Technical white paper

HP Cloud Service Automation What's New in HP CSA 4.00



Table of contents

| Release Themes | 2 |
|------------------------------------------------------------|---|
| Modern marketplace experience | 3 |
| Highly customized theme support | 4 |
| Responsive user interface | 5 |
| Clean interaction powered by new REST APIs | 5 |
| Robust scalable platform | 5 |
| Enhanced service management | 5 |
| Advanced modeling tools for an open, flexible architecture | 6 |
| Database views for custom reporting | |
| Localization | 8 |
| Upgradability | 9 |
| Licensing | 9 |

Release Themes

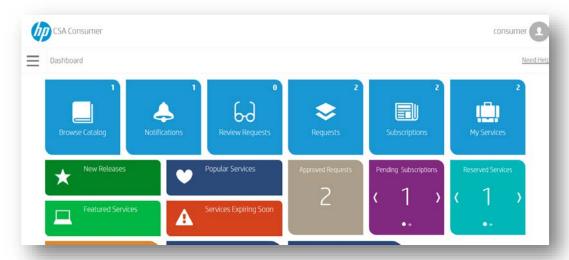
| Modern marketplace experience | Improved performance |
|--------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | Improved catalog ordering and browsing |
| | Mobile-friendly responsive user interface design auto-adjusts to different screen sizes and device types |
| | Highly customized theme support—three out-of-the-box themes and ability to specify a custom theme |
| | User interface mash-up capabilities to include URL links, widgets, and featured services |
| | Enhanced capabilities: resubmit request, subscriber attachments, and more |
| Enhanced service management | Uses HP Converged Cloud User Experience technology |
| | Customizable management console dashboard |
| | New Offerings user interface |
| | New operations user interface for complex realized services |
| | Streamlined publishing process for service offerings |
| | Tags for categorizing offerings and designs |
| | Cancel subscriptions from the operations user interface |
| | Select and customize actions that require approvals |
| | Multi-level approvals available for User Context Approval template |
| Advanced modeling tools for an open, | Sequenced designer for laaS, PaaS and SaaS services |
| <u>flexible architecture</u> | Topology designer for laaS services in HP Cloud OS |
| | Seamless integration with HP Cloud OS, in turn based on OpenStack |
| | Common description language for topology-based architecture |
| | TOSCA topology template description documents from your topology designs for your HP Cloud OS provider |
| Database views for custom reporting | HP CSA subscription and resource data organized in out-of-the-box database views |
| | Resource provider capacity view |
| | User subscription and subscription options view |
| | Subscription resource provider view |
| | Use 3rd party or HP reporting tools |
| Localization | Service Marketplace localized in Simplified Chinese, Danish, Dutch, French, German, Italian, Japanese, Korean, Portuguese, Russian, and Spanish |
| | Service Management Console localized in Simplified Chinese and Japanese |

In addition, HP CSA 4.00 provides new and improved capabilities in these areas:

- <u>Upgradability</u>: Upgrade in place from HP CSA 3.20.
- <u>Licensing</u>: Easily track your HP CSA entitlement and usage with the new 4.00 licensing information.

Modern marketplace experience

HP CSA 4.00 introduces a new customizable user interface for the cloud service consumer: the Marketplace Portal.



The Marketplace Portal includes key enhancements for an improved service consumption experience. The Marketplace Portal is a shared technology component of the HP Converged Cloud User Experience.

