

5 Key Data Center Trends for 2024

The currents driving change in data center networking.



This will be a landmark year for AI

But, it's not the only motion making waves in data center networking this year.

1



Enterprises choose: On-premises, cloud, or hybrid AI?

The need for AI/ML compute resources is strong, but should organizations go with a hyperscaler or build their own data center?

On-prem

- ✓ Greater control
- ✓ Potentially lower OpEx
- ✓ Lower latency

- ✓ Higher bandwidth
- ✓ In-house training/inference data
- ✓ Secure

Cloud

- ✗ Hidden complexity
- ✗ High OpEx
- ✗ Inflexible

Sustainability takes center stage

AI training and inference is pushing power requirements up. Way up.

What's next for sustainable AI data centers?

- 100% renewable-powered
- BYOP (bring your own power)
- Liquid immersion and other new cooling methods



2

Data center network management gets cloudier

Scaled-up, reliable private infrastructure with complex workloads can't be run from the command line alone.

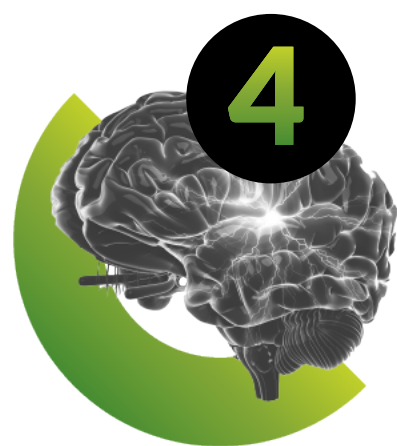


➤ Traditional networking tools that seamlessly integrate with cloud technologies will thrive, while bulky, siloed, old network management systems that aren't integration-first will wither.

AI Ops moves into the data center

With explosive growth in applications and workloads, keeping end-user experiences consistent is more crucial than ever.

AI Ops adapts and learns in real time, enabling more dynamic and intelligent network management.



4

When problems do occur, AI Ops will actively perform the troubleshooting steps normally taken by a network operator.



5

AI Ops raises the bar for multivendor network automation

The combination of AI and Intent-Based Networking (IBN) will enable network teams to finally achieve their automation goals and assure high application performance and availability.



To learn more about these trends, read the eBook, **"5 Key Data Center Trends for 2024"**