

## NETWORK MANAGEMENT SERVICES

## NETWORK MANAGEMENT SERVICES. SPECIALIZED SUPPORT FOR SMOOTH OPERATIONS.

Lean on our global network management experts for maximum uptime, efficient network operations, and ultimate peace of mind.

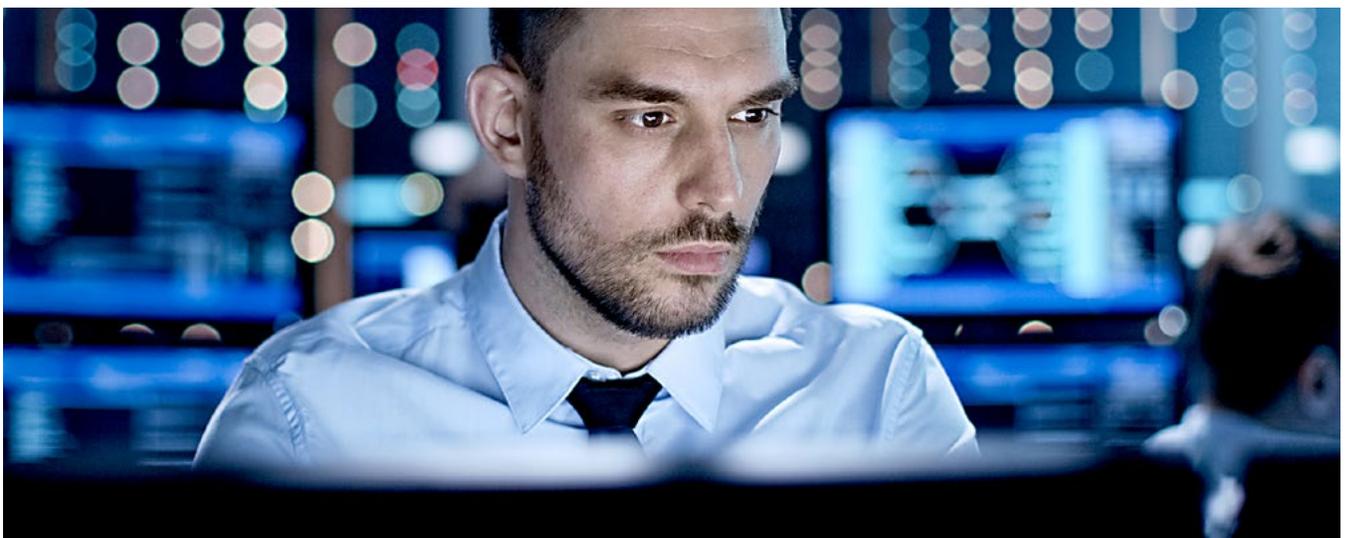
You wisely invested in Infinera equipment, but would rather have your team stay focused on core business challenges than manage your optical infrastructure. If this rings true, you can take The Infinera Experience to the next level by enlisting our operations specialists for the support you need to sustain maximum network uptime.

From proactive identification of potential issues to ongoing management of your critical operations, Infinera Services has you covered. You'll get the extreme optical network reliability you need, while freeing your team to stay focused on your key challenges—all for a highly effective return on your operating expense. When you look to Infinera for your network management and diagnostic needs, you can rest easy knowing your network is under the skilled and watchful eye of optical experts.

### Network Operations Center Services

When you choose Infinera's Network Operations Center (NOC) Services, you benefit from extremely reliable and personalized management of your optical network.

Purpose-built for ultra-reliable network performance, Infinera's monitoring platform continuously surveils your worldwide network and automatically alerts our operations team of any issues or concerning trends. Our global NOC operates 24x7x365 and is linked with another geographically diverse facility for optimal redundancy. If incidents occur, our seasoned operations specialists apply engineering-driven rigor, best-practice processes, and a proactive approach for predictable success. You keep the security and control while avoiding fire drills, enhancing performance, and enjoying peace of mind.





- Proactive Monitoring and Automated Backups
- Event Troubleshooting and Notification
- Corrective Actions
- Root Cause Analysis and Reporting

Available for an annual fee, Infinera NOC Services provide:

**Proactive Monitoring and Automated Backups**—Supported by our secure global network and advanced monitoring system, you receive proactive monitoring and analysis of your network performance, plus information about emerging trends so action can be taken before issues arise. You also benefit from monitoring and management of any Simple Network Management Protocol (SNMP)-capable assets in your network, whether they are from Infinera or another vendor. Finally, you're protected by automated periodic backups of your nodal database, stored offsite in secure redundant storage area network (SAN) facilities.

