

VMware vRealize Automation 6.2 Release Notes

Last Updated 09/22/2017

vRealize Automation 6.2 | 9 DEC 2014 | Build 2330392

VMware Identity Appliance 6.2 | 9 DEC 2014 | Build 2300183

vRealize Automation Application Services 6.2 | 9 DEC 2014 | Build 2299597

Updated on: 20 AUG 2015

Check for additions and updates to these release notes.

What's New

Supportability Enhancements

- Improved logging and event tracking for auditing.
- Included centralized log collection of all cluster logs, including IaaS.
- Added telemetry support.
- Added certificate validation and simplification in vRealize Automation Management console.

Integration with vRealize Operations Manager

- Provides reclamation recommendation based on data from vRealize Operations Manager.
- Displays Health Badge from vRealize Operations Manager.

API Improvement and new CLI Tool

- Support for managing reservations has been added to the vRealize Automation REST API. The new API capabilities include creating, updating, or deleting a reservation, and viewing information about a reservation such as its compute resource usage. The supported reservation types are supported: vSphere, vCloud Director, Amazon, KVM (RHEV), SCVMM, Hyper-V, and XenServer. Enabling FlexClone in vSphere reservations is not supported from the API in this release.
- Updated the vRealize Automation Programming Guide with a greater focus on performing common tasks and scenarios by using the vRealize Automation REST API and with overview information about the API services and working with the API reference documentation.

Endpoint Support Enhancements

- vRealize Automation can connect to vCloud Air including subscription and on-demand service or vCloud Director through proxy, which is configured in vCloud Endpoint.
- Supports Xen Desktop 7.0.
- Supports OpenStack Havana.

Advanced Service Designer Enhancements

- Support for importing and exporting Advanced Service Designer content.
- Support for complex and interactive forms for resource actions.
- Populates form controls with data from external systems.

Application Services Enhancements

- Ability to edit custom properties for published applications in the service catalog.

vRealize Orchestrator Enhancements

- **Switch case**
The switch case activity handles complex conditional and branching operations from within the automated workflows. In common with the decision elements, switch case activity controls the workflow run by letting the workflow developers to specify different codes that should run in various conditions. In the switch statement, a variable is tested for equality against a list of values. When a case statement matches the value of the variable, the particular workflow branch is processed.
- **Global error handling**
In addition to the traditional activity-based error handling, vRealize Orchestrator 6.0 introduces a global error handling mechanism, which lets workflow developers choose a default error path that is valid at a global workflow level. The default error handling activity diagram also allows for a custom definition of rollback actions in case of a workflow failure.

Other Feature Enhancements

- View the **Calendar of Events** on the **Home** page.
- Schedule date and time for the reconfigure operation.
- Change lease. You can set the expiration to indefinite or never.
- Supports configurable email templates.

- Supports editing of any machine property during the approval process.
- Supports filtering of catalog items by Business Group.
- Performance improvements.

Branding Change

- vCloud Automation Center is rebranded to vRealize Automation. Only the user interface and service names are changed. Directory names and program names that contain `vcac` are not changed.
- Branding has been changed to match the VMware standard for color, tabs, and gradient. You can still set your product logo in a header that is now 50pixels tall and has a gradient from your supplied color to 40 percent darker in HSV space. Your supplied text color is now used for the entire page, including secondary tabs, bottom text, and goal navigator. For very bright themes, for example almost white, the tab background is #DDD to differentiate it from the active tab. Otherwise your color is used. You cannot change the bottom color.

System Requirements and Installation

For information about supported host operating systems, databases, and Web servers, see the [vRealize Automation Support Matrix](#).

Documentation

The vRealize Automation documentation set includes updates to support all of the new features and functionality introduced in version 6.2. This includes significant improvements in the installation process to deploy vRealize Automation in a distributed configuration, see *Distributed Deployment Checklist* in the VMware vRealize Automation 6.2 Documentation Center.

Resolved Issues

The resolved issues are grouped as follows:

- Advance Service Designer
- Configuration and Provisioning
- Networking

Advanced Service Designer

- **Resource actions for Hyper-V, SCVMM, and XenServer virtual machines might fail if based on resource mapping workflows that query the EXTERNAL_REFERENCE_ID property**

If you create a resource mapping for a Hyper-V, SCVMM, or XenServer virtual machine based on a resource mapping workflow that queries the EXTERNAL_REFERENCE_ID property, when a resource action runs the workflow, it fails because the EXTERNAL_REFERENCE_ID property is not set in the **Properties** object passed to the workflow.

