

HP Codar

Software version 1.50, July 2015

Release Notes



Contents

Introduction	2
In this version	2
Installation requirements	2
Documentation	2
Support.....	2
Fixes in this release	3
HP Codar	3
Installation, initial configuration, upgrade, and uninstallation.....	3
HP Codar Management Console	3
Pipeline management	4
Online help	5
Integrations	5
HP Operations Orchestration	5
Known problems, limitations, and workarounds.....	6
HP Codar	6
Installation, initial configuration, and uninstallation.....	6
HP Codar Management Console	7
Pipeline management	9
Online help	10
APIs	11
Integrations	11
Jenkins.....	11
HP Operations Orchestration (HP OO)	11
Deprecation notes.....	12
Service designs and content packs.....	12

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Introduction

This document provides an overview of the changes made to HP Codar for this release. It contains important information not included in the manuals or in online help.

In this version

HP Codar provides software to integrate specific HP products for the purpose of delivering and managing automated services in a cloud computing environment. For more information about integrated products, see the *HP Codar Solution and Software Support Matrix*.

To ensure the performance and stability of the HP Codar environment, complete the following tasks before installation begins:

- Review supported hardware and software for each component product in order to meet the minimum installation requirements.
- Make sure the relevant patches and hot fixes to the patch releases are applied to the component products.
- Review the release notes for each component product to be aware of additional changes or restrictions.

Installation requirements

Installation requirements are documented in the *HP Codar Solution and Software Support Matrix*. Instructions for installing HP Codar are documented in the *HP Codar Installation and Configuration Guide*.

Documentation

To access HP Codar documentation and white papers, go to the following URL and sign in or register:

<https://softwaresupport.hp.com/>

Use the Search function at the top of the page to find documentation, white papers, and other information sources.

To learn more about using the customer support site, go to:

https://softwaresupport.hp.com/documents/10180/14684/HP_Software_Customer_Support_Handbook/

Support

You can visit the HP Software support web site at:

<https://softwaresupport.hp.com/>

To learn more about using the customer support site, go to:

https://softwaresupport.hp.com/documents/10180/14684/HP_Software_Customer_Support_Handbook/

Fixes in this release

HP Codar

Installation, initial configuration, upgrade, and uninstallation

Installer picks up incorrect fully-qualified domain name (FQDN) in hostname configuration

ID	QCCR1D189573
Problem	During installation of HP Codar on Windows Server 2012 R2, sometimes the FQDN is incorrectly picked up. This issue is applicable only if SSO is disabled. This may lead to improper installation and result in unexpected functioning of application.

Installer displays generic messages if incorrect values are provided for database configuration

ID	QCCR1D192951
Problem	During HP Codar installation, if any value (hostname, database name, database users, password, port, etc.) entered in the database configuration is incorrect, then a generic message "Could not connect" is displayed rather than specific error.

HP Codar installation completion message is misleading

ID	QCCR1D192635
Problem	In the install wizard, the message in the last screen says "Press Done to quit the installer". "Quit" is misleading, as user is completing the installation and not quitting or cancelling the installation.

Incorrectly installed embedded HP Operations Orchestration causes all flows to fail

ID	QCCR1D192695
Problem	While installing HP Codar with embedded HP Operations Orchestration, the installation will continue even if the default port for HP Operations Orchestration (8080) is used by another process or application. As a result, the installation will report that there were errors at the end of the installation.

HP Codar Management Console

Provisioning of a topology design can fail with an error message that includes 'optimistic locking failed'

ID	QCCR1D193511
Problem	In some cases provisioning of a topology design can fail with an error message that includes 'optimistic locking failed'. Such failures occur during either the Reserving or Unreserving lifecycle phase. This error can be viewed in the Test Run area of the Codar Management Console by selecting the event that failed during provisioning. Such errors occur only when measurable properties are used in the topology design and when resource pools have been configured on resource providers in the Providers area of the Codar Management Console.