| Customization | Customize the Marketplace Portal appearance and presentation for each consumer organization. |
|---------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Simple navigation | The Marketplace Portal dashboard displays six navigation tiles across the top, distinguished from offering and status tiles just below. Each navigation and status tile indicates the number of items in that area. For example, the Browse Catalog tile displays the number of service offerings that you can browse and order. |
| | The Marketplace Portal includes an optional sidebar menu that provides quick access to the different portal areas. |
| | When configured, the Marketplace Portal displays custom widgets containing links, HTML or JavaScript mash-ups, and featured services. |
| | The Marketplace Portal uses infinite scrolling to automatically retrieve additional entries as you scroll down the page. You can also toggle between list and grid views. |
| Improved service ordering | From the Cloud Service Management Console, an administrative user can attach screenshots to a service offering. You can page through these screenshots in the Marketplace Portal as you evaluate the offering. |
| | The Marketplace Portal displays checkout and request status in a status bar as you chose service options and configure your subscription request. |
| | You can select the level of detail that the Marketplace Portal displays as you view a service offering. |
| | The Marketplace Portal displays a confirmation page with a request number once you have successfully placed your request. |
| | You can reorder an existing request from the Marketplace Portal with the click of a button. This brings up an order page for a new subscription with the same configuration as the existing request. |
| | You can attach a document to a service request in the Marketplace Portal. For example, you could include a justification for an approver to review when evaluating your request. |
| | |

Enhanced subscription management

- View the realized topology of your service instance in addition to the service component list.
- Bookmark subscription and service management pages, with structured deep linking that directly accesses subscription and service objects.
- From the Cloud Service Management Console, an administrative user can
 configure an HP CSA organization to enforce subscription end dates. For
 that organization, the Marketplace Portal will require all subscriptions to be
 term subscriptions. The Marketplace Portal also enforces a maximum
 subscription period as configured in the Cloud Service Management Console
 for the organization.
- From the Cloud Service Management Console, an administrative user can
 configure an HP CSA organization to include the organization's terms and
 conditions in service requests. For that organization's consumers, the
 Marketplace Portal will display a link to the terms and conditions. The
 Marketplace Portal will also require users to accept the terms and
 conditions when ordering a service.

Highly customized theme support

You can customize each HP CSA organization's portal layout, information, and theme.



Figure 1 Marketplace Portal themes included with HP CSA 4.00

Basic customization

From the Cloud Service Management Console, you can customize Marketplace Portal images and text for each HP CSA consumer organization. Each organization's Marketplace Portal can display customized values for the following fields:

- · Organizational logo
- · Portal title
- · Welcome Message
- Copyright statement
- Footer

- Privacy statement link
- Terms and conditions link
- Security classification
- Disclaimer

This basic capability is similar to the customization provided in CSA 3.20, with additional fields.

| Theme customization | HP CSA includes three out-of the box themes: |
|-------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | HP Simplified (the default theme) |
| | HP Enterprise |
| | HP Playful |
| | You can assign any of these themes to an HP CSA consumer organization. You can also build your own custom theme and assign it to the organization. |
| Dashboard customization | You can add custom tiles to the Marketplace Portal dashboard for an HP CSA consumer organization. HP CSA provides three types of custom tile widgets: |
| | Add Link: Adds a tile to the Marketplace Portal dashboard that takes the user to the specified URL. You can customize the name, title, displayed icon, background image, and target for the link. |
| | Add Mashup: Adds a tile populated by custom HTML/JavaScript that can retrieve standard or CSA data. Specify JSP coding on an HTML5 canvas for your custom tile. |
| | Add Featured Service: Adds a tile to the Marketplace Portal dashboard that contains a randomly selected service offering from the featured category set for the organization. |

For more information, see the HP CSA Customizing the Marketplace Portal technical white paper.

Responsive user interface

The Marketplace Portal user interface layout is designed to adapt to various screen sizes, where the content adjusts to the size, and where all functionality persists. As a service consumer, you can use the Marketplace Portal on your desktop, tablet, or other mobile devices. Across these device screens, the Marketplace Portal displays an intuitive user interface that includes all functionality.

Clean interaction powered by new REST APIs

The Marketplace Portal leverages new REST APIs. These APIs use optimized queries, offering pagination, server side sorting, and server side filtering for improved performance.

Robust scalable platform

The Marketplace Portal takes advantage of the new identity management shared technology component, part of the HP Converged Cloud User Experience. The identity management component uses token-based authentication for secure communication between the portal and the HP CSA server. This JWT-based authentication replaces the HP CSA 3.20 mechanism of an integration account.

The Marketplace Portal is built on Node.js, a scalable high performance Web technology.

