HP Cloud Service Automation

Open, extensible service lifecycle management for private and hybrid clouds
Overview

• Highly automated service lifecycle management with easy-to-use, self-service portal and graphical service designer for platform and application cloud services
• Comprehensive, unified service management with built-in monitoring and compliance, and a common toolset for cloud and traditional IT management
• Open, extensible architecture with customization capabilities, multi-vendor hardware support, and multi-hypervisor support
• Core element of HP Converged Cloud Management

Booming demand for IT services has led many enterprises to embrace cloud computing. In satisfying the demand for requirements like immediate access to IT services, storage capacity, and compute power, many companies have augmented their own private infrastructure with the on-demand resources of a public cloud. These same companies are often faced with the task of managing a sprawling, heterogeneous environment that bridges both sides of the firewall.

In solving the problem of demand, another problem has emerged: how to efficiently manage resources and services that span private and public clouds as well as traditional IT.

Up until now, the processes for managing service provisioning have generally been manual, inefficient, and siloed. Such time-expensive processes create a drag on IT and result in less innovation and less agility in the face of changing business requirements. In a world of unprecedented IT complexity a new approach is needed, one that is specifically designed to fit the needs of cloud computing.

The key to stepping beyond traditional IT service provisioning is HP Cloud Service Automation. As an essential part of HP’s Converged Cloud strategy, HP Cloud Service Automation is a solution for brokering and managing private cloud, public cloud, and traditional IT services. It offers IT organizations increased agility and reduced cost via a self-service portal and highly automated lifecycle management. End-to-end service delivery provides a complete management environment for private and hybrid cloud. Designed with extensibility and openness in mind, HP Cloud Service Automation allows enterprises to add capabilities and easily adapt to changing business requirements while avoiding vendor lock-in.

Use cases for HP Cloud Service Automation

Private cloud

Enterprises build private clouds to increase the speed of delivering IT services and reduce cost. The entire cloud infrastructure operates behind the organization’s firewall. Instead of using a dedicated infrastructure for each service, a private cloud allows an organization to deploy infrastructure or application services on demand, in hours rather than weeks or months, using the same infrastructure across multiple projects. Private clouds are often used to deliver infrastructure and applications services for test, development, and production environments.

HP Cloud Service Automation can be used within a private cloud environment to manage the entire service provisioning process within a comprehensive, unified solution. Distributed physical and cloud-based resources can be organized into service offerings, designed for consumption within a graphical service designer, published to a service catalog, and requested via a self-service portal.

HP Cloud Service Automation within a private cloud:

Characteristics:
• Self-service portal for ordering services
• Predefined services with configuration options
• IaaS and PaaS
• Provisioned with internal resources
• Secure environment

Benefits:
• Fast access to IT services
• Fully automated
• Reallocate administration resources
• Pooling infrastructure

Hybrid cloud

Enterprises use hybrid clouds to deliver a broad catalog of services across private and public cloud environments with a single user experience. This unified approach results in a simplified provisioning experience, a streamlined ordering process, and a reduction in overall IT management costs. Part of the cloud infrastructure operates behind the enterprise’s firewall and part of it operates externally, generally on a service provider’s public cloud network.

A hybrid cloud bridges the need for control and security with external elasticity in the form of on-demand compute, network, and storage resources. A hybrid cloud can offer a seamless, integrated solution to line of business users, regardless of where the requested resources (physical or virtual) are located.

HP Cloud Service Automation can be used to manage a hybrid cloud environment, regardless of where resources are located. With a common toolset for cloud and traditional IT management, built-in
monitoring and compliance, multi-vendor and multi-hypervisor support, HP Cloud Service Automation provides a comprehensive, unified solution for managing the service lifecycle across heterogeneous environments—on both sides of the firewall.

HP Cloud Service Automation within a hybrid cloud:

Characteristics:
• Private, public, managed cloud, and traditional IT
• IaaS, PaaS, and SaaS
• Performance and service level management
• Compliance and security

Benefits:
• Access to more resources and services
• Focus on your core competencies
• Virtually unlimited scaling
• Leveraging current investment

Building a cloud solution with HP Cloud Service Automation

HP is uniquely positioned to help your organization succeed in a world where cloud computing, in all its forms, is becoming the norm. With HP Cloud Service Automation you can effectively manage any cloud computing environment, rapidly deliver services, and maintain the highest levels of quality, security, and oversight.

Key benefits of HP Cloud Service Automation include:

Choice
• Open, extensible architecture, designed with extensibility in mind.
• Heterogeneous—HP Cloud Service Automation provides a comprehensive, unified solution for managing the service lifecycle across heterogeneous environments, on both sides of the firewall.
• Support for third-party management software helps you evolve your service management over time while avoiding vendor lock-in.
• Available with CloudSystem or standalone to maximize flexibility.