When removing a relationship, the relationship mappings are not completely deleted

ID	QCCR1D192575
Problem	When a relationship is removed from a component in the Designs / Topology / Components area of the Codar Management Console, certain information from that relationship is not completely deleted from the operation parameter mapping configuration for that component. This can cause unexpected behavior if you remove a relationship, then add a new relationship,

	and then view the parameter mapping for an operation that was originally referencing the deleted relationship.
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Some images in the Management Console display as broken links

ID	QCCR1D193024
Problem	When HP Codar is configured for SiteMinder Single Sign On, certain images in the Management Console will display as broken links.

Accounting of resource usage for measurable properties used in topology designs does not work correctly

ID	QCCR1D193574
Problem	Proper accounting of resource usage for measurable properties used in topology designs does not always work correctly. In particular, if none of the providers of a given provider type have resource pools configured, no resource accounting will be performed and provisioning of topology designs that specify values for measurable properties for components of that provider type will be allowed to succeed. Additionally, if some of the providers of a given provider type contain resource pools while others do not, then resource accounting may not occur correctly.

Error occurs when using Save As button for a topology component

ID	QCCR1D192919
Problem	<p>When a topology component is being created using the Save As button, in the Designs / Topology / Components area of the Codar Management Console, if another component already exists with the same name, then the following error is shown: "Internal server error occurred. Contact your system administrator."</p> <p>In the csa.log file, you'll see an entry similar to the following:</p> <p>Caused by: java.sql.SQLException: Violation of UNIQUE KEY constraint 'UQ_CSA_TM_C__2F88FC4730441BD6'. Cannot insert duplicate key in object 'dbo.CSA_TM_COMPONENT_TYPE'. The duplicate key value is (AmazonServerType, com.hp.csa.type, 04.20.0000).</p>

Navigating to Topology Components tab changes the Brand from HP Codar to Cloud Service Automation in Browser tab

ID	QCCR1D193008
Problem	While navigating to the Topology > Components tab, the browser tab heading changes from HP Codar to Cloud Service Automation.

Concrete composite designs are listed in the Infrastructure drop-down list of the Test Run Wizard

ID	QCCR1D191907
Problem	Concrete composite designs created are incorrectly listed in the Infrastructure drop down list of the Test Run Wizard.

Pipeline management

Deployment does not pick correct value if user selects None after selecting an invalid environment

ID	QCCR1D192889
Problem	<p>In the deployment wizard, if you select an environment that is not associated with any provider, the message will correctly indicate that the environment does not have any providers associated with it.</p> <p>Further, if you select the None option for an environment, a message will incorrectly indicate that the environment does not have any providers associated.</p>

Topology design properties which has an associated package does not reset back the values after showing a proper error message

ID	QCCR1D192535
Problem	When you try to modify and save topology design properties that have an associated package, an error message is displayed but the application does not reset back to the original values.

The Promote option is not disabled for packages associated with empty design

ID	QCCR1D192976
Problem	The Promote button is not disabled, but you cannot promote a package with an empty design to the next stage in pipeline management.

Deploying a design without nodes produces an error message

ID	QCCR1D193345
Problem	An empty design, which is a design without nodes, produces the following error message when it is deployed, "No end step found while creating flow: design1 1.0.0 Deployment."

Readme files for the Pet Clinic example application provide incorrect information

ID	QCCR1D193079
Problem	Petclinic AWS and vCenter design readme files indicate that you should enter an artifact URL property which is nonexistent.

Petclinic DB Conf artifact password is not obfuscated

ID	QCCR1D193080
Problem	When you import the Pet Clinic example design, the 'PetClinic DB conf' component's 'artifactpassword' property doesn't obfuscate the values entered by the user.

Online help

Management Console online help inaccurately states that resource pools are not applicable to topology designs

ID	QCCR1D192619
Problem	The Management Console online help states: "Resource pools can be used to help with resource allocation in sequenced designs. They are not applicable to topology designs." This statement is not correct; resource pools are applicable to topology designs in HP Codar.