For more information on using the Marketplace Portal, see the HP CSA Marketplace Portal Help.

Enhanced service management

HP CSA 4.00 includes enhancements to the Cloud Service Management Console.

| Customizable dashboard | You can customize the Cloud Service Management Console by modifying its JSON configuration file. See the HP CSA <i>Configuration Guide</i> for more information. |
|----------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| New Offerings and Operations user interfaces | The new Offerings user interface includes a streamlined publishing process. You can now add an offering to a catalog directly from the Offerings area. The new Offerings area is part of the HP Converged Cloud User Experience. |
| | The new Operations user interface supports complex realized services. You can also cancel subscriptions from the new Operations area. |

| Tags | You can define tags for categorizing offerings and designs. |
|-----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Approvals | You can now specify whether approvals are required for the following actions: |
| | Order a subscription to an offering (approval required by default) Modify an existing subscription (approval required by default) Cancel a subscription (approval not required by default) HP CSA 4.00 also supports multi-level approvals for the User Context Approval template. |

Refer to the HP CSA Cloud Service Management Console Help for more details on using these new features.

Advanced modeling tools for an open, flexible architecture

HP CSA 4.00 offers two models for designing cloud services: sequenced and topology.

With sequenced designs, you can manage the end-to-end service lifecycle for laaS, PaaS, and SaaS services. HP CSA 3.20 service designs work under the sequenced design model. You can import and export HP CSA 3.20 content archives as HP CSA 4.00 sequenced designs.

With the new topology design model, HP CSA offers a streamlined and simplified design experience. Topology designs enable rapid development of infrastructure services based on HP Cloud OS. HP CSA 4.00 includes a native integration with the OpenStack-based HP Cloud OS. This seamless integration allows you to build topology designs that delegate lifecycle management to HP Cloud OS. You create a topology design by specifying high-level components, options, and relationships in a declarative approach. The implementation logic is provided by HP Cloud OS.

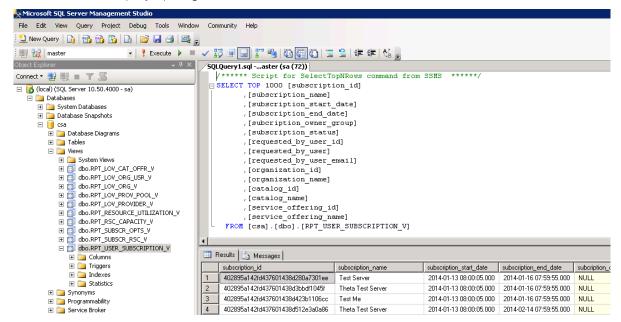
You specify the HP Cloud OS provider when you create or import a topology design. HP CSA queries that provider, so that the design references the resources, properties, and relationships of that particular HP Cloud OS instance. Since HP Cloud OS is extensible, each provider may support a customized or version-specific description of objects and capabilities.

Topology designs support open cloud standards such as the Topology and Orchestration Specification for Cloud Applications (TOSCA) and OpenStack. Topology designs result in TOSCA topology template description documents that are passed from HP CSA to the underlying HP Cloud OS provider. HP Cloud OS in turn utilizes OpenStack. Use of the TOSCA common description language for your topology models allows you to easily deploy cloud services across multiple hybrid clouds.

For more information on creating sequenced and topology designs, refer to the HP CSA Service Design Guide.

Database views for custom reporting

You can access HP CSA subscription and resource data using five out-of-the-box database views. You can access these views from HP or third-party reporting tools.



View

Database columns

User subscription view

This view (RPT_USER_SUBSCRIPTION_V) retrieves details for each subscription in the HP CSA database.

Subscription information

- ID
- Name
- Start date

- · End date
- Group owner
- Status

User (subscription owner) information

- ID
- Name
- Email address

The view also includes the ID and name for the organization, catalog, and service offering associated with each subscription.

