Adaptive Computing Moab – HP CSA Edition

Product Overview

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Overview

Adaptive Computing Moab – HP CSA Edition integrates the HP's state-of-the-art cloud computing solution, HP Cloud Service Automation (HP CSA) 2.01, with the power of the Moab® Adaptive Computing Suite™. For more information about obtaining this software product, contact your HP Software representative.
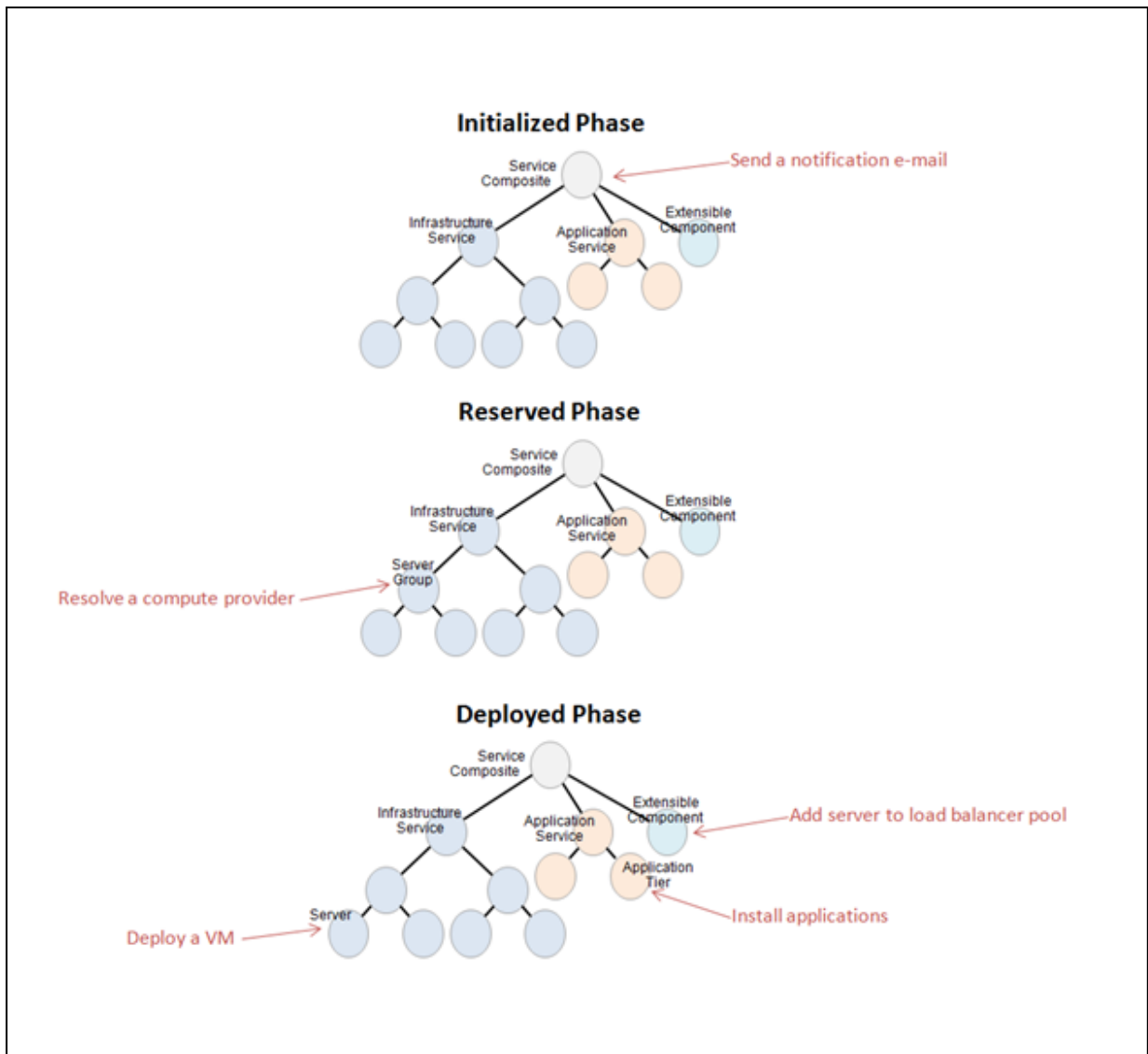
NOTE: The information below pertains to HP Cloud Service Automation (HP CSA) 2.01 and no other HP CSA software versions.