Integrations

HP Operations Orchestration

When you delete a topology design, the associated HP Operations Orchestration flows are not deleted

ID	QCCR1D182748
Problem	When you create a topology design, HP Operations Orchestration flows are created for that design in the Library / Integrations / Hewlett-Packard / Cloud Service Automation / E2E / <product_version> directory. Deleting the topology design will not delete the associated flows from HP Operations Orchestration.

Known problems, limitations, and workarounds

HP Codar

Installation, initial configuration, and uninstallation

Extra tags seen in the topology design page after upgrade

ID	QCCR1D208693
Problem	After upgrading HP Codar from 1.00 to 1.50, you may have extra tags in the topology design page. These extra tags were created for the topology components.
Cause	Codar 1.00 had service design tags that were common to sequence and topology designs. In Codar 1.50, this was changed to sequence and topology design specific tags. As part of the upgrade script, these common tags are cloned to create topology-specific tags; however, the cloning script missed a condition to clone only the tags with artifact type as "service blueprint" type.
Workaround	You can safely delete these extra tags as these are new tags and no design will be associated. As the original tags are not disturbed, there is not impact on the way the original tags were used.

Cancellation of partial design deployments errors out after the upgrade

ID	QCCR1D208678
Problem	The partial topology design deployment cannot be cancelled, and it may error out during the cancel after upgrading from a previous version of the product.
Cause	This happens because the providerType tagging is missing on the deployed instance.
Workaround	No workaround available.

Composite Designs gets exposed during the upgrade through container

ID	QCCR1D208677
Problem	After the upgrade from HP Codar 1.00 to 1.50 the composite design gets listed in the designer page which were not seen before the upgrade.
Cause	The composite designs are hidden but during the upgrade all designs get a new container through which these design gets listed.
Workaround	No workaround available.

Using the out-of-the-box design named "vCenter Simple Compute" and enabling certain properties causes deployment failures

ID	QCCR1D208663
Problem	Using the out-of-the-box design named "vCenter Simple Compute" and enabling 'Modifiable during package deploy' & 'Modifiable during package redeploy' for properties like cpuCount and memorySize with default packages created results in deployment failures.
Cause	Product defect with out-of-the-box content for this design.
Workaround	Delete the default vCenter component and add the component again into the design. Configure for deployment and it should work.

Issues with redeploy and scale out with content migrated from HP Codar 1.00

ID	QCCR1D208664
Problem	Content migrated from HP Codar 1.00 systems does not support redeploy or scale out and may see failures in when these actions are triggered.
Cause	The legacy designs do not support behaviors listed above as the content from these design does not support for redeployment or scale out.
Workaround	Use the newly packaged designs for HP Codar 1.50 release to exhibit these functionality.

HP Codar Management Console

Topology component Boolean and integer properties are not correctly mapped to Chef attributes

ID	QCCR1D187711
Problem	Topology components imported from Chef include an attributes parameter in their deploy operation, allowing customization of the provisioning of the Chef recipe. Properties passed in the attributes parameter are automatically converted to Strings. For example, an Integer component property of 3306 will be converted to "3306", and a Boolean component property of true will be converted to "true". If the Chef recipe is written to expect an Integer or Boolean input and not a String, the provisioning of the component will fail.
Cause	Product limitation
Workaround	The Chef recipe should be written or modified to expect string input.

Two attempts are needed to log into the Management Console

ID	QCCR1D185405
Problem	It sometimes takes two attempts to log into the Cloud Service Management Console.
Cause	Product defect that appears to be related to closing the browser tab for, rather than logging out of, the Management Console.
Workaround	Log out of the Management Console to end your session. If the first log in attempt does not succeed, log in again.

