Datacenter Networks
AN IDC CONTINUOUS INTELLIGENCE SERVICE

IDC’s Datacenter Networks service combines a strategic view of emerging datacenter-networking requirements with extensive analysis of the network hardware and software infrastructure within enterprise and service provider datacenters. This service provides a comprehensive view of the key technical and business issues driving network migrations in private and public cloud datacenters and the remote branch.

Markets and Subjects Analyzed
- Datacenter network infrastructure
- Software-defined networking (SDN), intent-based networking (IBN), and network virtualization in the datacenter
- Evolution of virtualized network services in the datacenter
- Automation of datacenter networks
- Application delivery networking (e.g., ADCs/L4–7 switching)
- Networking in the context of converged and hyperconverged infrastructure (HCI)
- Key industry partnership and alliances in datacenter networking
- Datacenter-network spending, segmented by technology and region
- Shifting datacenter network topologies
- Impact of cloud computing on datacenter-networking markets and technologies
- Datacenter network vendor profiles, including those of start-ups
- Datacenter networking for hybrid/multicloud environments
- IaaS networking (network services provided by IaaS cloud giants)
- Trends in datacenter network architectures and operations
- Impact of microservice and containers on network architectures and operations
- Adoption of network disaggregation by cloud providers and large enterprises
- Growth of ODM/white-box switching
- Evolution of open source networking technologies
- Software-defined WAN (SD-WAN) markets and technologies
- Ramifications of public cloud on datacenter networking

Core Research
- Datacenter Network Forecast and Analysis
- Application Delivery Forecast and Analysis
- Datacenter Network Infrastructure Spending
- Datacenter Networking: Hardware and Software
- Datacenter SDN/IBN Forecast and Analysis
- IT Buyer Studies Related to Deployment of Datacenter-Networking Products and Technologies
- Container Networking, Including Service-Mesh Technologies
- Datacenter Networks Customer Requirements
- Datacenter Switching
- SD-WAN Forecast and Analysis

In addition to the insight provided in this service, IDC may conduct research on specific topics or emerging market segments via research offerings that require additional IDC funding and client investment. To learn more about the analysts and published research, please visit: Datacenter Networks.

Key Questions Answered
1. What are the greatest growth opportunities for network infrastructure vendors in private and public cloud datacenters?
2. As hybrid IT and multicloud proliferate, what opportunities and challenges face vendors of datacenter SDN?
3. How will emerging converged and hyperconverged infrastructure influence network infrastructure requirements?
4. What are the key drivers of customer migration to 25/50/100/400Gb Ethernet within the datacenter?
5. How will public cloud affect the datacenter-networking landscape?
6. How will software-defined networking evolve to meet the needs of enterprises embracing multicloud?
7. What will drive the next wave of growth in the software-defined WAN, and where does SD-WAN lead?
8. How will the network evolve to support delivery of applications based on containers and microservices?
9. How disruptive will network disaggregation be in the broader datacenter networking marketplace?

Companies Analyzed
IDC’s Datacenter Networks service examines how equipment and software suppliers are positioning themselves to compete in the datacenter networking market. This service reviews the strategies, market positioning, and future direction of several providers in the networking market, including: A10 Networks, Akamai, Arista Networks, Array Networks, AT&T, Avi Networks, Big Switch Networks, Blue Coat, Broadcom, Brocade, Cavium, Cisco Systems, Citrix, CloudGenix, Cumulus Networks, Dell, EMC, Extreme Networks, F5 Networks, Glue Networks, H3C, Hewlett Packard Enterprise (HPE), Huawei, IBM, Intel, Ipanema/InfoVista, Ixia, Juniper Networks, KEMP, Level 3, Mellanox, Microsoft, NEC, NGINX, Nuage Networks/Nokia, ODM switch vendors (ODM Direct), Oracle, Pica8, Pluribus Networks, QLogic, Radware, Red Hat, Riverbed, Silver Peak, Spirent, VeloCloud, Verizon, Viptela, and VMware.