This issue is resolved.

- **Unable to find vSphere or vCloud Director virtual machines by unique identifier using the vRealize Orchestrator Plug-In for vRealize Automation 6.2 or directly in vSphere API**

The Workflow Runner helper workflow might fail to locate the VC:VirtualMachine inventory object. As a result, custom workflows invoked by the Workflow Runner workflow might fail with the error: TypeError: Cannot read property "datastore" from null. The VMUniqueID virtual machine entity property is changed from BiosUUID to InstanceUUID.

This issue is resolved.

- **Unable to refresh submission form fields when requesting some catalog items with detected cyclic dependencies published by using the Advanced Service Designer**

When all input parameters of a vRealize Orchestrator workflow have OGNL dependencies or validations, if you use the workflow to create and publish a service blueprint, when consumers request the catalog item, the form designer does not refresh the submission form fields because of detected cyclic dependencies. An example for a cyclic dependency is when you have two input parameters, and the value of each field depends on the value of the other field.

This issue is resolved.

Configuration and Provisioning

- **XenDesktop machine registration times out if not completed in under 2.5 minutes**

The value of \$regTries in the XenDesktopFunctions script needs to be increased.

This issue is resolved.

- **Approvals that are active before upgrading to vRealize Automation 6.2 do not appear after upgrade**

When you navigate to **Inbox > Approvals**, the default filter is set to Active but none of the active approvals appear. If you filter by any status other than All, none of the approvals that were active before upgrading to 6.2 appear.

This issue is resolved.

- **Machine state does not change to Power Off or Expired State after the expiry date**

A multi-machine and its components gets deleted after the expiry date is reached.

This issue is resolved.

Networking

- **Various issues exist with vRealize Automation and VMware NSX integrations**
The issues relating vRealize Automation and VMware NSX integration is resolved.
- **vCloud Networking and Security inventory synchronization fails and an error message appears**

When you delete a transport zone that is assigned to a vRealize Automation reservation, a multi-machine blueprint, or a multi-machine instance from the VMware NSX user interface, vCloud Networking and Security inventory synchronization fails and an error message appears. The details of the error message depends on the entity that is using the transport zone.

This issue is resolved.

- **Renaming, editing, or viewing an existing VMware vRealize Orchestrator or VMware vSphere endpoint with configured custom properties causes vRealize Automation to remove the hidden custom properties from the database**

Without the hidden custom properties of the endpoint users cannot run the VMware vCloud Networking and Security plug-in workflows.

This issue is resolved.

Known Issues

Known issues not previously documented are marked with the * symbol. A new issue was added to the end of the Configuration and Provisioning section on 16-JAN-2015.

Installation and Upgrade

- **Installation of Manager Service component fails by using IaaS custom install option***

Installation of Manager Service component is not supported on a machine where database, Web site and Model Manager Data components are already installed. If you attempt the installation, the Manager Service component installation fails, the error message Virtual application vcac exists is displayed.

- **Logs are not included in the final bundle because of a slow network connection between the nodes and the management console***

Logs are not uploaded and are not included in the final bundle if the timeout is exceeded. The current timeout is fixed at 30 minutes after a node has started executing the command. This might happen because of a slow network connection between the nodes and the management console.

- **Prerequisite Checker does not detect settings when it uses non default SQL port***

If you run a custom install and select database node on SQL with non default instance and non default port, even if Microsoft Distributed Transaction Coordinator (MSDTC) is configured correctly and the MSDTC service is running, the Prerequisites Checker does not detect the settings.

Workaround: Manually verify that MSDTC is running and then click **Bypass** in the Prerequisites Checker to proceed with installation.

- **Login page of the Identity virtual appliance displays the VMware vCloud Automation Center after upgrade from 6.1 to 6.2***

If you upgrade from VMware vCloud Automation Center 6.1.x to vRealize Automation 6.2, the login page of the Identity virtual appliance displays the brand name as VMware vCloud Automation Center instead of VMware vRealize Automation.

Workaround: Re-register with the Identity virtual appliance by navigating to the **SSO** tab in management console and selecting **Save Settings**. The new brand name is displayed.

- **Warning appears in the Identity appliance management console in a split DNS configuration***

A warning appears in the Identity appliance management console, if you select **Join AD Domain** in a split DNS configuration. You can ignore the warning message.