Imported topology component does not present a list of values for a multi-select Input property

ID	QCCR1D186068
Problem	When importing an HP Operations Orchestration flow in the Designs / Topology / Components area of the Management Console, if that flow contains an Input property with Type value of List of Values and From value of Prompt User from List – Selection List , the resulting component imported into HP Codar will have a property value of type string for this input property. Instead of a list of values from which one or more can be selected, a single text input will be presented to the user for this property in both the Components and Designer areas.
Cause	The Designs / Topology / Components and Designs / Topology / Designer areas of the Cloud Service Management Console do not have graceful support for multi-select properties such as these.
Workaround	In the text input for such a property, encode the property values using the appropriate delimiter, which is determined by the method the flow uses to parse the Input property. If the flow uses the default Selection List Iterate operation that is provided with HP Operations Orchestration, the delimiter (separator) is configurable and has a default of ' '. For example, the values 'red', 'green', and 'blue' would be specified as 'red green blue' (unquoted) if using the Selection List Iterate operation with the default separator value.

User Avatar image isn't displayed when access control is viewed by users and group

ID	QCCR1D208621
Problem	In Access Control the avatar image isn't displayed for the "By Users and Group" view in the Designs/Topology area of the HP Codar Management Console.
Cause	Product defect.
Workaround	No workaround available.

You can't add a user name which has first name, initials, and last name in the active directory

ID	QCCR1D208765
Problem	Access control does not allow you to add a user if the user name does not match with user first name and last name.
Cause	The LDAP User Name attribute configured in the provider organization LDAP setting with attribute name as sAMaccountName.
Workaround	User can access the container through an LDAP group. <ol style="list-style-type: none"> 1. Create a group in LDAP server. 2. Add user to the group. 3. In Access control search with group option. 4. Add group.

Unable to search user and/or group in Access Control

ID	QCCR1D206378
Problem	In Access Control tab of a specific design in the Designs/Topology area of the Management Console, while searching for users and/or groups in "Add Users and Group" dialog, no search results are shown even though the users/groups are available.
Cause	LDAP either not configured to use <i>memberOf</i> attribute or it doesn't support <i>memberOf</i> .
Workaround	Configure <i>memberOf</i> attribute <ol style="list-style-type: none"> 1. The <i>memberOf</i> overlay updates an attribute whenever changes occur to the membership attribute of entries of the objectclass (by default groupOfNames) configured to trigger updates. 2. If LDAP does not support <i>memberOf</i> then user search is restricted at OU (organization Units) level. For example, Configure Access Control DN like "ou=Codargroup, ou=Users"

When copying a design using the **Save As** button, tags associated with the source design are not copied

ID	QCCR1D206870
Problem	When copying a topology design or sequenced design using the Save As button, any tags associated to the source design will not be copied to the newly created design.
Cause	Product defect.
Workaround	Select the appropriate tags for the new design after the Save As operation has completed.

Errors occur in the Topology Designer tab when an operation is attempted before the prior operation has completed

ID	QCCR1D208472
Problem	In the Designs / Topology / Designer area of the Codar Management Console, errors may occur in the Designer tab when an operation is attempted before the prior operation has completed. For example, interacting with the Manage Groups dialog shortly after modifying a component on the canvas may produce an error message containing the text "Batch update returned unexpected row count".

Cause	Product defect
Workaround	Ignore the error message and continue editing the topology design.

Pipeline management

Selecting all available packages and deleting as a Developer or QA or Release Manager doesn't work

ID	QCCR1D208688
Problem	If there are multiple (at least 2) packages in development lifecycle and you try to delete both the packages using 'Delete packages' option, then you will get an error message which states that you don't have SERVICE_BLUEPRINT_WRITE access.
Cause	The delete multiple Packages functionality is expecting you to have permissions for editing the designs which a Developer will not have and hence this issue occurs.
Workaround	If you wish to delete all the packages, then you should leave one package un selected from the 'Delete packages' dialog and delete the rest. This will delete all the selected packages. After this you will be able to delete the last remaining one package without any error.

