

# TREND

ADVISORY

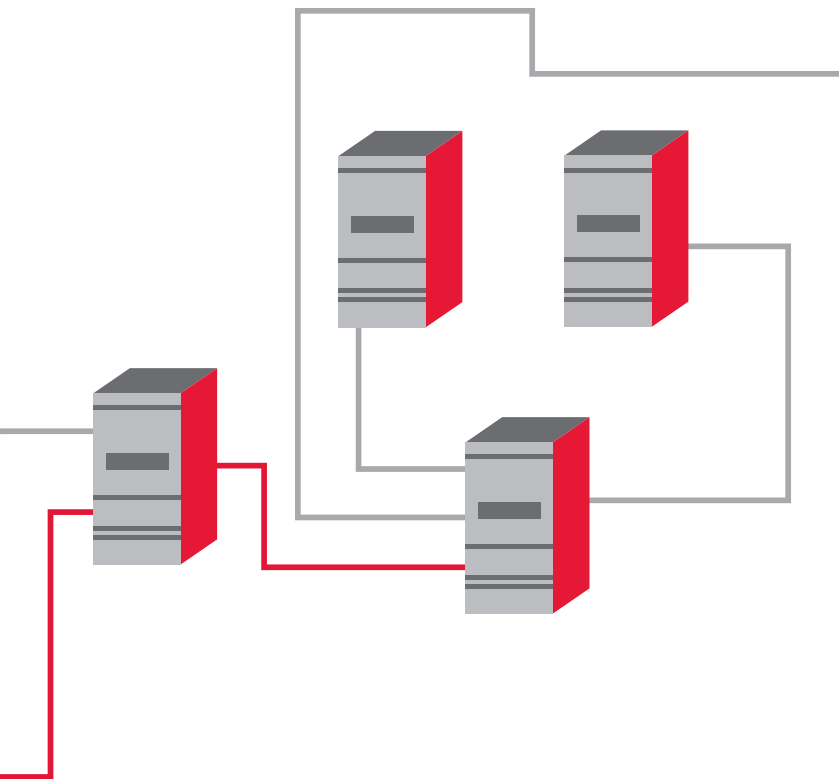
## NEXT-GENERATION NETWORKING

Highly adaptable is highly available

Having a highly available network is not merely a goal for businesses — it is a requirement. With few exceptions, every business of every size depends on uninterrupted access to a multifaceted network. Given ever-changing business and application demands, adaptability and reliability are critical — and so is cost efficiency.

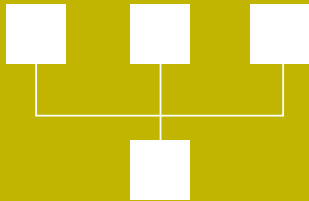
Next-generation networking (NGN), also known as convergence, high-performance networking or unified communications, is not only about bringing everything onto one network, but also about building highly available networks using a combination of redundancy and resiliency strategies. NGN tames numerous network, data and layer types by consolidating some and separating others. The network as a whole delivers high-performing applications and uninterrupted services, with open standards that make it easier and more cost effective to update.

As clear as the case may be for NGN, IT decision-makers still face competing challenges: provide reliable service and do it without additional expenditure. CDW can help, not only in getting to an NGN design within your budget, but also in making the case for it in the first place.



# WHAT'S IN A HIGHLY AVAILABLE, NEXT-GENERATION NETWORK

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## OPEN STANDARDS HELP MANAGE COSTS

NGN supports open standards, giving organizations more flexibility to integrate additional applications and services without having to add to your infrastructure — and without risking downtime.

**NETWORK COMPONENTS:** It's a network you're building, so of course you'll need the building blocks: routers, switches and other networking devices.

**LOAD-BALANCING SOFTWARE:** A balanced network is a healthy one. Monitor and distribute traffic based on predefined priorities of data type, IP address and destination, so you don't bottleneck your pathways.

**MANAGEMENT AND MONITORING SOFTWARE:** Being able to quickly diagnose connection problems and address them from a central location is essential to maintaining uptime and availability.

**VOICE AND DATA SERVICES:** Choosing the right connectivity services, whether for one or multiple business sites, is critical. It's important to provide for the number of sites you have, ensuring failover and disaster recovery and supporting wide area network (WAN) connections.

**HIGH-AVAILABILITY PLANNING:** Keeping your MTTR (mean time to repair) low requires planning the right sparing model, having configuration backup, knowing your OS strategy for bug fixes and patching, and getting a solid understanding of your network's behavior during failure.

**FLEXIBLE DESIGN:** Use open standards to integrate new applications and services, such as application acceleration, video optimization and information-leak protection, without adding to the network infrastructure.

