



50%

increase in the
number of
applications
supported over the
next two years.¹

Take your network to where the data is.

To keep up with the massive influx of data and increased demands on the network, networking professionals have to learn to broker, connect, build, and govern not only in the data center, but across a vast multicloud landscape. Cisco Application Centric Infrastructure Anywhere (ACI Anywhere) is a major step forward in managing complexity, maximizing business benefits, and deploying workloads in any location and on any cloud.

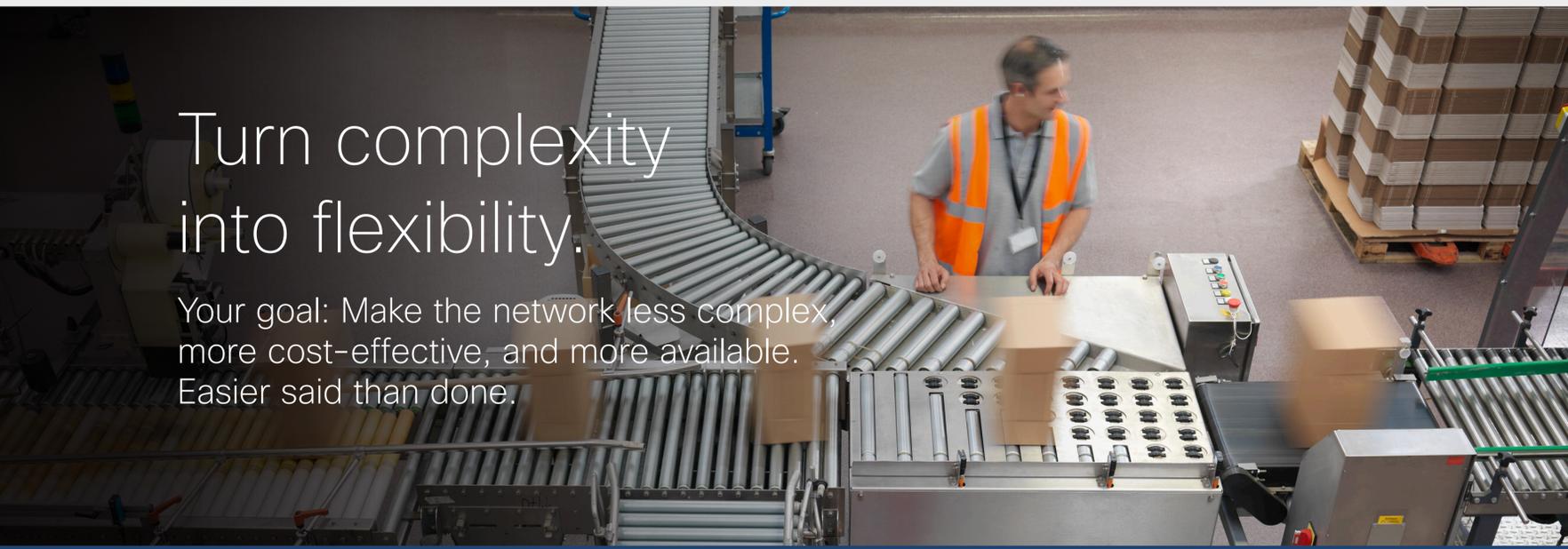
Chapter 1
Challenge

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1. *Transforming Applications and Multicloud Operations*, an IDC Infobrief sponsored by Cisco, August 2019.
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Turn complexity into flexibility.

Your goal: Make the network less complex, more cost-effective, and more available. Easier said than done.

Modern data centers are increasingly complex and distributed—spanning multiple geographically diverse sites and clouds and involving different technologies from a variety of vendors that are operating at a range of different capacities and capabilities. As a result, network engineers are facing a variety of challenges:

88%
do business with two or more cloud service providers; the average is 16.²



Agility

Applications are the lifeblood of modern business. They need to be deployed quickly on the network, transferred seamlessly to any environment, and scaled rapidly, having the ultimate resource elasticity, without compromising availability or security.



