



Cisco Cloud Network Automation Provisioner Presents an Optimized Cloud Model

Benefits of an Optimized Cloud Model¹

- **Efficiency:** Reduce IT costs 77 percent and improve your ability to meet service-level agreements (SLAs) by 72 percent.
- **Speed:** Deliver cloud services in minutes, not days or weeks. Improve your time to provision IT services by 99 percent.
- **Opportunity:** Deliver market-leading cloud services and value. Improve your strategic IT budget allocation by 200 percent and increase revenue growth by 10 percent.

¹ IDC InfoBrief, sponsored by Cisco, "Don't Get Left Behind: The Business Benefits of Achieving Greater Cloud Adoption," August 2015. Percentages refer to improvement from ad hoc to optimized cloud adoption. <http://www.cisco.com/c/dam/en/us/solutions/collateral/trends/cloud/cisco-bca-infobrief.pdf>

Cisco Cloud Network Automation Provisioner

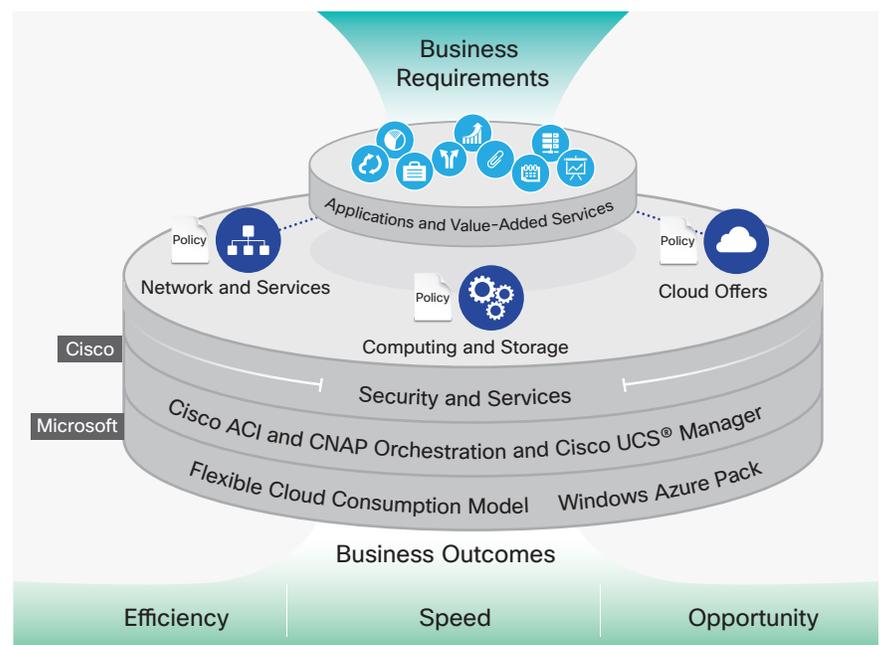
Quick and Efficient Policy-Driven Automation

Cloud providers and their customers can spend months planning and deploying the network and server components of a reference architecture. With the Cisco® Cloud Architecture for the Microsoft Cloud Platform solution (Figure 1), you can rapidly and confidently deliver new cloud services while increasing your profitability.

The Cisco Cloud Architecture for the Microsoft Cloud Platform solution integrates Cisco Application Centric Infrastructure (Cisco ACI™) and Microsoft Windows Azure Pack (WAP) through the Cisco Cloud Network Automation Provisioner (CNAP). CNAP sits at the heart of this solution, automating the deployment of network elements and network services, while WAP, together with Microsoft System Center Virtual Machine Manager (SCVMM), deploys and configures servers and application services.

Network, router and firewall services, together with ACI application policies, are mapped to infrastructure policies in the form of patterns, and are stored in the WAP tool. Patterns that are tuned for specific workloads, such as Microsoft SQL Server, can easily be instantiated by the administrator with complete security, firewalls, and more for each workload. The capability to map and integrate policies end-to-end, across the multi-tenant cloud data center fabric, is unique to this offering.

Figure 1. Cisco Cloud Architecture for the Microsoft Cloud Platform Is Defined by Applications, Driven by Policy, and Delivered as a Service



Benefits of CNAP

- Shortens time to market, increases agility
- Leveraging SDN, streamlines management tasks, reducing OpEx
- Automates deployment of managed network elements and network services

Defined by Applications—Driven by Policy

Business requirements determine which applications are needed, and application-based policies let you deliver on those requirements easily. CNAP and WAP enable consistent and common policies that are provided through profiles and network containers. With a common policy model, cloud providers and their customers benefit from operational simplicity with comprehensive and consistent security and compliance.

Enabling Secure, Portal-Driven Tiered Services

CNAP integrates directly into WAP, providing holistic portal-based instantiation and control of networking, network services and compute resources and secure multitenancy across the entire system. Secure Cisco network containers can be created in minutes, providing off-the-shelf, yet flexible, deployment of tiered cloud service offers. For each cloud tenant, CNAP creates a Cisco Application Policy Infrastructure Controller (APIC) network container and orchestrates hundreds of configuration lines. This process can be performed:

- Securely and repeatedly for hundreds of tenants
- Across the full tenant lifecycle, including tenant creation, updating, and deletion
- In minutes, at software-defined networking (SDN) speeds
- Natively from Windows Azure Pack

The result of this synergy is a complete reference architecture, supported by Cisco and Microsoft and unique in the industry. It is specifically tuned for tiered cloud-based as-a-service applications, as well as for many other cloud provider offerings. CNAP can dramatically reduce your time to market for new services and increase your agility, providing faster time to value, lower engineering costs, and the capability to deliver timely, value-added services to your customers.

Next Steps

For more information about Cisco Cloud Architecture for the Microsoft Cloud Platform and CNAP, visit www.cisco.com/go/ccamcp.