- **HP Server Automation Software integration scripts are broken because of missing PowerShell scripts***

Support for HP Server Automation Software machine PXE create and software install is broken because of missing PowerShell scripts.

- **Archive logs are missing for the stopped machines***

If the archive logs are missing for some of the machines, the machine is either stopped or is unreachable.

- **Tabs intermittently appear with incorrect names***

After upgrading an HA environment from vCloud Automation Center 6.0.x or 6.1 to vRealize Automation 6.2, tabs might intermittently appear with incorrect names.

Workaround: Restart all the vRealize Automation virtual appliances.

- **The vRealize Automation database cannot be installed to a custom directory by using the installation wizard**

In a distributed (custom) installation, the installer ignores changes you make to the default database and log directory. The database and logs are created in the default directory.

Workaround: To install your database to a non default location, install the database using the DBinstall scripts before installing vRealize Automation.

- **IaaS Authentication Fails During IaaS Web and Model Management Installation due to an issue in IIS**

When running the Prerequisite Checker, the message that the IIS authentication check failed because authentication is not enabled appears, but the IIS authentication check box is selected.

Workaround:

1. Clear the **Windows authentication** check box.
2. Click **Save**.
3. Select the **Windows authentication** check box.
4. Click **Save**.
5. Rerun the Prerequisite Checker.

- **Single Sign-On certificate validation fails if the common name contains an uppercase letter**

When you assign a certificate to a Single Sign-On appliance, all strings are converted to lowercase. Because the validation process is case sensitive, the process fails because the certificate name contains an uppercase letter and the validation process is searching for a name in all lowercase.

Workaround: When you specify the SSO host address at **vRealize Automation Appliance > vRA Settings > SSO**, enter the address with the capitalization used when the certificate was assigned to the SSO appliance.

- **Installation fails when an incorrect host name is specified**

Installation fails with an error similar to the following:

Info : 2014-06-17 10 42 32 059 AM : System.AggregateException: One or more errors occurred. ---> System.Net.Http.HttpRequestException: An error occurred while sending the request. ---> System.Net.WebException: The remote name could not be resolved: 'po-va-rtq8c.sqa.local'Cause: Cause: An incorrect name was entered in the vCAC HostName field at vCAC Settings > Host Settings.

Workaround:

1. Edit the virtual appliance configuration file `/etc/sysconfig/network/dhcp` to include the correct host name.
2. Reboot the virtual appliance.
3. Log in to the virtual appliance management console.
4. Open the **vRA Settings** tab and click **Host Settings**.

5. Enter the correct name in the **Host Name** text box.
6. Click **Save Settings**.
Note: Do not click **Resolve Host Name**.
7. Complete the virtual appliance configuration steps and continue with the installation.

Migration

- **Destroy date for a vApp component is different from that of the vApp container for the vApps migrated from vRealize Automation 5.2.x version***
Any vApp that gets migrated from vRealize Automation 5.2x version displays the destroy dates inconsistent between the component and container. The component displays the same destroy date as the expiration date, but the container displays correct information. Because vRealize Automation manages vApp leases based on the container information, your components are not deleted prematurely.
- **Calendar of Events portlet does not show the correct create date after migration***
After migration, the **Calendar of Events** portlet shows the migration date as the creation date for all migrated items. This issue occurs regardless of the actual or correct date.
- **Pre-migration check erroneously reports that agents are missing in target system**
Pre-migration performs a check to verify that agent names in the source system are present in the target system and it generates a message in the report when there is a mismatch. The pre-migration report might include the message, No matching agent found on the target system. Install an agent with a matching name on the target system, even when a matching agent exists in the target system.

The message is generated, in error, if a matching agent is present in the target system but that agent has no endpoint configured.

Workaround: If the message appears in the pre-migration report and a matching agent does exist in the target system, configure an endpoint for the agent in the target system and then rerun pre-migration. Otherwise, ignore the message and configure an endpoint when migration finishes.

Internationalization

- **Unable to create snapshots if name of the virtual machine contains non-ASCII characters in Items tab***
If the virtual machine name in the **Items** tab contains non-ASCII characters, you cannot create the snapshot of the virtual machine.

Workaround: Rename the machine and use English characters to create the snapshot.

- **Guest agent custom scripts that contain unicode characters remain in an infinite loop**

If you use custom scripts with the guest agent that have unicode characters in the name of the script, the VM is not provisioned and the request remains in an infinite loop.

