



# Cisco and NetApp Use FlexPod to Deliver Seamless Network Performance at Cisco Live!

Converged infrastructure used for a decade, and this year supported 19,000+ conference attendees.



## Results delivered by the NOC

- Provided a simple, secure, sustainable, and reliable solution with reduced data center footprint
- Supported 19,000+ connected users with a high-performance, always-on network for one-week event duration
- Transferred more than 50TB of data during the event with seamless FlexPod integration into the Cisco network
- Used the FlexPod infrastructure to run the last ten Cisco Live! events in EMEAR and the US

## Customer summary

Event: Cisco Live! US, 2023 - Las Vegas network operations center (NOC)

Industry: Trade shows/Events

Location: Las Vegas, Nevada (USA)

Number of attendees: 19,000+

## Business challenges

- Provide consistent, secure, and high-quality network performance for a large technology-based event
- Replace the in-house conference facility network, which cannot meet the technological demands of Cisco Live!
- Decrease risk, improve overall attendee experience, increase scalability, and eliminate network downtime

## Network solution summary

- Full Cisco® data center with two FlexPod units in a metro cluster IP configuration
- Enterprise-level features provided for the event, including full-stack observability, modular design, secure infrastructure, agility, sustainability, and resiliency

## Technology/Application partner

NetApp: FlexPod

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“FlexPod is a partnership between Cisco and NetApp. It’s an out-of-the-box data center that allows us to have the confidence that everything in it has been tested and ratified before we use it.”

Andy Phillips, NOC Engineering Lead,  
Cisco Live! 2023

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“Cisco trusts NetApp to run its most important conferences and events for customers. It shows the partnership we have, the trust in each other, and the dedication that we have together.”

Jennifer Edgell, Global Alliance Director  
for Cisco at NetApp

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## Business challenges

Cisco Live! events occur annually in different global regions as some of the most important events for the organization. The Las Vegas event now brings together more than 19,000 attendees (with numbers rising every year) for a week. The network supporting the event must be flawless.

Traditionally, conference facility networks cannot provide the depth of visibility, programmability of APIs, database access, or visualization required to keep the network continuously running for the week of the show. To help ensure results for the event, Cisco and NetApp work to provide the following:

- Secure, always-available network that is reliable, scalable, and fully tolerant to support this large industry trade show event
- Collaboration across technology organizations to set up and run the NOC
- On-site data center that supports the demand required by this large live event
- Data storage solution to support continuity between annual events



## Cisco and NetApp collaboration in action

Cisco and NetApp share a decade-long history of standing up an infrastructure to make sure the show runs flawlessly, reflecting the cooperation and trust that exists between the organizations. For each Cisco Live! event, they set up and run a full FlexPod data center and NOC with seamless integration into the Cisco network, showcasing real-life use cases and features such as full-stack observability, modular design, secure infrastructure, and resiliency.

The NOC runs the entire conference, reflecting the combination of Cisco networking technology with NetApp storage and data management. All the show's technology runs on the private NOC, including the wireless network, security, infrastructure, and virtual machines streaming video content. The NOC serves as the epicenter for Internet connections: applications, registration, testing, and network services to support customers.

Throughout this event, the show's 19,000+ attendees experience FlexPod's capability daily through network interactions. They can see the solution in action and speak with the NOC team on building and using it. Everything that takes place during Cisco Live! is displayed in the NOC: performance, connections, interfaces, backbone, and the Wi-Fi network. FlexPod allows Cisco to provide a full data center experience on the showroom floor, with supporting cloud capabilities.

### Building the Cisco Live! Network Operations Center

NetApp and Cisco teams work closely to ensure the on-site data center can support the demands from a live event of this magnitude.

Collaboration begins months prior to the show. NetApp and Cisco engineers review the NOC systems and update technical designs as needed. For 2023, for example, engineers reduced the footprint of the NetApp units, allowing them to save power, rack space, and shipping costs without sacrificing performance.



One week before the event begins, the engineering crew sets up the wireless network, security, and infrastructure needed for the show. They establish backup and disaster recovery routines and create long-term storage for the event's resources.

Throughout the show, Cisco and NetApp employees run the NOC. Any issues that occur are handled in real time as they monitor the network security, storage, compute, virtual machines, and containers in use.

## Business results summary

Cisco and NetApp provide a simple, secure, and sustainable data center and NOC solution to support Cisco Live! They provide security across six major security domains and work together to ratify all technologies running on the FlexPod infrastructure.

This collaboration delivers the following benefits year after year:

- Avoid gaps that may exist in traditional conference networking
- Deliver a network with scalability, flexibility, ability to replicate, and fault tolerance
- Run everything that powers the show
- Provide the same FlexPod benefits during the show that any customer can expect to receive

This alliance allows IT departments to gain new insights with full-stack visibility and customized automation capabilities that increase operational productivity through deep technology integration aimed at solving customers' biggest challenges.

## Explore our joint solution

Learn more about [FlexPod](#), the converged infrastructure from Cisco and NetApp, and how it can help you optimize your network performance and reliability.

## Main components list:

### NOC components

- Over 800 Catalyst® switches
- 1200+ Cisco wireless access points
- Full Cisco data center including two FlexPod units in a metro cluster IP configuration
- Cisco next-generation firewalls protecting the edge and the data center
- Cisco ASR routers supporting 3 x 100G links to the Internet

### FlexPod

This converged infrastructure solution from NetApp and Cisco includes the following:

- NetApp storage and data management
- Cisco UCS® X-series compute chassis
- Cisco networking

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