

# HP Cloud Service Automation

What's New in HP Cloud Service Automation 4.20



## Contents

- HP Cloud Service Automation 4.20 overview..... 2**
- What's New in HP Cloud Service Automation 4.20 ..... 2**
  - Improved confidence.....2
  - Delivery of cloud services through agility .....2
  - Reduced cost of ownership as a cloud service provider .....2
  - Improved time to value.....2
- HP Helion Codar based on HP CSA platform..... 3**
- Enhancements and Certifications for the US public sector ..... 3**
- Dynamic topology composition ..... 3**
- Component management and designer usability improvements ..... 3**
- Subscription modification for topology designs ..... 4**
- Service offering versioning..... 4**
- Tenant administration subscription management ..... 4**
- Intelligent resource accounting and provider selection for topologies..... 4**
- Cloud Optimization with HP Virtualization Performance Viewer ..... 4**
  - Resource Provider Placement & Allocation.....4
  - Resource Capacity Management.....5
  - Cloud Optimization.....5
- Embedded Orchestration using HP Operations Orchestration..... 5**

© Copyright 2014 Hewlett-Packard Development Company, L.P. The information contained herein is subject to change without notice. The only warranties for HP products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. HP shall not be liable for technical or editorial errors or omissions contained herein.

Restricted rights legend: Confidential computer software. Valid license from HP required for possession, use or copying. Consistent with FAR 12.211 and 12.212, Commercial Computer Software, Computer Software Documentation, and Technical Data for Commercial Items are licensed to the U.S. Government under vendor's standard commercial license.

Microsoft and Windows are U.S. registered trademarks of Microsoft Corporation. AMD is a trademark of Advanced Micro Devices, Inc. Intel and Xeon are trademarks of Intel Corporation in the U.S. and other countries. Oracle and Java are registered trademarks of Oracle and/or its affiliates.

## HP Cloud Service Automation 4.20 overview

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

The HP CSA subscription, service design and resource utilization capabilities address three key challenges:

- The Marketplace Portal provides a customer interface for requesting new cloud services and for monitoring and managing existing services, with subscription pricing to meet your business requirements.
- The HP CSA graphical service design and content portability tools simplify developing, leveraging, and sharing an array of service offerings that can be tailored to your customers' needs.
- The HP CSA lifecycle framework and resource utilization features ease the complexity of mapping your cloud

## What's New in HP Cloud Service Automation 4.20

### Improved confidence

- [HP Helion Codar based on HP CSA platform](#)
- [Enhancements and Certifications for the US public sector](#)

### Delivery of cloud services through agility

- [Dynamic topology composition](#)
- [Component management and designer usability improvements](#)
- [Subscription modification for topology designs](#)
- [Service offering versioning](#)

### Reduced cost of ownership as a cloud service provider

- [Tenant administration subscription management](#)
- [Intelligent resource accounting and provider selection for topologies](#)
- [Cloud Optimization with HP Virtualization Performance Viewer](#)

### Improved time to value

- [Embedded Orchestration using HP Operations Orchestration](#)

## HP Helion Codar based on HP CSA platform

HP Helion Codar exposes powerful DevOps capabilities on top of the HP CSA platform.

Organizations are facing new challenges when extending continuous integration into continuous delivery. These challenges include consistently deploying applications through development to production environments while considering the differences in those environments.

With HP Helion Codar, HP CSA application topologies can be managed through the application lifecycle from development through to production and then be exposed to the Marketplace Portal for consumption by end-users. HP Helion Codar enables deployment of the same application topologies on different platforms or infrastructures based on lifecycle.

Activate the HP Helion Codar license on your HP CSA system to start using the HP Helion Codar functionality.

## Enhancements and Certifications for the US public sector

HP CSA 4.20 introduces the following enhancements and certifications for the US public sector:

- Common Criteria (On-going Certification Process)
- FIPS 140-2
- JITC – Multi-Factor Authentication
- Section 508 – Accessibility
- IPv6 Support

## Dynamic topology composition

HP CSA 4.20 introduces dynamic topology composition to enable application architects to focus on their applications and target the application deployment on different platforms or infrastructure by separating application topologies from platform or infrastructure designs.

Updates to the component management UI enable application architects to easily view and define the capabilities, properties, and relationships between the components used in a topology design. You can define the required characteristics in the application topology. The matchmaking algorithm then provides a selection of applicable platform topologies that can fulfill the required characteristics based on the component definitions.

## Component management and designer usability improvements

HP CSA 4.20 introduces an improved service design experience. With the new Component Management Experience, providers can now associate capabilities and characteristics to components. This allows the system to perform the matching required to target applications on different platform or infrastructure services.

## Subscription modification for topology designs

HP CSA 4.20 introduces the ability for subscribers to change subscription options during the life of the service subscription using the Marketplace Portal. This allows the user to manage the subscription during its lifecycle.

## Service offering versioning

HP CSA 4.20 introduces the ability for service providers to create multiple versions of service offerings. New versions of service offerings are created for the new versions of service designs so that service providers can deliver improvements for their consumers. All attributes of the previous versions of the service offering, such as default values, pricing, and associated documents are preserved in the new version.

## Tenant administration subscription management

HP CSA 4.20 introduces tenant administration for subscription management. Tenant administration subscription management helps service providers minimize the administrative overhead and total cost of managing their cloud environments by empowering their consumer organizations with additional administrative capabilities. Service providers can assign a new role, the Consumer Organization Administrator, to a user in a consumer organization. The Consumer Organization Administrator can view and modify users and subscriptions, and transfer subscriptions between users in the consumer organization.

## Intelligent resource accounting and provider selection for topologies

HP CSA 4.20 introduces intelligence resource accounting and provider selection for topology designs. An automatic, built-in resource provider placement policy selects the resource provider with the most available resources for a topology design. The HP CSA platform performs automatic resource accounting prior to a deploy action on a topology design with no additional configuration required.

## Cloud Optimization with HP Virtualization Performance Viewer

HP CSA 4.20 introduces support for HP Virtualization Performance to provide resource provider placement, resource capacity management, and cloud optimization.

### Resource Provider Placement and Allocation

- HP CSA compiles requested resources and sends them to HP vPV.
- HP vPV analyzes the details of the request and provides best fit placement guidance back to HP CSA.
- HP CSA provisions VMs to designated location(s) based on vPV guidance.

## **Resource Capacity Management**

- Monitor resource pool capacity.
- Keep capacity balanced.
- Identify idle VMs using pool capacity.
- Plan for future resource pool capacity needs.
- Identify problem areas.

## **Cloud Optimization**

- Remove services or servers that are no longer needed.
- Add more VMs or flex up CPU/memory for under provisioned services.
- Remove VMs or flex down CPU/memory for over provisioned services.

## **Embedded Orchestration using HP Operations Orchestration**

HP CSA 4.20 introduces HP Operations Orchestration embedded with HP CSA as an orchestration engine to power service fulfillments. Embedded orchestration provides an enhanced content development and debugging experience using test deployments and seamless navigation into HP OO central.

The HP CSA administrator can install HP OO embedded with HP CSA or as an external HP OO instance and can also link to existing HP OO executions from the Cloud Service Management Console.