Workaround: Do not include unicode characters in the name of your script.

Networking

- **Concurrent deployment of multi-machine blueprints with VMware NSX tasks remain In Progress state indefinitely.**

Workaround: To resolve this known issue, see [KB 2128908](#).

- **When load balancing is enabled on multiple VDR routed networks, the same NSX Edge is used.**

When load balancing is enabled on multiple VDR routed networks in a multi-machine blueprint, a single NSX Edge is connected to both the networks on the uplink side of the edge. In such situations, one or more load balancer virtual servers might not be accessible.

- **IP ranges in routed network profiles are listed as allocated although no IP addresses are in use**

If a multi-machine blueprint contains the routed external network profile but not an assignment for the routed network to component network adapters, machines are provisioned successfully but an IP address range from the routed network profile is allocated and not actually in use.

- **Incorrect network setting displayed for virtual multi-machine component in vRealize Automation after network reconfigured in vCenter Server**

You cannot reconfigure the vCloud Networking and Security (NSX) network of a virtual multi-machine component in vRealize Automation. Instead, you must use the vSphere Client to reconfigure the network in vCenter Server. Note that some network settings for the virtual multi-machine component do not appear correctly in vRealize Automation.

Workaround: Update the network in vCenter Sever to restore proper network settings.

Application Services

- **AWS eu-central-1 region cannot be used with Application Services 6.2***

When you attempt to deploy AWS in eu-central-1 region, the deployment fails

and the error message An unexpected error occurred. Please contact your system administrator is displayed.

- **Deployment Environments proxy settings are not used whether or not you configure global proxy settings***

Even if you configure or do not configure the global proxy settings in the darwin_global.conf file, when configure the proxy settings at the Deployment Environment level, the deployments does not apply the proxy settings at the Deployment Environment level.

- **Unable to publish a blueprint from Application Director to vRealize Automation catalog by using vRealize Automation 6.2 version**

If you upgrade to vRealize Automation 6.2 from 6.0.1.x or 6.1 and then attempt to publish a blueprint to the vRealize Automation catalog, the error message An unexpected error has occurred. Please contact you system administrator appears. This problem does not occur for newly registered instances of Application Director with vRealize Automation 6.2 version.

Workaround: Unregister Application Director 6.0.1.x or 6.1 from vRealize Automation 6.2 and then register Application Director again with vRealize Automation.

- **Access denied for fabric administrator destroying cross-tenant Physical, Application Service**

Fabric administrators receive an Access Denied message when destroying cross-tenant Physical, Application Service.

Workaround: Log in as a fabric administrator of the fabric group in the tenant where the machine resides to destroy it.

- **vRealize Automation does not support multiple hosts in the system with the same name**

Data collection updates hosts based on the host name. If two endpoints have identically named hosts, endpoints contend over ownership of the host.

Workaround: Ensure that all host names are unique.

- **In Application Services, you cannot add a description to a disk in a blueprint canvas**

If you are using Windows Internet Explorer 11, you cannot add a description to a disk on the **Disks** tab of a blueprint canvas.

Workaround: To add a description to a disk in a blueprint canvas, you must use Chrome or Firefox.

- **You cannot update nodes that use Puppet services deployed with Application Director 6.0.1.x or 6.1**

Application Services 6.2 does not support the updating of nodes that use Puppet services that were deployed with Application Director 6.0.1.x or 6.1. Application

Services 6.2 creates a Puppet node manifest that allows you to update specific services, but it is not compatible with the node manifest files generated in Application Director 6.0.1.x or 6.1.

Advanced Service Designer

- **Advanced Service Designer field value constraint is not evaluated after the vRealize Orchestrator presentation binding***
If you are designing a request form, a constraint is not applied correctly if the constraint of the field uses binding with another field of the form whose value is calculated based on the binding expression defined in the vRealize Orchestrator presentation. This binding between fields should be defined entirely in either the vRealize Orchestrator presentation or the Advanced Service Designer form.
- **Incorrect fields check might occur in Advanced Service Designer***
When you change the endpoint type in create mode, an incorrect fields check might occur.

Workaround: Perform the following steps.

1. Close the currently opened wizard for the endpoint creation.
2. Start a new endpoint creation wizard.
3. Select the correct plug-in type on the first wizard page.
4. On the **Form Presentation** tab, and enter the required data.
5. Save the configuration.

The correct form conditional constraints are executed.

