Transform Your Business with Hybrid Cloud

What if IT had the technology and processes to say “yes” to service requests regardless of their location? With Cisco’s self-service automation, along with your standardized services and use policies, IT can fulfill those service requests, with quick delivery of secure infrastructure and application services across multiple hybrid cloud environments.
Overview

IT organizations are faced with rapid and far-reaching changes. Companies are becoming increasingly user centric, instead of IT centric. No longer does IT hold the same influence and control over technology as in the past. Line-of-business (LoB) and application developers are placing greater pressure on IT to:

• Deliver a self-service user experience
• Provide developers with freedom of choice to deploy applications in hybrid environments
• Transform IT from a reactive, slow organization into a proactive part of the business

The cornerstone of this business transformation is automation. Cisco ONE™ Enterprise Cloud Suite provides the automation tools you need to deliver a self-service experience for all users and freedom of choice for application teams and at the same time transform IT into a business partner.

Benefits

• Intensify IT productivity in order to keep pace with business.
• Enable LoB and application teams to interact with technology the way they mandate.
• Accelerate time-to-market for new applications and services.
• Increase user productivity and efficiency with a centralized self-service portal.
• Provide infrastructure and application services that meet your business’s governance and use policies.

Need for Speed

Digital transformation is occurring everywhere. Read any technical website, blog, or conference agenda, and you will see that the industry is consumed with the topic. And this transformation can’t happen fast enough.

To respond to all the changes in technology, many organizations are seeking to transform across three areas: users, applications, and workload placement. The modern enterprise has become user centric, instead of IT centric, and a more diverse set of users now have significant influence and control over technology decisions. Modern applications have become less dependent on the data center and more focused on mobile environments, which has changed the way they are created. Workloads are no longer housed safely behind the confines of the on-premises data center. Users, application, and workloads now operate in public and hybrid cloud environments. And these changes are all happening concurrently, which especially places burdens on IT organizations arranged by technology silos rather than the needs of business units.
Automation is the cornerstone to transformation. The cloud has become the practical option for an increasing set of enterprise workloads and the platform of choice for application teams. LoB and application teams need to move fast, and IT needs to keep pace. IT transformation is a necessary step in transforming your business for the digital world. IT needs to move to an “as-a-service” model, in which applications and services are defined, offered, and orchestrated based on business goals rather than technology.

How to Buy
Cisco ONE Enterprise Cloud Suite is a member of the Cisco ONE Software Family, which delivers purchasing flexibility for data center, WAN, and access software solutions. Cisco ONE Enterprise Cloud Suite is a part of the Cisco ONE for Data Center solution and consists of four components. Each component can be used individually, or all components can be used together to create an integrated hybrid cloud solution. All components were designed to work together, providing you with an incremental approach to hybrid cloud automation.

• Infrastructure Automation: This component delivers all-inclusive provisioning and management of physical and virtual resources across computing, networking, and storage layers. The Infrastructure Automation & IaaS component replaces manual, trouble-ticket-based processes with automated workflows that deliver consistent and secure infrastructure instances within minutes. This component simplifies and automates the delivery of complex processes such as:
  - Setup and resource assignment for bare-metal environments
  - Configuration and deployment of numerous security and isolation models designed for specific applications
  - Day-0 setup and day-1 definition and deployment of resources across converged and hyperconverged infrastructure
  - Built-in governance and use policies that define security and isolation models and access entitlements across the organization

Achieving Success with Innovation and Automation

“We can deploy a virtual data center for a tenant in 20 minutes by automating 56 manual tasks.”
— Velibor Kokanovic
Director of IT Operations, Telekom Srbija

• Cloud Management: This component allows the modeling, provisioning, and deployment of application and supporting infrastructure into approximately 20 data center, private, and public cloud environments. By abstracting the application from the underlying cloud environment, this patented approach helps ensure that infrastructure is set up and deployed to meet the specific needs of the application.

Before deploying an application profile, a developer can use the built-in benchmark tool to perform real-time comparisons of multiple cloud platforms based on performance and cost factors. This analysis is not a simulation but a native deployment of the application simultaneously into each platform, where it is monitored for performance and cost efficiency. The result is an easy-to-read graphical representation comparing each selected cloud platform, helping ensure that the developer gets the best performance with the greatest cost efficiency for the organization.