Confidence
• Based on industry-leading software tools, HP Cloud Service Automation delivers enterprise-grade functionality.
• Secure access to services
• Implement in 30 days to maximize productivity

Consistency
• Comprehensive, unified management—streamline, standardize, and automate the process for ordering, provisioning, and managing technology services across all types of environments.
• Platform for growth—HP Cloud Service Automation can meet any level of demand for the IT services you deliver, allowing your cloud solution to scale as your business grows.
• Common user experience—HP Cloud Service Automation features a self-service portal for simplified service ordering and an intuitive provider portal, combining intuitive modules for service design and administration. Use the same management tools across private cloud, public cloud, and traditional IT.

HP Cloud Service Automation architecture and features

Overview
As a key element in HP’s Converged Cloud strategy, HP Cloud Service Automation is a solution for brokering and managing private cloud, public cloud, and traditional IT services. HP Cloud Service Automation offers IT organizations increased agility and reduced cost, via a self-service portal and highly automated service lifecycle management. End-to-end service delivery provides a complete management environment for private and hybrid clouds. Designed with extensibility and openness in mind, HP Cloud Service Automation allows enterprises to add capabilities and easily adapt to changing business requirements while avoiding vendor lock-in.

HP Cloud Service Automation features

Highly automated service lifecycle management
• Easy-to-use self-service portal—order and manage cloud services with an easy-to-use portal.
• Graphical Service Designer—easily and quickly design new cloud services with a built-in graphical service designer.
• Application and infrastructure services—automate provisioning of infrastructure and application services.

Comprehensive, unified service management
• Built-in compliance and monitoring—maintain the health of your cloud services through consistent monitoring (additional end-to-end service level management possible); enable industry and regulatory compliance with compliance checking and patching.
• Common management toolset—simplify management and leverage administrator knowledge by using the same tools to manage private cloud, public cloud, and traditional IT.
• Multi-tenancy—provide secure services to multiple organizations.
Virtual and physical server support—provision cloud services on virtualized server environments or physical servers.

**Open, extensible architecture**

- Multi-vendor hardware and multi-hypervisor support—provision cloud services on HP or non-HP servers, storage and networking equipment; provision cloud services in multiple virtualized environments.
- Customizable, extensible architecture—add capabilities such as end-to-end service level management, public cloud management, and security. Customize the subscriber portal, integrate with third-party management products, or use a third-party portal using the REST APIs.
- Private and public cloud resources—provide services using on-premises, internal IT resources or off-premises public cloud services.

**Other features**

- Showback/chargeback—gain insight into resource and cost usage with cost reporting capability.
- Policy-based workload management—define service deployment based on policies.

**HP Services**

**Strategic Advisory and Solution Consulting Services**

Develop your vision, strategy, and roadmap for your cloud journey.

- Cloud Workshop—strategic executive workshop, which walks customers through understanding cloud and its impact on the customer’s organization, defining the cloud strategy, vision, and initiatives based on business drivers and key objectives and mapping out transformation journey
- Service Integration and Management (SIAM) Roadmap Service—maximize business output and minimize the business risk around the transformation toward hybrid delivery and managing multi-supplier eco-system.
- Management of Organizational Change (MoC)—Identify all stakeholders, how change will impact them, and develop a communication and change plan to provide that the transition to hybrid delivery will be effective and as smooth as possible.

**HP Cloud Service Automation Services**

Accelerate your private/hybrid cloud design and deployment.

- Foundation offering—delivers a baseline IaaS/PaaS cloud in as little as 30 days. It provides a single instance CSA deployment and an open architecture foundation and path for future customizations and enhancements. This is a fixed-scope, fixed-price offering delivering rapid value through the use of standard, out-of-the-box (OOB) features.
- Advanced offering—delivers all of the benefits of the Foundation offering. With its custom scope and variable cost, it offers increased flexibility by being able to accommodate customers whose requirements exceed or are not fully met by a fixed-scope service.
- Lifecycle Modules—enhance the capabilities of Cloud Service Automation through modular customizations and integrations. They extend the deployment to include sophisticated lifecycle actions such as: Flex up/out, Lease assignment, Charge-/showback, Freeze and shelf and Service management.
- HP Cloud Maps—feature easy-to-use, pre-packaged and tested service designs that accelerate the deployment of mainstream applications in cloud environments. HP Cloud Maps save you weeks or even months when designing cloud services, increasing flexibility for enterprises and creating new revenue opportunities for service providers.

**Cloud service automation you can trust**

Adopting cloud computing allows your organization to meet unprecedented demand for resources, applications, and services. But without a unified lifecycle management system the complexity of interacting with multiple cloud environments can be overwhelming. HP Cloud Service Automation allows enterprise IT groups to adhere to service-level agreements by better controlling processes, providing flexibility and scalability, and enabling innovation.

**Next steps**

To find out more about how IT can better manage private, public, or hybrid cloud environments and build a stronger partnership with business stakeholders, contact your HP Software representative or HP preferred partner. For more information on HP Cloud Service Automation to help you get up and running quickly, go to [hp.com/go/CSA](http://hp.com/go/CSA).

---

1 Require third-party products to support functionality.