What is HP Cloud Service Automation?

HP Cloud Service Automation (HP CSA) is a unique platform that orchestrates the deployment of infrastructure compute resources and complex multi-tier application architectures. HP CSA integrates and leverages the strengths of several HP data center management and automation products, adding resource allocation management, service offering design, and a customer portal to create a comprehensive service automation solution.

Services are designed with a visual palette. Then the service designs are referenced in offerings presented to subscribers through a customer catalog. Subscriptions are instantiated and processed through a structured lifecycle, with pre-defined integration mechanisms to invoke external processes. A provider console serves to administer the system, configuring offerings, resources, and viewing service instances for the HP CSA domain.

HP CSA provides an automated ecosystem that differs from other cloud-service controllers by comprehensively managing a service lifecycle and all associated lifecycle relationships. HP CSA does much more than provide you with a collection of scripted tasks. HP CSA's approach standardizes IT services through model-driven automation featuring a comprehensive service lifecycle process. The fundamental unit in this model is called an *element*; lifecycle actions can be associated with each element. Sets of service design elements make up a service instance, which is processed through predefined phases (or states). Before processing begins, service elements, lifecycle actions, properties, and provider requirements are established for each service composite; however, these features can be dynamically refined as processing continues. When processing begins, HP CSA walks the entire service composite with its associated elements through each phase of the lifecycle process. For example, the illustration below shows a simplified processing model for the lifecycle actions.

What are HP CSA Software Components?

Software components are programs that function together to form the HP CSA automated solution. Software components can be viewed from the functional level — in other words, the jobs they perform as part of the CSA solution, or from the logical level — how they behave as part of the HP CSA lifecycle process. Software components installed with the CSA 2.01 Foundation package provide these functions:

- HP CSA Consumer Portal – provides subscription services for customers, featuring a selectable set of service offerings. Subscribers can launch on-demand actions for active services, and terminate subscriptions.

- HP CSA Provider Console – delivers the design capability required to prepare service offerings for publication in the HP CSA Consumer Portal and to manage service offerings. Additionally, contains an administrator interface to manage the HP CSA solution and the solution database.

- HP CSA Cloud Controller – contains the HP CSA lifecycle engine, plus customized flows and sample templates for the service lifecycle.

Integrated HP Software solution components provide these functions:

- HP Operations Orchestration (HP OO) – coordinates communication between the integrated products and managed devices. Customized HP OO flows are essential to implementing the HP CSA solution lifecycle. HP OO also provides a visual service design palette.

- HP Matrix Operating Environment – provides a converged infrastructure platform for cloud deployments, including HP Operations Orchestration (HP IO) software for interactive service design, and HP BladeSystem for blade architecture.

- HP Insight Orchestration (HP IO)

- HP Server Automation – deploys operating systems and policies to managed devices. Optionally, controls application deployment processes through Application Deployment Manager (ADM).

- HP SiteScope – provides agent-less monitoring for servers, storage, and other managed devices.

- HP Universal CMDB – maintains accurate, up-to-date information regarding the relationships between infrastructure, applications, and cloud services.

In addition to the integrated software components above, VMware vCenter is supported as a compute provider.

For More Information about HP CSA

Go to the HP Software Product Manuals website: *http://h20230.www2.hp.com/selfsolve/manuals*

General-access documentation requires that you register for an HP Passport and sign in. Restricted-access documentation requires that you have an active HP support agreement ID (SAID) and an HP Passport sign-in. For more information or to track updates for all HP CSA documentation, refer to the *HP Cloud Service Automation Documentation List.* Documentation currently available is shown in the table below.