Availability and disaster recovery

Businesses are dependent on applications and data, so it is critical that the network connecting them stays up and running—and it needs to play a more proactive role in overcoming disruptions and disaster recovery anywhere along the chain.



Security

In the expanding multicloud data center, the network plays one of the most vital roles in protecting a business’s reputation and assets. Securing the data center and its applications requires a holistic strategy where security is pervasive.



Multicloud

Many businesses are looking to multicloud to meet their ever-growing infrastructure needs. But that leaves them with a new challenge: Their on-premises infrastructure must coexist peacefully with public clouds while still providing automated network connectivity, consistent policy management, and simplified operations for multicloud environments.



Day 2 operations

Network operators face the challenge of managing change according to intent, with the need to have visibility into their fabric and the ability to quickly remediate issues when troubleshooting providing for a truly intent-based network (IBN). As networks have grown more critical to every organization’s mission, the need to understand what is going on in and across the network has become vital to the success of network staff and IT organizations.



ROI

Cost remains one of the chief limitations for engineers looking to implement a premier solution, and a strong potential for return on investment remains one of the biggest drivers for business decision makers.



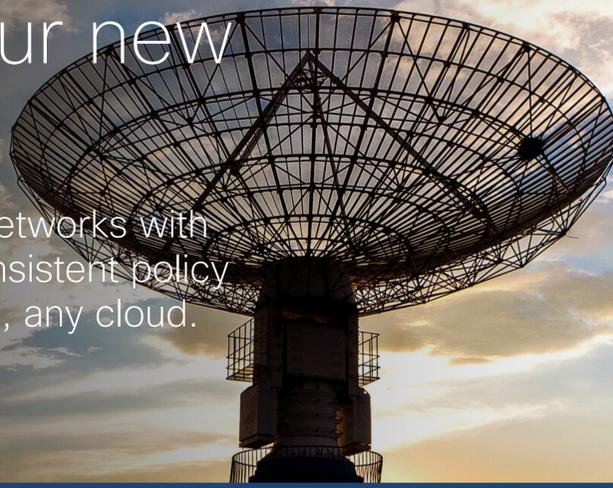
So how do you overcome these challenges?
Strategy



2. IDC CloudPulse 1Q19, IDC, June 2019, n=2,211.
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Cisco ACI is your new best friend.

You need to scale multicloud networks with operational simplicity and a consistent policy model—in any app, any location, any cloud. We can help.



Whether you are just gearing up to make the move to multicloud or you are looking for a way to simplify existing processes, Cisco ACI Anywhere is designed to help you overcome technology limitations and give you the same automation, multicloud, and security capabilities for any application on any infrastructure and any cloud.

69%
have a multicloud strategy.³

“It was the only solution that gave us single-pane-of-glass management.”

– Ben Vickers,
Director of IT, ProMedica

What is Cisco ACI?

Cisco Application Centric Infrastructure is Cisco’s leading software-defined networking (SDN) solution, facilitating application agility and data center automation. Cisco ACI is traditionally deployed through a combination of other industry-leading solutions, including the Cisco Nexus 9000 Series data center switches, the Cisco Application Policy Infrastructure Controller (APIC), and other hardware and software solutions.

“ACI was perfect for us. It allowed us to automate the whole network stack; it integrates with open source technologies like Terraform, Kubernetes, and Ansible; and it unifies network operations for bare metal, virtual, and container workloads.”

– Andreas Kurz,
Infrastructure Engineer,
Runtastic

What’s new?

The data center is no longer a place or a fixed location but instead is defined as wherever the data is created, processed, and used. Cisco ACI Anywhere helps network engineers by extending the capabilities of the innovative ACI solution to any location: small and large, on-premises and remote, private and public cloud, satellite data centers and 5G-enabled telecom edges.

Key benefits of Cisco ACI Anywhere:

- Automation of IT workflows and application deployment agility.
- Open APIs and a programmable SDN fabric, with 65-plus ecosystem partners.
- Security through whitelisting, policy enforcement, microsegmentation, and analytics.
- Workload mobility at scale.