Selecting all available packages and deleting as a Developer or QA or Release Manager doesn't work

ID	QCCR1D208688
Problem	If there are multiple (at least 2) packages in development lifecycle and you try to delete both the packages using Delete packages option, then you get an error message which states that you don't have SERVICE_BLUEPRINT_WRITE access.
Cause	The delete multiple Packages functionality expects you to have permissions to edit the designs, and a Developer will not have this permission.
Workaround	If you wish to delete all the packages, then you should leave one package un selected from the Delete packages dialog and delete the rest. This will delete all the selected packages. After this you will be able to delete the last remaining one package without any error.

Redeployment cannot be done for a Server-Group Based deployed instance

ID	QCCR1D207936
Problem	While Redeploying Application design containing scaling group components an error is thrown on specific condition. (Resource 'xxxx' in topology 'yyyy' cannot be found)
Cause	The scaling group instance count property has the "modified during redeploy" option enabled.
Workaround	"Modify during package redeploy" option checkbox must not be enabled on "instanceCount" property in scaling group for Application designs.

Modifying Value in Package Configure tab is not reflected in user interface when saved

ID	QCCR1D207185
Problem	The values for integer properties in a package that are optional and modifiable cannot be set to empty.
Cause	Integer property values cannot have an empty value in the package. When the value is set to empty, it will default to the value specified in the design.
Workaround	No workaround is available.

A simple design with server group enabled for redeploy doesn't prompt for instance count value during redeploy

ID	QCCR1D207650
Problem	User cannot redeploy a package and scale out in a single operation.

Cause	Internally, redeploy and scale out are handled as two different operations. It is not designed to redeploy as well as scale out.
Workaround	Codar does not support scale out during redeploy in this release. In this release the user can first redeploy and update the instance. After the instance is updated, the user can scale out the deployed instance. Redeploy and scale out is not supported in single operation. These must be different operations.

Deploying the HP Codar out-of-the-box capsule does not deploy the vCenter topology jar

ID	QCCR1D208269
Problem	The out-of-the-box PetClinic design does not get deployed and it will not be able to generate the master OO flow.
Cause	The VMware vCenter and Amazon 15.07 content pack is missing.
Workaround	Deploy the VMware vCenter and Amazon 15.07 content pack using the CSL content installer.

Online help

Online help incorrectly uses the term *infrastructure design* instead of the term *microservice design*

ID	QCCR1D207239
Problem	The Management Console help uses the term <i>infrastructure design</i> to identify concrete designs that meet the needs of one or more capabilities present in a partial design. The infrastructure design term is no longer used in the Cloud Service Management Console. Concrete designs that meet the needs of a particular capability in a partial design are now referred to as microservice designs. The selection of one or more microservice designs during a test run is now made on a design composition step in the Test Run wizard.
Cause	Product terminology changed after the help was completed.
Workaround	Be aware of the terminology change when performing test runs of partial designs.

The Cloud Optimizer tile in the Codar Management Console is not discussed in the Codar Management Console help

ID	QCCR1D207149
Problem	The Cloud Optimizer tile in the Codar Management Console is not discussed in the Codar Management Console help.
Cause	The tile was added after documentation was finalized.
Workaround	The following text describes the Cloud Optimizer tile: HP Virtualization Performance Viewer (HP vPV) is a web-based analysis and visualization tool that analyzes performance trends of elements in virtualized environments. When HP vPV is integrated with HP Codar, you can monitor the performance and analyze the capacity, usage, and forecast trends of the virtualized infrastructure. By default, in the Codar Management Console, there is a Cloud Optimizer tile that launches the product web page for HP vPV. You can configure the Cloud Optimizer tile to launch the HP vPV dashboard. See the HP Codar Configuration Guide for more information on how to enable HP vPV in your HP Codar environment.

Incorrect links to online help

ID	QCCR1D206928
Problem	Clicking on "Help" link of configure tab and environments tab takes you to wrong URL.
Cause	The mapping between help link and help pages is not correct.

