

Provider Connectivity Assurance for Non-Terrestrial Networks

End-to-end visibility with seamless performance
across converged networks

Cisco® Provider Connectivity Assurance (PCA) is an end-to-end service assurance solution that unifies performance monitoring across terrestrial and satellite networks. Ideal for service providers and satellite operators, PCA delivers real-time visibility with microsecond precision and AI-driven insights that enable automated Service-Level Agreement (SLA) assurance from core to edge to orbit.

As part of Cisco's Non-Terrestrial Networking Solution, PCA's intelligent Assurance Sensors provide continuous monitoring of end-to-end network and service quality, transforming complex multidomain environments into a single performance management platform. Integrated with Cisco's routing and automation platforms, PCA simplifies operations while maximizing network resilience and service quality. Whether supporting remote mining operations, maritime fleets, or rural broadband, PCA helps ensure seamless connectivity through proactive alerts to enable intelligent traffic steering and predictive analytics, delivering an exceptional customer experience while reducing operational costs in even the most remote or mission-critical scenarios.



Benefits

Cisco® Provider Connectivity Assurance for Non-Terrestrial Networks revolutionizes how satellite network operators manage converged network performance and service delivery with:

- **Reduced operational complexity:** Automated monitoring eliminates the need for manual satellite link assessments, allowing operators to manage larger constellations with existing staff.
- **Minimized service interruptions:** Real-time proactive performance monitoring helps identify developing issues, enabling faster response to potential service impacts.
- **Accelerated troubleshooting:** End-to-end and per-segment visibility pinpoints whether issues originate in the space segment, ground infrastructure, or terrestrial connections, dramatically reducing resolution time.
- **Enhanced customer satisfaction:** More reliable service delivery with consistent performance helps operators meet increasingly demanding SLAs for enterprise and government customers.

- **Differentiated service offerings:** Comprehensive performance guarantees backed by sophisticated assurance capabilities allow operators to command premium pricing for mission-critical network services.

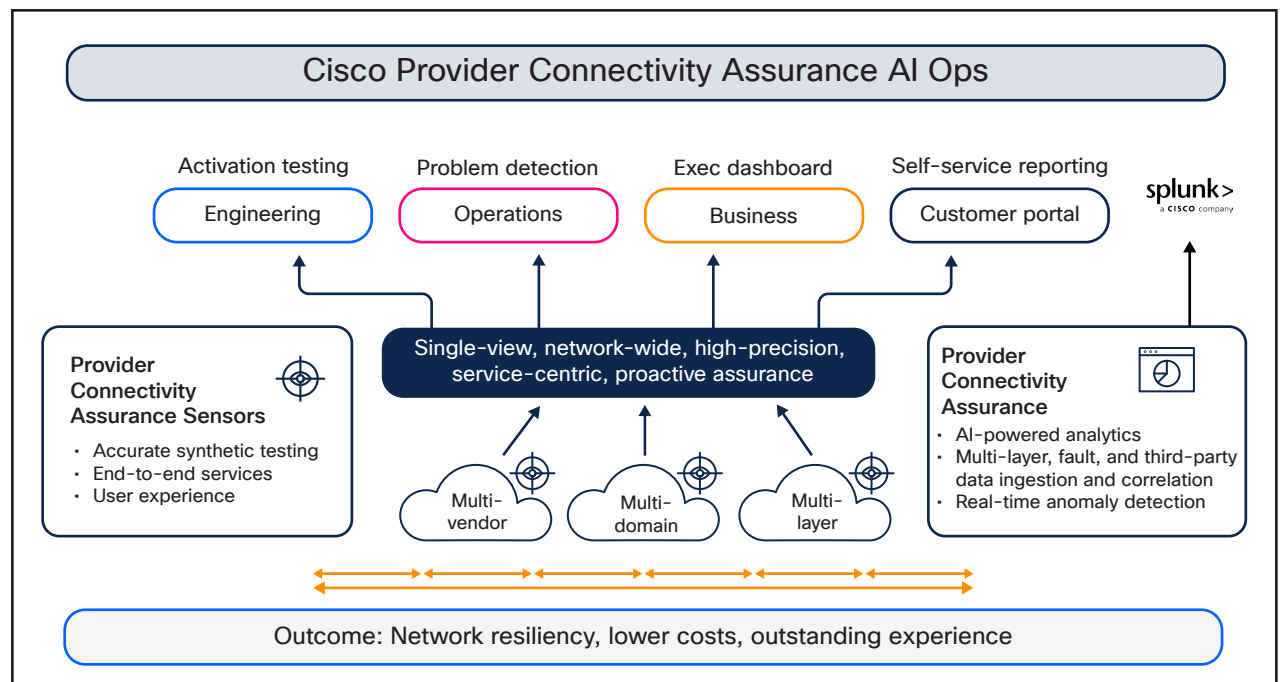


Figure 1. Proactive assurance with real-time visibility and accuracy for resilience and consistently great user experiences

Learn more

Cisco Provider Connectivity Assurance (PCA) empowers service providers to seamlessly manage and integrate satellite (non-terrestrial) and terrestrial networks. By delivering real-time visibility that enables automated SLA assurance, as well as intelligent path optimization, PCA helps ensure high-performance, resilient connectivity across even the most remote or complex environments. This enables consistent user experience, faster service deployment, and reliable support for mission-critical applications—whether over land, sea, or sky.

For more information on Cisco Provider Connectivity Assurance, please visit our web page: www.cisco.com/go/provider-connectivity-assurance.

For more information on Cisco NTN, please visit www.cisco.com/go/NTN.

To schedule a demonstration of the Cisco Non-Terrestrial Networking Solution with PCA, contact your Cisco sales representative.

Intelligent visibility that simplifies complex network operations

Cisco PCA delivers unified performance visibility and monitoring across terrestrial and satellite networks with capabilities no traditional monitoring tool can match. While competitors offer fragmented visibility, PCA provides AI-powered insights and proactive alerts to automate assurance specifically engineered for hybrid network complexities.

What sets PCA apart:

- **Unified cross-domain monitoring:** Single-pane visibility across satellite, terrestrial, and cloud infrastructure eliminates monitoring silos.
- **AI-powered predictive analytics:** Proactive anomaly detection and root cause isolation prevents service degradation before customers are impacted.
- **Satellite-optimized SLA management:** Purpose-built algorithms measure and report variable latency and link conditions unique to space-based communications.
- **Microsecond precision measurement:** Real-time performance data with millisecond sampling provides unmatched accuracy for critical applications and networks.
- **Seamless Cisco integration:** APIs integrated with SD-WAN, ThousandEyes®, and routing platforms deliver full-stack observability and seamless operation.
- **Intelligent automated response:** Proactive intelligent alerts enable dynamic path optimization and failover capabilities, reducing manual intervention and accelerating issue resolution.