- **Number maximum value and String maximum length conditions are not populated from vRealize Orchestrator in the Advanced Service Designer form**
When a service architect creates a blueprint form in Advanced Service Designer and loads a vRealize Orchestrator workflow that contains a number field with an associated maximum value condition or contains a string field with an associated maximum length condition, the restrictions applied to these fields do not appear in the Constraints tab on the blueprint.

Workaround: The service architect should re-enter the constraints manually as follows:

1. Click the Edit option for the input parameter.
 2. Click the Constraints tab.
 3. Insert a restriction for the Maximum value if the parameter is a number or Maximum length if the parameter is a string.
- **Cannot create a service blueprint or resource action in the Advanced Service Designer when selecting a workflow that has an input of a string array type with a predefined answers action that could return null**
In the Advanced Service Designer, during creating a service blueprint or resource

action, if you select a vRealize Orchestrator workflow that has an input parameter of a string array type with a predefined answers property in the presentation that calls a scripting action that could return null, when you click Next, the procedure fails and the following error message is displayed: Internal ErrorAn internal error has occurred. If the problem persists, please contact your system administrator. When contacting your system administrator, use this reference: ...

Workaround: From the Design perspective of the vRealize Orchestrator client, edit the predefined answers action by replacing null with an empty array. For example, if the action scripting code is:

```
if (someCondition) {  
  
    return ["a", "b", "c"];  
  
} else {  
  
    return null;  
  
}
```

You must change the code to:

```
if (someCondition) {  
  
    return ["a", "b", "c"];  
  
} else {  
  
    return [];  
  
}
```

Configuration and Provisioning

- **VMware Remote Console (VMRC) is disabled for vSphere machines***
The **Connect by Using VMRC** action for vSphere machines has been removed because of a security vulnerability. Remote console access for machines provisioned through vCloud Director is unaffected. For details about this issue, see [VMSA-2014-0013](#).
- **Costs in a reconfigure approval request are not displayed correctly***
After you change costs on a compute resource of an existing machine and then reconfigure the machine with more memory, CPU, and storage, the costs in a reconfigure approval request are not displayed correctly. Instead, the old values are displayed.

- **Provisioning of multi-machine service with predefined load balancer by using VCNS.LoadBalancerEdgePool.Names property configured at the multi-machine blueprint level is not supported**

If multi-machine components are added to a predefined load balancer by specifying VCNS.LoadBalancerEdgePool.Names property on the multi-machine blueprint, after successful provisioning the multi-machine service starts to dispose immediately and an error message Failed to configure one or more network and security settings. Error: Exception has been thrown by the target of an invocation is displayed.

Workaround: Define the custom property VCNS.LoadBalancerEdgePool.Names on the standalone virtual machine blueprint level.

- **Reprovision action takes the first custom property only***
After provisioning a machine, if you reprovision the machine, the custom property that you have applied during the reprovision task is not updated, and only the first custom property is applied.
- **Tabs are missing in compatibility mode on the new blueprint and new reservation page***
If you enable the compatibility mode in Internet Explorer 11 and disable the **Display Internet sites in Compatibility View** option, and then log into the vRealize Automation, the tabs from the new blueprint page and new reservation page are not displayed.
- **Error appears in the Metrics Provider Configuration tab***
If you navigate to the **Metrics Provider Configuration** tab where the vRealize Automation metrics provider is selected initially, and select **vRealize Operations Endpoint** option, and then select back vRealize Automation metrics provider, and click **Save**, the error message Correct the highlighted errors is displayed.

Workaround: Refresh the browser or log out and log back in to the vRealize Automation user interface.

- **Approval policies does not appear in the Approvals tab***
Approval message does not appear when an approval policy is assigned to a service.
- **Health badge of vRealize Operations Manager is not displayed in the Items tab***
If you configure vRealize Operations Manager in reclamation machines metric provider configuration, the Health badge is not displayed in the **Items** tab, although the Health badge is available in the reclamation machines table.

Workaround: Manually assign tenant administrator role to the user.

- **AppServiceState workflow utilizes excessive CPU on Model Manager Web Service and DEM Worker when many multi-machines are deployed***

The AppServiceState workflow is scheduled to run every 5 minutes. If the system is at sufficient scale, the AppServiceState workflow is scheduled to run before it completes. As a result, the Model Manager Web Service might remain at high CPU utilization for infinite amount of time.