**Event Troubleshooting and Notification**—Working with Infinera specialists, you receive a customized incident lifecycle management framework based on your specific network, needs, and capabilities, as well as recommended best practices. This framework gives you a clear playbook to drive the tracking, notification, escalation, and

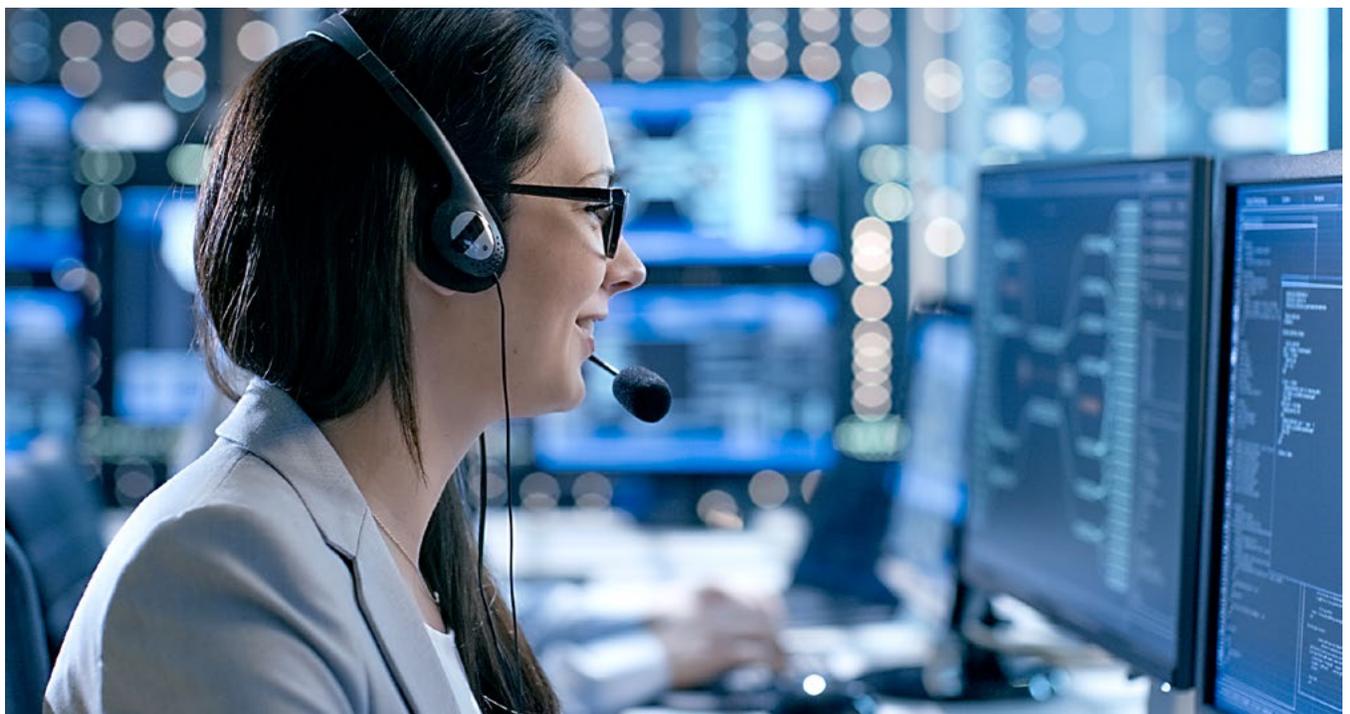
reporting for all network incidents. With your authorization, Infinera takes ownership of network disruptions from initial report to final resolution. If needed, we can coordinate with outside vendors on your behalf to quickly restore service. You have full transparency into performance and issue resolution with custom reports and online tools.

**Corrective Action**—If network triage is required, Infinera's Tier 3 technical support engineers will jump into action. You're notified of any required corrective actions and can direct us to drive any or all of those actions to fast resolution. You also have a direct escalation path to our Tier 4 support and software and hardware specialists, available when you need them.

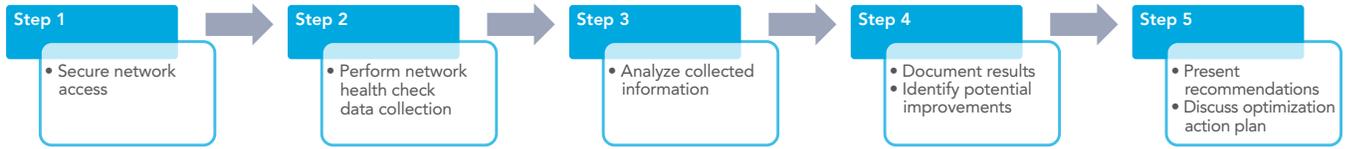
**Root Cause Analysis and Reporting**—You receive fast resolution of each incident, plus a detailed analysis identifying its root cause to prevent a repeat situation. Along with incident reporting, you gain a macro view through regular updates and analysis on key network and performance indicators and suggested actions to improve them. You can accelerate your results by enlisting Infinera to execute the recommended actions.

