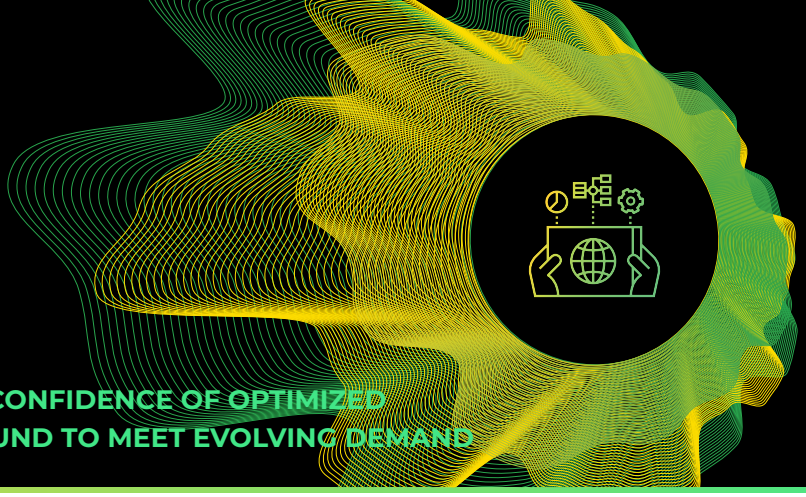
INTUITION

END-TO-END ORCHESTRATION



NETWORK OPERATORS GAIN THE CONFIDENCE OF OPTIMIZED INTEGRATION OF SPACE AND GROUND TO MEET EVOLVING DEMAND

Today's communications networks are complex—and without multi-faceted orchestration capabilities, operators will struggle to meet ever-changing customer demands while also meeting revenue goals. End-to-end orchestration is the coordination of all aspects of the solution from the end user interface to the ground and space segments, leveraged across multi-orbit and ultimately even terrestrial or mobile network environments.

Intuition will support satellite resource orchestration with applications and APIs to relay information and decisions between ground and space segments. It will support service orchestration based on key performance indicators (QoS, QoE) of the network's function.

Resource management will rely on APIs and an application layer in some cases to implement changes motivated by the service orchestration. Altogether, the entire system is coordinated to maximize revenue, reliability, and quality of service.

Service orchestration is necessary to integrate disparate systems and domains such as OSS/BSS in the NMS or newer domains such as the core MPLS network. Intuition will rely on APIs in some instances and standards such as MEF to operate.

HOW WILL FULLY AUTOMATED ORCHESTRATION CHANGE YOUR BUSINESS?

Resource Orchestration to Optimize Software-Defined Software Capacity
Through radio resource control (RRC) Management via APIs, we will leverage industry standards to keep the ground and space segments in sync. Such orchestration will facilitate mass-scalability and flexible integration between the satellite payload, the satellite ground network and, ultimately, global telco networks.

Service Orchestration for Seamless Global Coverage
End-to-end service orchestration across all network functions including terminal and baseband provisioning will ensure services are implemented in an automated and seamless manner without manual navigation changes. This reduces complexities and expedites time to market.

Our ground system elements will be able to manage multiple configurations and quality of service profiles and standardized APIs for a fully automated set up, letting service providers manage those elements with ease.

Full Network Control with Cloud-Based NMS
Opensource APIs and MEF standards enable business system integration for automated functions like billing, provisioning, and general management. This will reduce complexity and help Service Providers differentiate their service offerings.

INTUITION

SLA Assurance and Optimized Revenue
Global Bandwidth Management (GBWM) creates a single, combined pool of bandwidth which network operators can use to manage sophisticated service plans. GBWM supports the industry's highest degree of flexibility, helping operators subdivide bandwidth into tailored service plans for users. GBWM allows operators to mitigate congestion and contention, and optimize fill rates for numerous customers.

Self-Organizing Waveform Innovation
Mx-DMA MRC return waveform is our real-time, self-organizing return link. It removes the challenge and complexity of return link carrier management and corresponding resource allocation.

MAXIMIZE SOFTWARE-DEFINED SATELLITE ASSETS AND OPTIMIZE END USER SERVICES

Use Cases for E2E Resource Orchestration:

- Maximized sellable capacity with reconfigured beam maps and bandwidth
- Highly advanced and dynamic mobility resources
- Gateway diversity and back-up
- On-demand service activation for ad hoc events
- On-demand orchestrated beam/resource activation at target location expanding serviceable footprint without dedicated beams)

ORCHESTRATE YOUR OPERATION, MASTER YOUR CAPACITY, MAXIMIZE YOUR REVENUE

With Intuition, optimizing the end-to-end capabilities of software-defined satellite networks, operators will be empowered with efficient management of their complex operation, bolstering their services and leveling up their revenue.

ST Engineering

iDIRECT