Document	Purpose	Restricted Access?
HP Software Cloud Service Automation Concepts Guide	An overview of the HP CSA solution.	No, HP Passport sign-in
HP Software Cloud Service Automation Documentation List	Lists all current documentation and white papers available with each release.	No, HP Passport sign-in
What's New in HP CSA 2.01?	Provides a list of enhancements for the latest version of HP CSA.	Yes, SAID required
HP Software Cloud Service Automation Solution and Software Support Matrix	Current document	Yes, SAID required
HP Software Cloud Service Automation Release Notes	Important pre-installation information.	Yes, SAID required
HP Software Cloud Service Automation Configuration Guide	Detailed solution deployment instructions presented in an interactive format.	Yes, SAID required

HP Software Cloud Service Automation Provider Help	How to design and publish services for the cloud, how to manage the resources for deploying those services, and how to administer HP CSA.	Yes, SAID required
HP Software Cloud Service Automation Service Design Guide	How to design a service using HP Operations Orchestration (HP OO) flows.	Yes, SAID required
HP Software Cloud Service Automation Troubleshooting Guide	Suggested solutions for solving problems with setup, configuration, customization and use of HP CSA.	Yes, SAID required
HP Cloud Service Automation Open Source and Third-Party Software License Agreements	HP Cloud Service Automation Open Source and Third-Party Software License Agreements	No, HP Passport sign-in

What is Adaptive Computing Moab – HP CSA Edition?

Adaptive Computing Moab – CSA Edition delivers key new automation enhancements that enable IT organizations to be more agile in providing the services their business needs while ensuring that those services stay up and running through automation intelligence. The cloud management solution has extended Moab's unique abilities to create agile, automated and adaptive data center and cloud environments that self-optimize and manage to meet dynamic business needs and conditions.

How do HP CSA and Adaptive Computing work together?

Together HP CSA and the Moab Adaptive Computing Suite™ provide the following capabilities:

New workload management capabilities to improve self-service automation and cloud service reliability by automating customer's best practice workflows for approving, provisioning and de-commissioning resources. The new workload templates reduce IT staff burden, configuration errors, and issues. The workload templates are also modular in design to enable common provisioning and decommissioning workflow steps to be re-used between cloud services and to leverage existing best practice IT process scripts for maximum efficiency. These workload templates leverage Moab Adaptive Computing Suite's existing unique management abstraction layer that integrates and organizes the chaos of complex heterogeneous IT environments by orchestrating workflows across multiple heterogeneous resource management tools and integrating with existing workflow engines.

New holistic management across each cloud service's environment intelligently manages and applies policies, decisions and actions across the set of resources for a service. This ensures proper provisioning and decommissioning, and avoids issues during the service lifecycle as the different resources are dynamically managed. This mapping and consideration of the relationships between all of the resources of a service further improves the reliability of each service throughout its lifecycle. These extended holistic management capabilities build on Adaptive Computing's leadership in multi-dimensional analytic policies that model IT resources, workloads, SLAs and priorities across domains to automate real-time decisions and actions.

Enhanced chargeback flexibility allows you to set chargeback rates for custom billing scenarios such as set-up versus periodic resource usage. These enhancements build on the existing flexible chargeback rates and model capabilities available with the Moab Adaptive Computing Suite to ensure you can implement the showback and chargeback parameters your organization needs.

Simplified installation for faster time to value with the new Adaptive Solution Installer that accelerates the basic installation process of the solution components so the focus can be on tailoring it to your environment and business needs.

For More Information about the Moab Adaptive Computing Suite™

Go to the Adaptive Computing website: *http://www.adaptivecomputing.com/products/*

To find Moab documentation, select the **Resources** tab; then select **Documentation**.