Ameritas builds a secure, scalable, and operationally simple data center network with Cisco ACI. [Watch the video >](#)

“Other networks get in the way, but Cisco ACI makes things very easy.”

– Raul Tomas Tornero,
Global Head of Networking,
BBVA

[See more customer stories >](#)



What can help with your multicloud data center environment?
Solution



3. <https://www.cisco.com/c/en/us/solutions/data-center-virtualization/application-centric-infrastructure/case-studies.html>
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Your key to multicloud mastery

Cisco ACI Anywhere delivers the full package: scalability, application agility, security, and automation.

Let's review: You want a robust multicloud environment, but you need a little help getting there. When you are building a multicloud environment and connecting on-premises data centers with public cloud, there are a lot of things to consider.

92%

of customers have both public and private cloud environments installed.⁴

A solution designed for your needs

Need to create a single, consistent policy across multiple on-premises and public cloud instances?

Cisco cloud ACI

- Translate ACI policies into cloud-native constructs through public cloud APIs to create a single, consistent policy abstraction across multiple on-premises and public cloud instances in Amazon Web Services (AWS), Microsoft Azure, and Google Cloud Platform.
- Support policy-driven connectivity and simplify routing between on-premises data centers and public clouds (including cloud first/cloud only). Ensure consistency of network security policies, ultimately helping with compliance demands.
- Features include cloud provisioning; discovery of instances and services; application segmentation; Layer 4 to Layer 7 service stitching; fault management; visibility and monitoring; statistics; role-based access control (RBAC); and authentication, authorization, and accounting (AAA).

Looking to extend on-premises Cisco ACI networks into remote bare-metal clouds?

Cisco virtual ACI

- Allows engineers to extend their on-premises ACI networks into remote locations, bare-metal clouds, colocation providers, and brownfield environments.
- Reduces network provisioning for a dramatic increase in agility.
- Available as a software-only version of Cisco ACI, without the need for additional hardware.

Ready to push policy to multiple data centers across the globe?

Cisco ACI Multi-Site Orchestrator (MSO)

- Expands functions to the cloud sites and automates the creation of overlay connectivity between all sites (on premises and in private and public clouds).
- Continues to be the central orchestrator of intersite policies, not only publishing policies to on-premises ACI data-center sites but also pushing the same policies to multiple public cloud sites.
- Supports advanced scale and encryption capabilities, allowing you to push policy to multiple data centers and public clouds across the globe in one step.

Need extended connectivity in remote locations?

Cisco ACI Remote leaf

- Addresses the need to extend connectivity and consistent policies to remote locations where it is not possible or desirable to deploy a full Cisco ACI Pod.
- Extends the ACI policy model outside the main data center to remote sites such as satellites, colocations, and distributed data centers.
- Provides unique value with centralized policy management, a control plane for remote locations, and small-form-factor solutions.

Looking to push your Cisco ACI capabilities even further?

Cisco ACI integrations

- Cisco Assurance and Insights Suite: Comprehensive day 2 operations software portfolio that provides analysis for all components of a data center to assure business intent, guarantee reliability, and identify performance issues in a network before they happen.
- Cisco AppDynamics: Correlate application health and network constructs for optimal application performance, deeper monitoring, and faster root-cause analysis.
- Cisco SD-WAN: Orchestrate across the data center, campus and branch, and public cloud to reduce operational complexity and increase end-to-end security.
- Cisco DNA Center/Cisco Identity Services Engine (ISE): Understand and map user identities consistently to endpoints and applications throughout the entire network—from the campus to the data center.



Explore



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Make the move to multicloud with Cisco ACI.

[Intro](#) | [Challenge](#) | [Strategy](#) | [Solution](#) | [Explore](#)

Ready to dive even deeper into Cisco ACI Anywhere? Check out the resources below:

[View a demo](#)[Get the data sheet](#) CONTACT US