Workaround	Clicking on "Help" Link of Configure tab will take you to "Edit a Package" page. Click on "Configure package properties" below "Edit a package" on left side to see correct help Clicking on "Help" link of Environments tab will take you to "HP Codar" Help Home page. Traverse to "HP Codar" > "Designs" > "Topology designs" > "Environment groups" to view help.
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APIs

UserAccessControl in DeleteDeployment: Any user role can DELETE deployments created by any user

ID	QCCR1D206901
Problem	You can delete of deployments that were created by other users.
Cause	Deleting a deployment is not restricted for all users. Unlike cancel of deployments which is restricted.
Workaround	Do not delete deployments created by other users.

Integrations

Jenkins

Test tab doesn't get updated for Jenkins role based deployments

ID	QCCR1D203249
Problem	When Jenkins is configured to integrate with HP Codar, the instance owner in HP Codar is different from what is configured in the Jenkins plugin.
Workaround	To propagate user context from Jenkins to HP Codar: In the Jenkins plugin, use a user who has the Integration role in HP Codar. Edit the csa.properties file, which is found in CODAR_HOME and change the OO user name and password as configured in the Jenkins plugin. In OO \Content Management\ Configuration Items\System Properties use the same user name and password for the CODAR_REST_CREDENTIALS property.

For Jenkins Codar integration the JSON file should not contain spaces.

ID	QCCR1D207544
Problem	For Jenkins integration design file name contains spaces.
Cause	Design file name contains spaces when we copy the file on Jenkins.
Workaround	While creating design file for Jenkins integration user should not create the file name with spaces.

HP Operations Orchestration (HP OO)

Provisioning fails for a Puppet topology component provisioned on a Linux system

ID	QCCR1D208580
Problem	When a Puppet topology component is provisioned on a Linux system that does not contain the /opt directory, the provisioning will fail.
Cause	Defect in the HP OO flow that provisions Puppet components.
Workaround	Manually create the /opt directory on the Linux system or the template for the Linux system prior to provisioning Puppet components.

Deprecation notes

Service designs and content packs

The following service designs and HP Operations Orchestration content packs have been deprecated; HP Codar 1.50 is the last release that will support this content. The content will not be included in future releases. Content is now included as part of the CSL Content Installer, and that content should be used instead. You can access the CSL Content Installer from the tools/CSLContentInstaller directory after installing HP Codar.

CSAKit-4.5/Content Archives/sequenced/matrix operating environment/CSA_BP_MOE_COMPUTE_ADM_SITESCOPE_UCMDB_v3.20.00.zip

CSAKit-4.5/Content Archives/sequenced/matrix operating environment/CSA_BP_MOE_COMPUTE_ADM_v3.20.00.zip

CSAKit-4.5/Content Archives/sequenced/matrix operating environment/CSA_BP_MOE_COMPUTE_CUSTOM_PROVIDER_SELECTION_v3.20.00.zip

CSAKit-4.5/Content Archives/sequenced/matrix operating environment/CSA_BP_MOE_COMPUTE_DMA_JBOSS_SITESCOPE_UCMDB_v3.20.00.zip

CSAKit-4.5/Content Archives/sequenced/matrix operating environment/CSA_BP_MOE_COMPUTE_DMA_JBOSS_v3.20.00.zip

CSAKit-4.5/Content Archives/sequenced/matrix operating environment/CSA_BP_MOE_COMPUTE_MT_v3.20.00.zip

CSAKit-4.5/Content Archives/sequenced/matrix operating environment/CSA_BP_MOE_COMPUTE_SITESCOPE_UCMDB_v3.20.00.zip

CSAKit-4.5/Content Archives/sequenced/matrix operating environment/CSA_BP_MOE_COMPUTE_SOAPV4_v3.20.00.zip

CSAKit-4.5/Content Archives/sequenced/matrix operating environment/CSA_BP_MOE_COMPUTE_STANDALONE_DMA_JBOSS_v3.20.00.zip