• Service Management: As applications move to cloud-based architectures, each application adds a self-service portal to deliver a better customer experience. This approach has resulted in portal sprawl, with an average of 20 self-service portals residing in your data center. Studies indicate that replacing portal sprawl with a consolidated, unified approach in your organization can:
  - Increase end-user productivity and efficiency by 79 percent
  - Increase customer satisfaction by 65 percent
  - Increase the business’ understanding of end-user needs by 65 percent

1 HDI Research Brief, December 2015
This component component provides customers with the ultimate self-service user experience by replacing multiple portals with a single, unified portal that simplifies consumption and lifecycle management. Built-in electronic forms help you easily deliver unique experiences to each customer, which increases productivity. Role-based access empowers users to monitor and manage all applications, services, and infrastructure instances under their control. Users can also perform lifecycle actions such as take a snapshot, clone a virtual machine, or start or stop a service, eliminating the need to issue a trouble ticket for IT to complete these actions.

This component can be used with the other components individually, for example, with the IaaS component or the cloud management component, or with all the components installed, for a consolidated portal for a hybrid cloud.

• **Big Data Automation:** This component helps you deploy, adapt, and scale Hadoop big data infrastructure from a single user interface. As organizations implement Hadoop to meet their growing data and business needs, operational challenges often emerge related to the Hadoop and data center environments. The big data component provides a single-touch solution that automatically deploys Hadoop clusters residing on the Cisco Unified Computing System™ (Cisco UCS®) Common Platform Architecture (CPA). Unified management across physical infrastructure and Hadoop software reduces the complexity and time needed to deploy Hadoop clusters.

This component integrates with major Hadoop distributions such as Cloudera, MapR, and Hortonworks distributions. It communicates with the Hadoop managers, providing IT professionals with a systemwide perspective as well as assisting with the correlation of Hadoop activities with network and computing activities on individual Hadoop nodes.

**Hybrid Cloud Management**

“Developers and DevOps pros increasingly are turning to multiple cloud platforms to quickly build and transform applications.”

– The Forrester Wave: Hybrid Cloud Management Solutions, Q1 2016, February 2016

**Use Cases**

**Infrastructure Automation**

• Simple automation to begin the digital transformation journey
  - Unification of Cisco UCS domains
  - Secure microsegmentation
  - Performance monitoring and capacity planning
• Data center automation
  - Self-service consumption of infrastructure (computing, networking, storage, and virtualization resources)
  - Multivendor automation and orchestration

**Cloud Management**

• Application deployment and management across data center and private and public cloud environments
• Integration of single application profiles into DevOps and continuous integration and continuous deployment (CI/CD) solutions
• Optimized capacity augmentation for data center and private and public cloud resources
Service Management
- Consolidated self-service portal and catalog for data center and business services
- User-centric portal for Cisco ONE Enterprise Cloud Suite components (for example, IaaS or cloud management)

Big Data Automation
- Single-touch deployment of Hadoop clusters built on Cisco UCS architecture
- Consolidated view of Hadoop activity with networking and computing on individual Hadoop nodes

The Cisco Advantage
To achieve speed and agility in the data center, you need heterogeneous infrastructure automation. This solution supports Cisco and industry-leading third-party hardware vendors, so you can automate your entire data center instead of only virtual resources or proprietary hardware solutions.

And you don’t need to install all the solution components to get started. Modular automation allows you to deploy only the automation you need to deliver immediate ROI to your business and then expand as your business needs expand.

Automating Hybrid Cloud for Fast Service
“Now we can build even the largest environments within a day or two, helping customers achieve more agile business.”

— Adam Simpson
General Manager of Cloud Services, Harbour IT


The Time to Start Is Now
Organizations today are confronted with rapid and far-reaching changes that require you to transform your business. Automation is critical to meeting customer expectations for service delivery, increasing IT productivity, and providing freedom of choice for application teams. Cisco ONE Enterprise Cloud Suite helps you transform all these areas of your business so that you can capture new revenue and business opportunities. For additional information, visit www.cisco.com/go/cloudsuite. Then contact your Cisco sales representative or Cisco authorized channel partner.

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