Workaround: Modify the AppServiceState workflow schedule within the `DynamicOps.RepositoryModel.WorkflowSchedules` table to execute at a different interval. For example, change interval from 5 minutes to 60 minutes to run the workflow once an hour.

- **vApp might fail to provision because of an error during customization***
If you change the hardware settings of a virtual machine in a vApp template and then update the template, the virtual machine cannot be provisioned unless you run the endpoint data collection.
- **Tabs are not being updated after a user is granted new roles***
After you grant a user a new role, the tabs specific to that role might not show up for at least 5 to 10 minutes even after you log out and log back in.
- **Previously added portlets might not render fully on the Home tab***
If you use Internet Explorer 8 or 9 to log in to vRealize Automation and add additional portlets under the **Home** tab, previous portlets that are already present in vRealize Automation might not render fully.

Workaround: Refresh the browser.

- **Error occurs when deploying either predefined Puppet-based Test App 1.0.0 or Puppet-based Test App 1.0.1 using a new operating system version***
If you create and use a new operating system version in the blueprint of either the predefined Puppet-based Test App 1.0.0 or Puppet-based Test App 1.0.1 and deploy the application, the deployment fails with the error message `An unexpected error occurred. Please contact your system administrator.`

Workaround: Reuse the predefined operating system versions in the blueprint instead of using the new operating system version.

- **Attempts to log in as the IaaS administrator with incorrect UPN format credentials fails with no explanation**
If you attempt to log in to vRealize Automation as an IaaS administrator with UPN credentials that do not include the `@yourdomain` portion of the user name, you are logged out of SSO immediately and redirected to the login page with no explanation.

Workaround: The UPN entered must adhere to a `yourname.admin@yourdomain` format, for example if you log in using `jsmith.admin@sqa.local` as the user name but the UPN in the Active Directory is only set as `jsmith.admin`, the login fails. To

correct the problem change the userPrincipalName value to include the needed @yourdomain content and retry login. In this example the UPN name should be jsmith.admin@sqa.local. This information is provided in the log file in the log/vcac folder.

- **Email template customization behavior has changed and extraneous templates are unusable**

In vRealize Automation 6.0 or later, only notifications generated by the IaaS component can be customized by using the email template functionality from earlier versions.

Workaround: You can use the following XSLT templates:

- ArchivePeriodExpired
- EpiRegister
- EpiUnregister
- LeaseAboutToExpire
- LeaseExpired
- LeaseExpiredPowerOff
- ManagerLeaseAboutToExpire
- ManagerLeaseExpired
- ManagerReclamationExpiredLeaseModified
- ManagerReclamationForcedLeaseModified
- ReclamationExpiredLeaseModified
- ReclamationForcedLeaseModified
- VdiRegister
- VdiUnregister

Email templates are located in the \Templates directory under the server installation directory, typically %SystemDrive%\Program Files x86\VMware\vCAC\Server. The \Templates directory also includes XSLT templates that are no longer supported and cannot be modified.

- **Actions on provisioned machines are marked complete before they finish**
Actions such as Reprovision or Power Off might appear as Complete on the Requests page when the operation might still be in progress. The actual status of the machine is reflected on the Items page.
- **Guest agent file SCCMPackageDefinitionFile.sms needs to be updated**
The guest agent file SCCMPackageDefinitionFile.sms contains outdated name and publisher information. This does not affect functionality.
- **Lease dates can be changed to fall outside of the Approval Policy value**
Lease dates can be changed by using the **Change Lease** resource action to a date that is later than the maximum lease range specified on the blueprint.
- **Deleted custom groups are not removed from entitlements**
When a custom group that is linked to an entitlement is deleted, the custom group is not removed from the entitlement.

Workaround: To delete a custom group and to remove it from the entitlement:

0. Remove the custom group from the entitlement.
1. Delete the custom group.

- **Removing the business group role from a custom group does not revoke entitlements**

When a custom group that is linked to an entitlement is removed from the business group role, the custom group is not removed from the entitlement.

Workaround: To remove the business group role from a custom group and to delete it from the an entitlement:

0. Remove the custom group from the entitlement.
1. Remove the custom group from the business group role.

- **Hyper-V endpoint is incorrectly listed as an unmanaged machine in Infrastructure Organizer**

When a Hyper-V endpoint fails to provision, vRealize Automation reports the machine as destroyed, but it remains on the endpoint, and appears as an unmanaged machine in Infrastructure Organizer.