CSAKit-4.5/Content Archives/sequenced/matrix operating environment/CSA_BP_MOE_COMPUTE_v3.20.00.zip

CSAKit-4.5/Content Archives/sequenced/network automation/CSA_BP_NA_VIRTUAL_NETWORK_v3.20.00.zip

CSAKit-4.5/Content Archives/sequenced/openstack/CSA_BP_OPENSTACK_HPCS_COMPUTE_v3.20.00.zip

CSAKit-4.5/Content Archives/sequenced/vmware vcenter/CSA_BP_VCENTER_COMPUTE_ADM_SITESCOPE_UCMDB_v3.20.00.zip

CSAKit-4.5/Content Archives/sequenced/vmware vcenter/CSA_BP_VCENTER_COMPUTE_ADM_v3.20.00.zip

CSAKit-4.5/Content Archives/sequenced/vmware vcenter/CSA_BP_VCENTER_COMPUTE_CASCADED_OPTIONS_v3.20.00.zip

CSAKit-4.5/Content Archives/sequenced/vmware vcenter/CSA_BP_VCENTER_COMPUTE_CUSTOM_POOL_SELECTION_v3.20.00.zip

CSAKit-4.5/Content Archives/sequenced/vmware
vcenter/CSA_BP_VCENTER_COMPUTE_DEPENDENT_OPTIONS_v3.20.00.zip

CSAKit-4.5/Content Archives/sequenced/vmware
vcenter/CSA_BP_VCENTER_COMPUTE_DMA_JBOSS_SITESCOPE_UCMDB_v3.20.00.zip

CSAKit-4.5/Content Archives/sequenced/vmware
vcenter/CSA_BP_VCENTER_COMPUTE_DMA_JBOSS_v3.20.00.zip

CSAKit-4.5/Content Archives/sequenced/vmware
vcenter/CSA_BP_VCENTER_COMPUTE_DYNAMIC_OPTIONS_v3.20.00.zip

CSAKit-4.5/Content Archives/sequenced/vmware
vcenter/CSA_BP_VCENTER_COMPUTE_FAILURE_HANDLING_v3.20.00.zip

CSAKit-4.5/Content Archives/sequenced/vmware vcenter/CSA_BP_VCENTER_COMPUTE_MODIFY_v3.20.00.zip

CSAKit-4.5/Content Archives/sequenced/vmware
vcenter/CSA_BP_VCENTER_COMPUTE_SA_SOFTWARE_POLICIES_v3.20.00.zip

CSAKit-4.5/Content Archives/sequenced/vmware
vcenter/CSA_BP_VCENTER_COMPUTE_SITESCOPE_MODIFY_v3.20.00.zip

CSAKit-4.5/Content Archives/sequenced/vmware
vcenter/CSA_BP_VCENTER_COMPUTE_SITESCOPE_UCMDB_v3.20.00.zip

CSAKit-4.5/Content Archives/sequenced/vmware
vcenter/CSA_BP_VCENTER_COMPUTE_STANDALONE_DMA_JBOSS_v3.20.00.zip

CSAKit-4.5/Content Archives/sequenced/vmware vcenter/CSA_BP_VCENTER_COMPUTE_v3.20.00.zip

CSAKit-4.5/Content Archives/topology/amazon ec2/CSA_BP_AMAZON_EC2_INFRA_v4.10.00.zip

CSAKit-4.5/Content Archives/topology/vmware vcenter/CSA_BP_VCENTER_COMPUTE_v4.10.00.zip

CSAKit-4.5/Content Archives/topology/vmware vcenter/CSA_BP_VCENTER_HPSA_LAMP_STACK_v4.10.00.zip

CSAKit-4.5/00 Flow Content/10X/oo10-csa-cp-4.50.0000.jar

CSAKit-4.5/00 Flow Content/9X/CSA-4_10-ContentInstaller.jar