Data#3

Pathways to Intent-Based Networking

With the announcement that Cisco Prime is now End-of-Life and no longer being developed, organisations must consider their longer-term network management and monitoring solutions.

The defined migration path is to Cisco Catalyst Center (formerly known as DNA Center), but Cisco Catalyst Center is so much more than just network monitoring and management. It's also the network controller and analytics platform at the heart of Cisco's shift to intent-based networking.

95% of network changes today are completed manually and introduce errors in 2 to 3 times higher than the cost of the network.[1]

What challenges does intent-based networking address?

- Accelerating digital transformation demands
- Grappling with the realities of supporting hybrid work models
- The time it takes to provision, configure and upgrade networks
- Security becoming a complex web of overlapping solutions
- Networking issues are compounding as troubleshooting takes too long

59% of survey respondents said they were prioritising centralised visibility, security and a top cloud access networking initiative over the next 24 months[2]

Why should you be considering Intent-Based Networking (IBN)

1. **Operational Efficiency:** The benefits of intent-based networks include the ability to quickly set up new physical locations, reduce manual tasks, alleviate pushing configuration changes to numerous network devices, and identify the causes of network or application slowdowns.
2. **Proactive Management:** The combination of network analytics and machine learning means issues are solved before they arise.
3. **Security:** Detect and contain threats everywhere, in real-time, achieving integrated network security.
4. **Speed and Agility:** The increasing use of network-based automation helps achieve faster operational results, the ability to contain issues more rapidly, and to reduce downtime.
5. **IT Focus and Compliance:** IT staff can focus more on delivering business value and reducing compliance risk.
6. **Investment for Innovation:** IT and business innovation can be realised continuously, as it is built on a suite of open networking platforms.
7. **Improved SDN:** For practitioners of Software-Defined Networking (SDN), IBN addresses SDN's shortcomings by adding context, learning, and assurance capabilities, which are coupled tightly with policy and intent.

56% of survey respondents agreed that complexity and variable security policies were the most significant network challenges faced when managing hybrid cloud and distributed workloads[2]

Cisco Software-Defined Access (SD-Access)

Cisco Catalyst Center is a key component of Cisco SD-Access and the shift towards software-defined everything.

Cisco SD-Access specifically provides:

Simplified Operations

Stretched IP subnets and centralised configuration at the fabric edge and border nodes eliminate the need for hop-by-hop configuration.

Enhanced Endpoint Visibility

Advanced analytics for user and device identification and profiling - enhancing endpoint visibility across the network.

AI/ML Techniques

Artificial intelligence and machine learning techniques classify similar endpoints into logical groups.

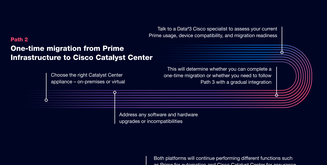
Seamless Wired and Wireless Integration

Unified management for wired, wireless, and software-defined network services under a single framework, simplifying network administration.

41% of survey respondents agreed that securing user access, IoT connections, applications, mobile devices or cloud-based solutions was the leading networking obstacle to digital initiatives[2]

Catalyst Center Deployment Options

The Cisco DNA Center Virtual Appliance is designed to be deployed in a public cloud service starting with AWS (and later Microsoft Azure and Google Cloud Platform), or in a VMware ESXi (and later Hyper-V and KVM) virtual environment located on-premises or in a co-location facility.



Migration Pathways from Cisco Prime

The reality network admins face is that there is no such thing as a 'standard' network, no 'one size fits all'. Every environment has unique challenges that must be considered, rather than blindly following a single predetermined path.

There are three pathways Cisco Prime users can follow:

[1] Cisco 2019, 'Wi-Fi 6 Network Automation', Scribbler Data

[2] Cisco 2019, '2020 Global Networking Trends Extra Results', Scribbler Data

Unlock the potential of a modern network infrastructure with Data#3, your trusted Cisco Master Specialised Partner for Networking and Security, and the APJC Cisco Customer Experience Partner of the Year. Our expert team is ready to guide you towards the best migration path, ensuring you harness the security and operational advantages of internet-based networking.

Let's transform your network together – reach out to us today.

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