



Accelerating the Path to Autonomous Satellite Network Operations

Foresight unifies network, service, bandwidth, security, and AI intelligence in a single operating environment, helping satellite operators transform operational data into faster decisions, stronger performance, and increasingly autonomous operations.

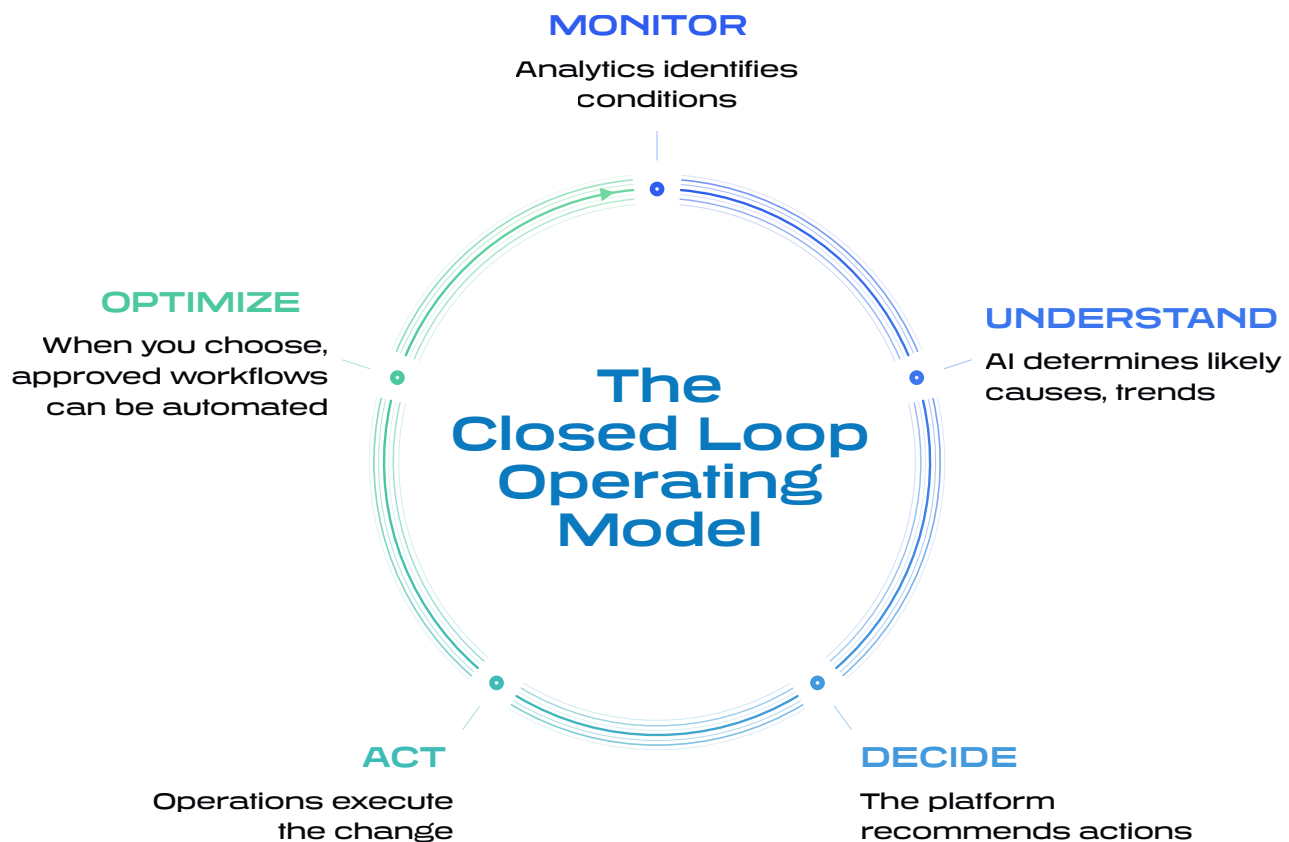
The New Operating Reality

Satellite networks are becoming more complex, more dynamic, and more strategically valuable. Success is no longer defined by connectivity alone. Operators must manage multi-orbit environments, evolving service portfolios, rising customer expectations, expanding security requirements, and unprecedented volumes of operational data. At the same time, many organizations continue to rely on fragmented systems, disconnected workflows, and reactive operational processes that make it difficult to scale efficiently.