Lean on our NOC Services to manage your network and you gain a more cost-effective solution for achieving industry-leading optical performance and invaluable peace of mind. Pair NOC Services with an annual subscription to Infinera's Technical Assistance Center for:

- Full-service 24x7x365 network management
- Proactive monitoring and trend analysis to minimize alarms
- Comprehensive incident and performance reporting



**NETWORK HEALTH CHECK PROCESS**



**Assisted Operations Services**

Assisted Operations Services can be applied to a wide range of network operations, administration, and maintenance tasks. Provisioning (move, add, and change activity), network monitoring, first line maintenance, and key performance indicator (KPI) monitoring and reporting are frequently requested Assisted Operations Services.

Assisted Operations Services are provided on a continuous basis for a defined term based on a mutually agreed-upon scope of work and service level. Infinera is fully responsible for the resources (personnel, tools, procedures, etc.) required to attend to delivery within the agreed service level. Assisted Operations Services can be the answer to many common challenges facing network operators, including:

- Improving compliance to end-customer or internal service level commitments
- Improving planning, budgeting, and control of recurring operational costs
- Increasing in-house resource focus on customer-facing work
- Reducing procedural errors through standardization of operational processes
- Improving network availability and performance through rigorous compliance to standards

To ensure we achieve your expected outcome, each Assisted Operations engagement includes:

- Definition of the scope for the Assisted Operations Services
- Documentation and agreement on all service level requirements and measurements
- Definition and design of system interfaces and portals
- Documentation of workflows and key contacts
- Definition and development of reporting packages

Work typically is performed at an Infinera-defined location with secure remote access to the customer network and network manage-

ment system (NMS), with regularly scheduled performance reviews conducted at your premises or through a remote conference utility.

**Network Health Check Service**

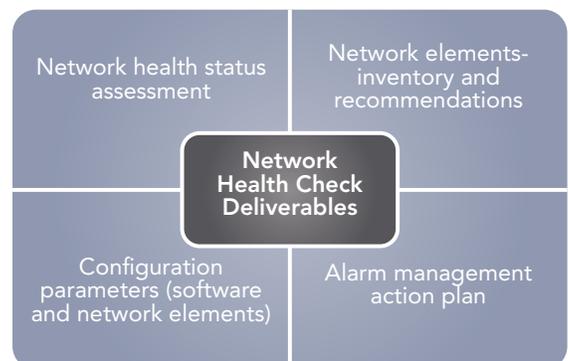
You can proactively minimize risks and network issues with the Infinera Network Health Check (NHC) Service. NHC provides you with a one-time snapshot of your network’s health, plus prioritized recommendations for improved alarm management. You will not only reduce the number of alarms your network produces, but you will also have an action plan to improve alarm management and prevent operational deterioration.

Your NHC is performed using a structured five-step process. You are partnered with an experienced Infinera PM who oversees the engagement and serves as your single point of contact for a seamless experience.

Using information from a range of sources, like network design documentation and manually extracted node data, your comprehensive health check includes a detailed analysis of key network indicators:

- Hardware revisions and software levels, with emphasis on product lifecycle status
- Alarm status, history, and trends
- Configuration of key network parameter values versus industry best practices

Based on our analysis, you will receive detailed NHC reports and recommendations including:



By acting on this information before a problem arises, you can optimize and fine-tune your network to secure growth and reduce ongoing operational costs.

Pair NHC with Infinera's High-touch Engineering Service for expert support to execute NHC recommendations. For larger engagements, we also assign a program manager to work with your and Infinera's operations teams to drive recommended corrective actions to closure.

A network health check is recommended at least twice each year to ensure optimal network operations. NHC Service:

- Ensures network hygiene
- Prevents operational deterioration
- Includes plan for alarm management and configuration of key network parameters
- Is program managed for a seamless experience

### ENSURE SUCCESS WITH INFINERA SERVICES

When you choose Infinera Services, you gain a level of expertise rooted in decades of successful deployments. You get the global scale and proven expertise you require, enhanced by the speed, personal service, and peace of mind you've always wanted.

It's called the Infinera Services Experience. And for you, it means:



Personalized Services



Rapid Resolution



Unrivaled Support



Accelerated Time To Revenue



Peace of Mind

Network owners and operators worldwide rely on Infinera Services to deploy, operate, and optimize their critical network infrastructure. Shouldn't you, too?

**To learn more,** contact your Infinera account representative or visit us at [www.infinera.com/services](http://www.infinera.com/services).