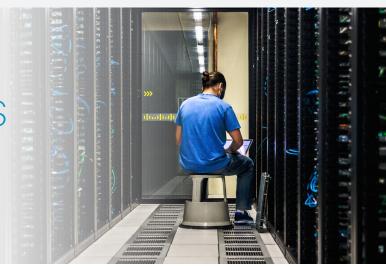


Interconnecting Data Centers for Cloud Scale



Benefits

- Simplify and automate operations with turn-up time reduced from days to minutes, standards-based open management, multivendor environment support, and realtime actionable views via telemetry.
- Reduce the price per bit with industry-leading capacity and density built into a box designed to operate as a server and mechanically optimized for the data center.
- Rapidly respond to an increasingly dynamic service environment with Cisco IOS® XR Software cloud-scale features, including on-demand scalability and an open ecosystem of independent software vendors (ISVs) that DevOps can utilize to reduce the time to market for competitive services.
- Expand when needed with pay-as-you-grow model, which provides you with a cost-effective solution for managing network capacity.

Optimizing the Data Center Interconnect

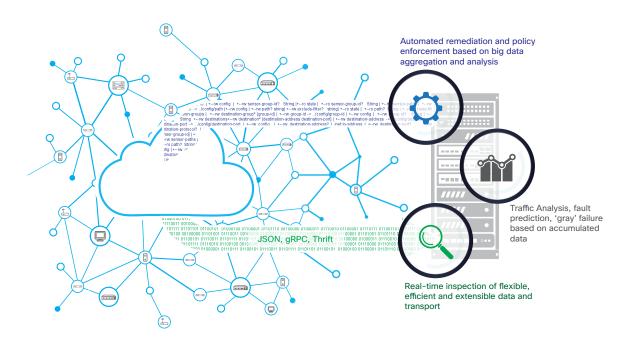
Cisco Public

With traffic between data centers expected to increase threefold by 2019,* you need a solution that can meet the challenge of this exponential growth in traffic and the pressures on networks caused by digitization. A solution optimized for the cloud that reduces operational costs, scales with flexibility, simplifies and automates operations, and supports a rapid response to your dynamic service environment.

With an industry-leading capacity, density, and footprint, the purpose-built Cisco® NCS 1000 Series supports these goals by lowering OpEx, through a dramatic reduction in space and power requirements as compared to legacy solutions. The NCS 1000 also scales efficiently and flexibly through its fully programmable, high-bandwidth capacity (up to 250 Gb wavelengths over distances exceeding 3000 km using existing fiber).

Operations and management are simplified by Cisco IOS XR Software, which supports zero-touch provisioning, fully automated device onboarding, and real-time actionable views via streaming telemetry. And the NCS 1000 in conjunction with IOS XR, supports the cloud-scale features and technologies you'll need to build a dynamic service environment on top of a network fabric comprised of WAN and data center resources.





IOS XR & Cloud-Scale Networking

IOS XR support streaming telemetry, the ability to select data of interest and transmit that data in a structured format to a remote management station for monitoring and analysis. Telemetry data is continuously streamed based on a push model, providing near-real-time access to monitoring data. Streaming telemetry offers a high performance, push based alternative to SNMP that's independent of a management information base (MIB).

Next Steps

To learn more about how the NCS 1000 series can evolve your data centers to cloud scale, contact your Cisco account representative or visit http://www.cisco.com/c/en/us/products/optical-networking/network-convergence-system-1000-series/index.html.

Simplicity, Automation, Virtualization Through Cloud-Scale Networking

Simple to use, optimized for controlled environments, automation focused, and designed with maximize capacity at a minimum footprint, the Cisco NCS 1000 series enables you to rapidly achieve cloud-scale networking through:

- High scalability and resiliency with a purpose-built, model-driven architecture and support for multiple hard disks to mitigate failures.
- A distributed architecture that enables on-demand services with much greater exibility and provides the agility you need to deploy, modify, and scale services up or down in seconds or minutes, rather than hours or days.
- A rich body of streaming telemetry data to support the continual renement of resource allocation and automated fault isolation capabilities, thereby reducing the mean time to problem resolution.
- Open, standards-based automation capabilities that accelerate processes, minimize errors, and reduce operational costs throughout the service lifecycle.