Introducing Foresight

Foresight helps operators bridge that gap. By bringing together data and context across network, service, business, and security domains, Foresight transforms operational data into actionable insight and creates a practical path toward predictive and increasingly autonomous operations.

Foresight enables a closed-loop operating model: Analytics identifies issues. AI explains their impact. Intelligent workflows recommend the next best action. Automation executes approved changes and continuously improves outcomes over time.



One Platform. Two Powerful Dimensions.

Foresight combines operational management and AI-driven intelligence in a single environment, enabling operators to modernize at their own pace while preserving existing network investments.



Foresight Management

Run complex satellite operations with greater efficiency, consistency, and control.

Foresight AI

Transform operational data into predictive insight, guided action, and autonomous outcomes.

Why Operators Choose Foresight

- ✓ Single user interface
- ✓ Reduce operational complexity across networks and systems
- ✓ Accelerate troubleshooting and root cause analysis
- ✓ Improve SLA assurance through predictive intelligence
- ✓ Optimize bandwidth utilization and resource efficiency
- ✓ Strengthen operational security and resilience
- ✓ Modernize incrementally without replacing existing investments
- ✓ Improve business agility through integrated service operations
- ✓ Create a practical path toward autonomous network operations

Foresight Management

Run Operations with Greater Efficiency and Control

Foresight Management provides the operational foundation for modern satellite networks. By bringing network operations, service operations, and bandwidth management together in a unified environment, operators can reduce complexity, improve visibility, and scale more effectively across evolving architectures.



Network Management

Simplify Operations Across Every iDirect Network

Foresight Network Management delivers a common operational experience across multiple iDirect platforms, helping teams manage growth, reduce operational friction, and maintain greater control from a single environment.

Operators can configure, provision, monitor, and troubleshoot networks through one interface while leveraging modern security controls, dashboards, APIs, and automation capabilities.

Key Benefits

- Single operational view across multiple networks
- Faster troubleshooting and operational response
- Secure identity, role-based access, MFA, and SSO
- Real-time monitoring, alarms, and dashboards
- Open APIs for ecosystem integration
- Cloud, on-premises, and hybrid deployment flexibility



Service Management

Connect Service Delivery to Business Outcomes

Foresight Service Management helps operators manage services in business terms while automating the operational processes required to deliver them.

By connecting service definitions, subscriptions, SLAs, inventory, policies, and customer commitments with underlying network infrastructure, operators gain greater visibility and control throughout the service lifecycle.

What to Expect

- Faster service creation and launch
- Integrated OSS/BSS workflows
- Improved SLA assurance and service visibility
- Customer portals and multi-tenant operations
- Marketplace and monetization capabilities
- Consistent service management across evolving networks



Global Bandwidth Management

Turn Capacity into a Strategic Advantage

Bandwidth is one of the most valuable assets in any satellite network. Foresight Global Bandwidth Management helps operators maximize the value of that resource by managing capacity as a single intelligent pool across satellites, spot beams, and service areas.

The platform continuously optimizes allocation, balances demand, and enforces service commitments to improve utilization while maintaining service quality.

Business Outcomes

- Higher resource utilization
- Improved revenue efficiency
- Better service assurance
- Reduced operational complexity
- Greater flexibility across dynamic environments

Foresight AI

Transform Data into Predictive Action

Foresight AI brings advanced analytics, machine learning, and agentic intelligence directly into operational workflows.

Instead of simply monitoring network conditions, operators gain predictive visibility into future events, recommended actions for complex situations, and automation capabilities that accelerate resolution and improve operational outcomes.

NOC Intelligence

Predict Issues Before Customers Notice Them

NOC Intelligence helps operations teams move from reactive troubleshooting to predictive and prescriptive operations.

By correlating telemetry, weather data, alarms, service conditions, and historical trends, operators can identify potential issues earlier, understand root causes faster, and take action before customers are affected.