- **When provisioning a Citrix XenDesktop/Provisioning Service machine, the machine remains in the Unprovisioning state**

This issue can occur with the VMware VDI agent, and any version of the VMware EPI agent, such as, Citrix, BMC, Opware, VBScripts, and so on. It can also occur at various points throughout the master workflow machine provision cycle.

It is possible that the agent was installed to use a specific server name rather than left blank to handle all third party server requests. If a specific server name is entered, this agent can handle requests only for a server that exactly matches that server name. vRealize Automation uses the value in the custom properties EPI.Server.Name or VDI.Server.Name to locate a corresponding agent to handle the request. If no matching agent is found, the machine remains in the EPIRegister/Machine Provisioned state during provisioning, or the Unprovisioning/DeactivateMachine state, until a corresponding agent is found.

Workaround: Install a new EPI/VDI agent where the server value is exactly what was entered in EPI.Server.Name/VDI.Server.Name, or leave the server name blank.

Optionally, you can update the agent config file of your current agent and change the server value by completing the following steps.

0. Back up your agent config file, typically located at C:\Program Files (x86)\VMware\vCAC\Agents*agentName*\VRMAgent.exe.config.
1. Open a text editor as an administrator.
2. To make the change for any agent type, replace SERVER_NAME_VALUE with your server name, or delete it to leave it blank.
epiIntegrationConfiguration epiType="CitrixProvisioning"

```
server="SERVER_NAME_VALUE"  
vdiIntegrationConfiguration vdiType="XenDesktop" server=""X
```

3. Save your changes.
4. Restart your agent service.
 - a. Click **Start > Administrative Tools > Services**.
 - b. Right-click your desired VMware vRealize Automation Agent service and click **Restart**.
 - c. After the agent restarts successfully, your job continues as expected.

○ **Opening the Infrastructure tab fails when the administrator is a member of several hundred groups* 16-JAN-2015**

When using Active Directory and SSO, an IaaS administrator who is a member of many groups might be unable to display the Infrastructure tab. Attempting to do so may yield one of the following errors:

- Bad Request - Request Too Long - HTTP Error 400. The size of the request headers is too long.
- Service Unreachable - A required service cannot be reached at the expected address. Contact your system administrator for assistance. Reference error REPO404.

Workaround: The resolution is to increase the token limitations as in the following example.

1. Determine and set the maximum Kerberos token size. To determine the correct Kerberos maximum token size for your deployment, use the following guideline:

$\text{Kerberos MaxTokenSize} = 1200 + 40d + 8s$ (bytes)

This formula uses the following values:

- *d* -- The number of domain local groups a user is a member of plus the number of universal groups outside the user's account domain that the user is a member of plus the number of groups represented in security ID (SID) history.
- *s* -- The number of security global groups that a user is a member of plus the number of universal groups in a user's account domain that the user is a member of.

- 1200 -- The estimated value for ticket overhead. This value can vary depending on factors such as DNS domain name length and client name.

2. Determine if you need to modify the registry entry. If the token size that you calculate by using the above formula is less than 12,000 bytes (default size), you do not have to modify the MaxTokenSize registry value on domain clients. If the value is more than 12,000 bytes, adjust the MaxTokenSize registry value (reference <http://support.microsoft.com/kb/263693>). If you need to change the Kerberos MaxTokenSize value, modify the following registry entry:

```
HKLM\System\CurrentControlSet\Control\Lsa\Kerberos\Parameters
MaxTokenSize, REG_DWORD, <value> (the recommended value for the MaxTokenSize
registry entry is 65535 decimal or FFFF hexadecimal)
```

3. Determine and set the correct HTTP maximum request size for your deployment by using the following guideline, where *T* is the Kerberos MaxTokenSize as set above:

```
MaxFieldLength = (4/3 * T bytes) + 200
MaxRequestBytes = (4/3 * T bytes) + 200
```

Set MaxFieldLength and MaxRequestBytes to the calculated values, as in the following example where they are set to the permitted maximum value:

```
HKEY_LOCAL_MACHINE\System\CurrentControlSet\Services\HTTP\Parameters
MaxFieldLength DWORD 65534
MaxRequestBytes DWORD 16777216
```

For related information about issues with Kerberos authentication when a user belongs to many groups, see the following support notes:

<http://support.microsoft.com/kb/327825>

<http://support.microsoft.com/kb/263693>

<http://support.microsoft.com/kb/2020943>