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## CISCO'S NEXT-GENERATION APPLICATION DELIVERY

### APPLICATION CONTROL ENGINE DEVICES

Load-balancing, redundancy and security functions for applications are typically provided for in the network layer. But if user web traffic surpasses network capacity, you need devices that boost throughput, availability and security for critical operations. Application control engine devices help you use existing resources more efficiently while improving the overall resiliency of network-based applications.

### WIDE AREA APPLICATION SERVICES (WAAS)

WAAS is an application-optimization product from Cisco that accelerates performance over a WAN, centralizing applications and storage in the main data center while maintaining response times similar to those of a local area network (LAN). Deliver video to branch locations. Provide local hosting services for satellite offices. Go wide with services, stay central for managing them.

## MEET CDW NETWORKING SOLUTIONS ARCHITECTS

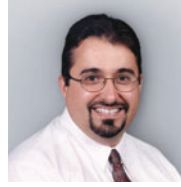
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**DAN V.**  
CCIE#11317 (R/S, Sec, Voice)  
Network Solutions Architect, Data Center and Infrastructure Team

I think of every design I do for my customers as a solution to a business problem. Keeping that in mind helps me deliver the flexibility and scalability they need, in a way that fits their budget.

I've been at this for nine years. And I believe strongly that having the right products is essential, but it isn't the whole story. Most of my engagements involve our CDW services. What that means is that we have more than just the best possible products to solve your business problems — we also have the knowledge and expertise to make each deployment a success.



**THOMAS M.**  
Network Solutions Architect, Data Center and Infrastructure Team

My philosophy when designing solutions for my customers: Focus on the business goals. Isolate and remove points of failure. Protect their investment.

After 13 years with CDW, I still get excited every time we complete a solution for a customer. I think the collective know-how of our solutions architects, specialists and delivery engineers is the most valuable resource we can offer. When you pick up the phone to call CDW, you have instant access to a team of engineers in nearly every IT domain. If you need an answer, we can get it. I'm proud to be a part of that.

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## REDUNDANT. RESILIENT. NEXT GENERATION.

The benefits of having a network that is as highly available as it is highly adaptable include:

- Gaining a greater competitive edge with a faster network, quicker transactions and better responses
- Getting the most out of your bandwidth; wasting no infrastructure
- Minimizing downtime and springing back into action
- Maintaining high-application delivery and availability
- Keeping your network's security as responsive as your business

## WHY CDW?

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We are more than your single source for the most trusted networking products. We bring experience and training to help you plan and strategize as well. Your dedicated account manager is backed by hundreds of experienced, certified networking specialists, project managers, networking solutions architects and delivery engineers, who can help you throughout the project lifecycle. Together, your CDW team can help you audit, assess and plan your next-generation network, providing you with the information and tools you need, so you can successfully make your case and implement your strategy.

# CDW SELECTS



## NETWORK MANAGEMENT

Improve operational efficiency and reduce network downtime using market-leading products and solutions for managing an end-to-end enterprise network.

The CiscoWorks LAN Management Solution is a suite of powerful management tools that simplifies the configuration, administration, monitoring and troubleshooting of Cisco networks. It integrates these capabilities into an optimal solution.

## NETWORK ROUTERS

When it comes to networking across branch locations, Cisco Integrated Service Routers enable the cost-effective delivery of high-definition collaboration. Cisco's networking products also help companies construct a network infrastructure that delivers the full potential of technologies, such as server virtualization and unified data center fabric.

## NETWORK SWITCHES

Your network infrastructure needs to quickly and efficiently transform itself with the ever-changing business environment. Cisco delivers end-to-end, enterprise-class solutions that allow your organization to adapt with agility and perform without compromise.

CDW is among an elite group of Cisco partners experienced in almost every aspect of Cisco's business, making it an ideal resource for your HA networking rollout.

## CDW TECHNOLOGY SERVICES

Our networking services can improve design and implementation.

Our highly trained solution architects will evaluate your current network environment, designing a solution that incorporates best practices for better application performance, reduced latency and increased adaptability. Our services include:

**Pre-sales:** Network design (Core, Edge, Campus and WAN), network discovery, refresh design, routing topology design and technology readiness assessment.

**Post-sales:** Installation, performance training, maintenance contracts, upgrades and migrations, and managed services.

Please contact your CDW account manager for more information on these and other services.

[CDW.com/servicestour](http://CDW.com/servicestour)

■ **CDW has the networking products and know-how to design your highly available network. Call 800.985.4239 or visit our Solutions Center at [CDW.com/resilient](http://CDW.com/resilient)**

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