Key Outcomes

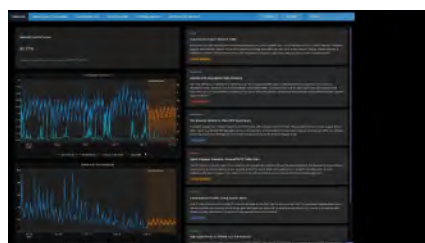
- Faster root cause analysis
- Reduced downtime
- Improved SLA performance
- Proactive risk mitigation
- Shorter mean time to resolution

Use Cases



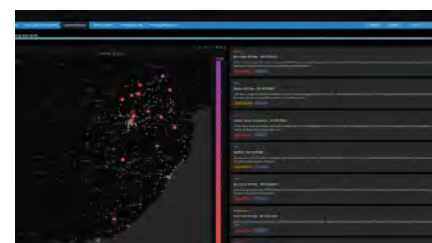
1. Predictive Weather & Link Risk Management

Anticipate weather-driven signal degradation, link instability, and potential SLA risk before service is affected.



2. Prescriptive Network Operations

Operations teams often have too much data and too little time to determine the best action during network performance issues.



3. Automated Troubleshooting & Root Cause Analysis

Modem commissioning issues and downstream or upstream CRC errors can delay service activation and extend outage resolution times.

Capacity Optimizer

Make Every MHz Work Harder

Capacity Optimizer combines demand forecasting, performance analytics, and automated optimization to maximize spectral efficiency and resource utilization across multi-orbit environments.

The result is more capacity availability without the cost of overprovisioning.

Key Outcomes

- Higher spectral efficiency
- Reduced overprovisioning
- Better resource utilization
- Lower congestion risk
- Improved network performance

Use Cases



1. Capacity & Demand Forecasting

Manage changing usage patterns and capacity demand without overprovisioning or risking congestion.



2. Uplink Performance Optimization

Uplink performance issues that can be difficult to detect, diagnose, and optimize using manual methods.

Multi-Orbit & Mobility Optimizer

Orchestrate Dynamic Networks Automatically

As operators adopt GEO, MEO, LEO, terrestrial, and 5G resources, managing mobility becomes increasingly complex.

Multi-Orbit & Mobility Optimizer uses AI-driven orchestration to continuously evaluate network conditions, capacity availability, and service requirements, enabling intelligent traffic steering and seamless mobility management.

<i>Key Outcomes</i>	<i>Key Capabilities</i>
• Smarter traffic steering • Improved mobility performance • Automated resource orchestration • Better customer experience • Continuous SLA compliance	• Predictive AI decision engine • Dynamic multi-network steering • Automated orbit, beam, and gateway orchestration • Real-time SLA enforcement

Threat Intelligence

Protect Critical Infrastructure Proactively

Threat Intelligence embeds security intelligence directly into operational workflows, helping operators identify, investigate, and respond to emerging threats before they impact service availability.

Through continuous telemetry analysis, anomaly detection, and automated response workflows, operators can strengthen resilience across mission-critical infrastructure.

<i>Key Outcomes</i>	<i>Key Capabilities</i>
• Earlier threat detection • Faster incident response • Reduced operational risk • Improved resilience • Stronger security posture	• Multi-vector threat detection • Cyber and RF interference analysis • Automated incident response • SIEM and SOAR integration • Zero Trust architecture support

The Platform Behind Foresight

The technologies powering Foresight work together to transform operational data into intelligent action.

Connect with MCP Connectors

Extend AI access across network, service, business, and third-party systems.

Understand with LLM Reasoning

Analyze information, connect relationships, evaluate options, and support complex decision-making.

Learn with MLOps

Keep AI models reliable, accurate, and continuously optimized.

Act with Agentic AI

Understand objectives, create plans, use tools, gather information, and execute workflows with limited human intervention.

Systematize with Closed-Loop Automation

Enable continuous monitor → analyze → act → verify operations that improve outcomes over time.

Interact with an Agentic Interface

Provide a natural language experience that allows users to interact with Foresight through goals and outcomes rather than traditional menus and workflows.



Foresight combines operational management and AI-driven intelligence to help satellite operators reduce effort, improve performance, optimize capacity, strengthen security, and accelerate decision-making.

The result is a practical path from reactive operations to predictive, proactive, and increasingly autonomous satellite networks.

