

Solution Overview: Constellation Analytics & Reporting

Reach Your ROI Faster. Power Smarter Broadband Operations.

The Backbone of Data-Driven Broadband

Constellation SaaS powers the complete broadband back office—from lead management to revenue collection—through a network of best-in-class platforms like Atlas Digital, CSG, Ni2, and Nokia Altiplano, all fully integrated and cloud-native. Designed by broadband experts and system integrator Crystal Eye Technology Partners, the platform is built to minimize operational friction, streamline lead-to-cash workflows, and scale with your business.

Analytics and reporting are not just bolt-ons — they are essential to understanding and optimizing your business. Our reporting strategy offers flexibility through three tiers of capability, empowering providers to select the model that best matches their organizational maturity and analytics needs.

Constellation Analytics Tiers

CORE Analytics

Foundational Access



Description & Features

- Native reporting from vendor platforms (e.g., CSG, Ni2, Nokia Altiplano)
- Direct access to the integration engine's data plane
- Direct connections to vendor-specific data repositories
- For teams building their own BI/analytics tools
- No aggregation or correlation – requires swivel-chair analysis

OPERATIONAL Analytics

Unified Data Lake & Reporting



- Constellation builds and manages a custom data lake - Structured by domain (e.g., Customer, CPE, Services, Orders/Billing, Workforce)
- Pre-built dashboards and KPIs
- Single access point for cross-domain operational insights
- Improved data governance and query performance

ENTERPRISE Intelligence

Advanced Analytics & AI



- Fully managed data warehouse
- Custom dashboards and reporting tailored to business needs
- Aligned with CableLabs models and broadband industry standards
- Deep business insights across sales, orders, billing, customer, and market penetration
- Predictive & prescriptive analytics
- Optional AI/ML integrations - End-to-end governance & infrastructure included

Why Constellation SaaS for Telecom Analytics



- Built specifically for telecom: workflows, metrics, and insights that align to your business
- Real-time visibility across billing, support, network, and customer experience
- Proven outcomes: reduced churn, faster resolution times, and improved margin
- Modular and scalable platform that grows with your needs
- Backed by telecom experts who understand your challenges and speak your language

Common Analytic Domains

It's important to consider what a typical broadband provider needs to report on. While specifics vary, common analytic domains include:

Customer Lifecycle & Revenue Analytics

- **Opportunity Insights** – Lead tracking, lead aging, win/loss rates, return-to-cart, campaign ROI
- **Sales Insights** – Conversion funnel, channel performance, quote-to-order ratios
- **Order Insights** – Order cycle times, fulfillment success rates, fallout analysis
- **Customer Insights** – Subscriber growth, churn, segmentation, lifetime value
- **Billing Insights** – Revenue leakage, aging reports, invoice cycle times

Operational Performance & Service Delivery

- **Service Insights** – Usage metrics, plan upgrades/downgrades, SLA compliance
- **Workforce Insights** – Job completion times, technician utilization, first-time fix rates
- **Inventory Insights** – Equipment lifecycle, stockouts, serviceability gaps
- **Product Insights** – Product performance, profitability analysis, lifecycle tracking

Market Strategy & Forecasting

- **Market & Penetration Insights** – Homes passed, serviceable footprint, penetration rates, network investment guidance
- **Support & Ticketing Insights** - Tkt trends, resolution SLAs, escalation rates, NPS drivers
- **Capacity & Demand Forecasting** - Network utilization trends, install backlog forecasting, future market demand

Experience, Digital and Compliance

- **Network Performance Insights** - Latency, uptime, bandwidth utilization, fault trends, node congestion
- **Digital Engagement & Self-Service Analytics** - Portal logins, chatbot resolution rates, self-service order success
- **Compliance & Governance Reporting** - Audit logs, data access patterns, regulatory filing support