Cisco Cloud Application Centric Infrastructure on Microsoft Azure

**Challenges**

**Need a consistent security posture both on premises and in the cloud**

Enterprises have adopted digital initiatives to increase customer loyalty, create new revenue streams, and accelerate business growth, resulting in cloud-based enterprise application development shifting toward a microservices architecture. With this trend, IT organizations are challenged to maintain governance, compliance, agility, flexibility, and TCO optimization for legacy, virtualized, and next-generation applications across on-premises sites and in the cloud. Business continuity demands a consistent security and policy posture across all applications and environments. As cloud adoption accelerates, organizations need the right tools to maintain consistency and visibility everywhere, with a simplified operating model.

**The Cisco solution**

**Cloud ACI on Microsoft Azure for a hybrid environment**

Cisco Cloud Application Centric Infrastructure (Cisco Cloud ACI™) is a comprehensive solution for simplified operations, automated network connectivity, consistent policy management, and visibility for multiple on-premises data centers and Microsoft Azure Cloud. Cisco Cloud ACI captures business and user intents and translates them into native policy constructs for applications deployed across both on-premises data centers and Microsoft Azure. It uses a holistic approach to enable application availability and segmentation for bare-metal, virtualized, containerized, or microservices-based applications. The common policy and operating model drastically reduces cost and complexity, providing a single management console to configure, monitor, and operate multiple environments spread across your data centers and Azure Cloud.
Benefits

Cisco Cloud ACI on Microsoft Azure Cloud extends the successful capabilities of Cisco ACI in on-premises environments to Microsoft Azure Cloud.

**Automate and secure connectivity**
With the Cisco Cloud ACI solution, you can use the same operating model for Azure instances as you do for your on-premises data centers today.

**Enable consistent security posture**
A common security posture across all locations enables consistent application segmentation, access control, and isolation across varied deployment models.

**Enable next-gen apps with governance**
With Cisco Cloud ACI, you can enable cloud-based application innovation while still providing consistent governance and control*.

**Optimize total cost of ownership**
Lower your operational costs by automating connectivity, using a common policy management model across both the on-premises data center and Azure while leveraging existing investments.

Cisco Cloud Application Policy Infrastructure Controller

Cisco Cloud ACI introduces the Cisco Cloud Application Policy Infrastructure Controller (Cisco Cloud APIC), which runs natively in the cloud to provide automated connectivity, policy translation, and enhanced visibility of your Microsoft Azure workloads. This solution brings a suite of capabilities to extend your on-premises data center into true cloud-native architectures, helping to drive policy and operational consistency regardless of where your applications or data reside.
Cisco Cloud ACI on Microsoft Azure

Cisco Cloud ACI can help organizations develop a holistic infrastructure strategy that takes an architectural approach toward solving the unique challenges of hybrid cloud deployments. Using this architecture, Cisco can guide organizations in a step-by-step journey that optimizes their technology investments and accelerates solution deployments across any location. Cisco Cloud ACI delivers on the promise of extending policy-driven automation across the on-premises data center and Microsoft Azure.

Get started with Cisco Cloud Application Centric Infrastructure on Microsoft Azure

Visit Azure Marketplace or www.cisco.com to learn more and get started today.

Solution capabilities

Deploy next-generation applications with consistent operations, visibility, and control

- Enable a common operational model across the on-premises data center and Azure with simplified visibility and troubleshooting capabilities
- Integrate cloud-native services between on-premises data centers and Azure
- Automate cross-domain service chaining of application traffic across various L4–L7 devices to scale and secure any application, anywhere

Enable common policy abstraction, governance, and compliance across environments

- Implement a common whitelist policy model for both your on-premises and cloud infrastructures
- Simplify deployment of cloud-native, containerized, virtualized, or bare-metal applications with consistent segmentation policy, security, and visibility
- Deliver consistent application segmentation, governance, and compliance across the on-premises data center and Azure

Enable business continuity and disaster recovery

- Allow organizations to maintain or quickly resume mission-critical applications using a backup and recovery site in the cloud
- Provide business continuity for organizations via always-on encrypted connectivity across multiple regions and your on-premises data center

Enable elasticity for resources across the on-premises data center and cloud

- Automate and scale data center extensions into Microsoft Azure. Enable on-demand cloud bursting whenever on-premises data center workloads require additional Azure resources
- Provide on-demand agility, cost savings, and consistent security policy for any workload in any location