

OcNOS Data Center (DC)

October 2022

TOTAL NETWORK DISAGGREGATION

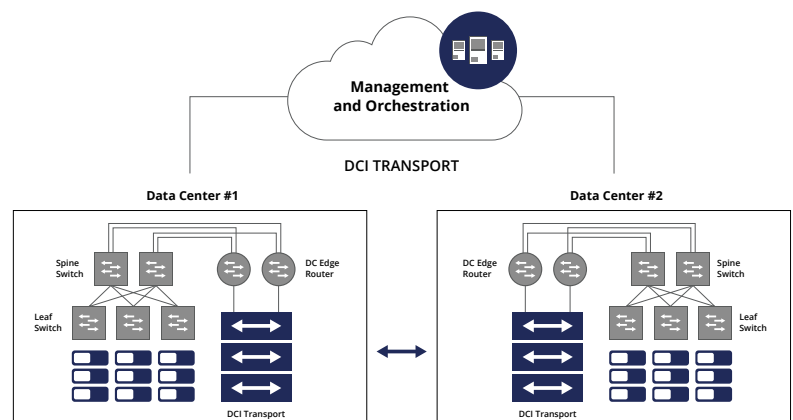
Take control of your network with Total Network Disaggregation from IP Infusion. Complex networks simplified with open standards.

OcNOS Data Center

Web-scale networking requires new solutions to build hyperscale and cloud data centers equipped with a web-scale operations toolset. IP Infusion's Network Operating System (NOS) running on open networking switches combines the key principles of best-in-class hardware and software. IP Infusion's Open Compute Network Operation System (OcNOS) can be used to build both Layer-3 and Layer-2 Data Center fabric as it provides a rich set of control plane features, providing robust quality, ensuring lower costs and at the same time providing vendors with a best-of-breed selection for hardware platforms.

A key concept that will enable next-generation Data Center networks is the separation of the networking software from the switching or routing hardware. One of the biggest advantages of disaggregation is CAPEX reduction, followed by OPEX savings and deployment flexibility.

OcNOS provides a unique value proposition in helping build modern Data Centers. It provides robust quality with over 500 OEMs and end users, with hundreds of thousands of deployments in solutions spanning access, core, transport and data center networking. It is a feature rich solution with extensive legacy and new protocol coverage.



Data Center Architecture

OcNOS also drastically reduces operational costs as it can be used to address multiple solutions such as Data Center, Optical Transport, Cell Site Router, Provider Aggregation and Passive Optical Networks.

OcNOS Software

OcNOS (Open Compute Network Operating System) is an industry-leading Network Operating System (NOS) providing the most complete carrier-grade disaggregated solution for service providers. OcNOS-based solutions have been widely deployed in access, aggregation, transport and data center use cases for simplified operations and automation. It provides extensive programmability for end-to-end network management and orchestration. OcNOS features a single software image that runs across the entire portfolio of Open Compute platforms from leading vendors. This guarantees consistent operations, workflow automation and high availability, while significantly reducing operational expenses.

OcNOS provides industry standard CLIs, supports standard MIBs as well as the latest network management tools. Its integrated centralized management and provisioning layer allows for transaction-based configuration and device feature modelling. OcNOS is a modular, multi-tasking NOS, with tight integration capabilities on commodity hardware. This design allows for scaled and performance critical deployments.

OcNOS benefits include:

- Fully validated and hardened carrier-grade solutions
- Breaks vendor lock-in
- Scalable software for Terabit switching bandwidth
- Lower TCO: Up to 65-75% savings against Traditional Tier-1 vendors
- A broad ecosystem of technology and integration partners

OcNOS key highlights include:

- Packaged solutions for faster deployment and shorter time-to-revenue
- Advance data models for network automation, orchestration, and control
- Standard Cisco-like CLI
- Flexible deployment: OcNOS Service Provider Solutions addressing different use cases across the Service Provider network
- World-class 24/7/365 support

OcNOS for Data Center

OcNOS for Data Center Key Benefits

Following are key benefits of the OcNOS Data Center:

- Full network migration of disaggregated networking solutions at Tier-1 Internet Exchange
- Flexible disaggregated network for scaling more subscribers
- Small footprint resulting from an optimized design
- Efficiently aggregate traffic at scale of up to 3.2 Tbps

- Proven migration for legacy services
- Enables hardware independence delivering faster roll-out of new services and shorter time-to-market
- Simplify operations to reduce Total Cost of Ownership (TCO)

Key Features

















- Network transformation into a flexible and scalable fabric
- Port and bandwidth scalability for Triple-play services
- EVPN-VxLAN
- IPoDWDM

Use-Cases

- DC-CLOS
- Multi-tenant DC (Underlay + Overlay)
- BGP Peering Router
- Data Center Interconnect

OcNOS Data Center Hardware Platforms

The following hardware platforms are supported.

Top-of-Rack (ToR)	Leaf	Spine
1.28 Tbps (Maverick 2)	3.2 Tbps (Trident 3)	3.2 Tbps (Trident 3/Tomahawk/Tomahawk 2)
Edgecore AS5835-54X 	Celestica Seastone2 DX030 	Celestica Seastone2 DX030 
2 Tbps (Trident 3)	Dell S5296F-ON 	Dell S5296F-ON 
Edgecore AS7326-56X 		Delta AG-9032v1 
Delta AG-9032v1 		Delta AG-9032v2 
Delta AG-9032v2 		Edgecore AS7712-32X 
Edgecore AS7712-32X 		Edgecore AS7726-32X 
Edgecore AS7726-32X 		Edgecore AS7816-64X 
Edgecore AS7816-64X 		

Relevant Links

[DATASHEET](#)

[FEATURE MATRIX](#)

[HARDWARE
COMPATIBILITY LIST](#)

Contact us today to learn more about the OcNOS Data Center product.

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