Subscription resource view

This view (RPT_SUBSCR_RSC_V) retrieves the resources associated with each subscription. Each subscription is identified by its ID. The view retrieves the following resource information:

- Resource provider ID
- Resource provider name
- Resource provider type
- URL of the resource provider access point

If the subscription uses any of the resource provider's resource pools, the view also displays the resource pool ID and name.

| View | Database columns | | |
|----------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|--|
| Subscription options view | This view (RPT_SUBSCR_OPTS_V) retrieves the options associated with subscriptions that are based on sequenced designs. Each subscription is identified by ID. | | |
| | For each subscription, the view retrieves the option model ID, the currency used for display, and the period for recurring pricing. The view also retrieves the ID, name, and display name for each option set associated with the subscription. The view retrieves the following information for each option within each option set: | | |
| | | | |
| | • ID • | Initial price | |
| | • Name • | Recurring price | |
| | • Display name • | Whether the subscriber selected this option | |
| retrieves the resources associated with each | | this view (RPT_RESOURCE_UTILIZATION_V) with each subscription. In addition to the ption resource view, this view displays resource | |
| | For each resource pool used (if any), this view retrieves the following information: | | |
| | Resource pool ID and name | | |
| | ID and name of the resource provider that hosts the resource pool | | |
| | ID and name of the service component utilizing the resource pool | | |
| | HP CSA uses service component measurable properties to calculate resource demand. For each measurable property of the component, the view retrieves the following information: | | |
| | • Name | | |
| | • Type | | |
| | • Unit | | |
| | Utilization | | |
| Resource provider capacity view | This view (RPT_RSC_CAPACITY_V) retrieves the resource pools (if any) associated with each resource provider. The view retrieves the resource provider ID, name, type, and service access point URL. For each resource pool (if any), the view retrieves the following information: | | |
| | • ID | Availability (Available, Unavailable, | |
| | • Name | or Unlimited) | |
| | Name as known to the provider | Total amount available to CSA | |
| | Type | Amount used by CSA | |

For more information, refer to the HP CSA *Reporting* technical white paper.

Localization

In addition to English, HP CSA 4.00 includes Marketplace Portal message catalogs for 11 other languages:

• Simplified Chinese

Danish

Dutch

• French

• German

• Italian

Japanese

• Korean

Portuguese

• Russian

• Spanish

The Cloud Service Management Console includes message catalogs for Simplified Chinese and Japanese in addition to English.

Simply configure your browser's preferred language settings as needed.

For more details, see the HP CSA Language Support Readme.

Upgradability

You can upgrade HP CSA 3.20 in place to HP CSA 4.00. HP CSA 3.20 must be shut down during the upgrade. Existing running services will continue to execute. Existing subscriptions and services will be migrated intact to HP CSA 4.00.

You can import HP CSA 3.20 service designs as HP CSA 4.00 sequenced designs. HP CSA 4.00 also supports the HP CSA 3.20 REST APIs alongside the new HP CSA 4.00 REST API calls.

For details on upgrading from HP CSA 3.20 to HP CSA 4.00, refer to the HP CSA 4.00 Upgrade Guide.

Licensing

HP CSA 4.00 requires a software license. HP CSA licensing is based on the number of operating system instances (OSIs) being used in current, active subscriptions.

A temporary 90-day trial license is activated when you install or upgrade to HP CSA 4.00. Once the trial license expires, you are limited to 10 OSIs. If you created more than 10 OSIs during the trial period, you cannot create any additional OSIs. You can add more licenses at any time to increase your OSI capacity.

You manage your licenses from the Licensing dialog of the Cloud Service Management Console.



Refer to the HP CSA Configuration Guide for more information on requesting and installing an HP CSA software license.

For more information

To access other toolkits to design and extend services running on HP CloudSystem, go to hp.com/go/csdevelopers.

For more information on HP CloudSystem, visit hp.com/qo/cloudsystem.

HP software product manuals and documentation for the following products can be found at http://h20230.www2.hp.com/selfsolve/manuals. You will need an HP Passport to sign in and gain access.

- HP Cloud Service Automation
- HP ArcSight
- HP Operations Orchestration
- HP Server Automation
- HP SiteScope
- HP Universal CMDB

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