Application Centric Infrastructure

REDEFINE THE POWER OF IT

The Challenge

The role of business applications has become crucial in helping reach new customers, extend into new markets, and ultimately grow the business. However, the needs of today's applications have changed, and IT infrastructure has to meet the different requirements across physical, virtual, and cloud-based environments to accelerate application delivery times, better align IT with business activity, and reduce time to revenue.

Applications and business IT leaders expect a simple, flexible, and agile infrastructure that better aligns with the needs of the entire application lifecycle. They prefer to overcome functional silos, bringing together infrastructure, security, application, and cloud teams through a holistic architecture and policy-driven framework that delivers the benefits of hardware performance and software flexibility.

The Solution

Cisco transforms next-generation data center and cloud deployments with innovative Application Centric Infrastructure (ACI) that radically simplifies, optimizes and accelerates the entire application deployment lifecycle.

With tight integration between physical and virtual elements, an open ecosystem model, and innovation spanning ASICs, hardware and software, Cisco's Application Centric Infrastructure takes a holistic system-based approach. This unique approach leverages a common policy-based operational model across ACI-ready network, compute, storage and security elements, overcoming silos and drastically reducing cost and complexity.

This redefines the power of IT to be more responsive to changing business and application needs, enhancing agility and adding business value.

ACI is a fundamental rethinking of the way you provision the data center network. It allows for:

- Rapid and consistent deployment of applications
- Automated remediation of network issues
- Dynamic security policies
- Predictable, consistent network services independent of application/workload location, including public and hybrid cloud deployments

The resulting capabilities can dramatically reduce IT costs by automating nearly all application and network provisioning tasks, while allowing IT to be significantly more responsive to changing business needs by accelerating application deployment and policy changes and fundamentally improving resource allocation and efficiency. The ACI fabric also removes obstacles to scale and network visibility that competitive overlay solutions introduce.

Cisco's Value to You, Our Partners

In the ACI Fabric, applications drive networking behavior, not the other way around. Pre-defined application requirements and descriptions ("policy templates") automate the provisioning of the network, application services, security policies, tenant subnets and workload placement. Automating the provisioning of the complete application network reduces IT costs, reduces errors, accelerates deployment and makes the business more agile. The solution includes:

- The new Cisco Nexus® 9000 Series Switches, comprising modular and fixed switches that support two modes, NX-OS mode or ACI mode, enabling customers to build out their switching infrastructure while maintaining operational consistency with their existing Nexus architecture
- The Cisco Application Policy Infrastructure Controller (Cisco APIC), the key architectural component that is the unified point of automation and management for the ACI Fabric, policy programming, and health monitoring.

- An ecosystem of technology partners using the open and extensible nature of the fabric, including:
  - Layer 4 through 7 services with Cisco ASA physical and virtual security appliances, Citrix, and F5
  - Cloud and automation solution integration with Cisco UCS® Director, OpenStack, Puppet Labs, VMware vCloud Director, Splunk, NetScout, and more

With these new innovations, coupled with a transformative vision of the new data center, partners are able to:

- Use the Nexus 9000 Series to address the needs of customers looking for next-generation switching architecture, superior price/performance, power efficiency, and 10 and 40 Gigabit Ethernet port density with open programmability
- Create an architecture that is future ready and able to transform into an Application Centric Infrastructure at your customer's own speed
- Take the conversation beyond the traditional compute, network, storage, and security silos, and position a true architectural view of the data center

Cisco Services for ACI

Cisco Services can complement your practice, speed time to delivery on new Cisco Application Centric Infrastructure (ACI) initiatives, and positively affect your profitability. When Cisco Certified Partners resell Cisco Services, their overall service margins are 11 to 23 percent higher, and their margins are 14 to 26 percent higher.[*]

These Cisco Branded Services can be resold by Cisco Certified Partners:

- **Cisco Readiness Planning** capabilities help transform data center networks to an ACI through analysis and recommendations for detailed migration plans.
- **Cisco Quick Start Service for Cisco Nexus 9000** provides consulting services to help deploy the Cisco Nexus 9000.
- **Cisco Accelerated Deployment Services for Nexus 9000** supports rapid transition to an ACI.
- **Cisco Data Center Services for Operations Enablement** addresses all stages of the operations lifecycle to prepare environments for ACI.

- **Cisco Nexus 9000 Technical Support** can be delivered by partners through Cisco Partner Support Service[**] or Cisco Smart Care;[**] partners who want support delivered by Cisco can choose Cisco SMARTnet or Cisco Smart Net Total Care.[***]

In addition, Cisco Services to Secure the Cisco Data Center Infrastructure can help ensure security for the new infrastructure, and can be co-delivered by Cisco and Cisco Security Specialized Partners.

For more services information, contact as-aci-support@cisco.com.

To Find Out More

To learn more about these game-changing benefits that combine the performance and scale of hardware with the flexibility and speed of software—and the services that can help you accelerate deployments—visit us at:

- www.cisco.com/go/aci

---

* Cisco Global Touch Survey, 2012

** Contact your local Cisco Partner Services Development Manager about availability of smart capabilities for the Nexus 9000

*** Cisco products only