



VMware Validated Design for Software-Defined Data Center 4.1 Release Notes

VMware Validated Design for Software-Defined Data Center 4.1 | 22 AUG 2017

Check for additions and updates to these release notes.

What's in the Release Notes

The release notes cover the following topics:

- [About VMware Validated Design for Software-Defined Data Center 4.1](#)
- [VMware Software Components in the Validated Design](#)
- [What's New](#)
- [Internationalization](#)
- [Compatibility](#)
- [Installation](#)
- [Lifecycle of the VMware Software Components](#)
- [Caveats and Limitations](#)
- [Expanding a Consolidated SDDC with an NSX Advanced License to a Standard SDDC](#)
- [Known Issues](#)

About VMware Validated Design for Software-Defined Data Center 4.1

VMware Validated Designs provide a set of prescriptive documents that explain how to plan, deploy, and configure a Software-Defined Data Center (SDDC). The architecture, the detailed design, and the deployment guides provide instructions about configuring a dual-region SDDC.

VMware Validated Designs are tested by VMware to ensure that all components and their individual versions work together, scale, and perform as expected. Unlike Reference Architectures which focus on an individual product or purpose, a VMware Validated Design is a holistic approach to design, encompassing many products in a full stack for a broad set of use case scenarios in an SDDC.

This VMware Validated Design supports a number of use cases, and is optimized for integration, expansion, Day-2 operations, as well as future upgrades and updates. As new products are introduced, and new versions of existing products are released, VMware continues to qualify the cross-compatibility and upgrade paths of the VMware Validated Designs. Designing with a VMware Validated Design ensures that future upgrade and expansion options are available and supported.

VMware Software Components in the Validated Design

VMware Validated Design for Software-Defined Data Center 4.1 is based on a set of individual VMware products with different versions that are available in a common downloadable package.

The products included in VMware Validated Designs participate in VMware's Customer Experience Improvement Program ("CEIP"). VMware recommends that you join CEIP because this program provides us with information used to improve VMware products and services, fix problems, and advise you on how best to deploy and use our products.

Details regarding the data collected through CEIP and the purposes for which it is used by VMware are set forth at the Trust & Assurance Center at <http://www.vmware.com/trustvmware/ceip.html>. To join or leave VMware's CEIP for the products that are part of VMware Validated Designs, see the documentation for each product.

Product Group and Edition	Product Name	Product Version
VMware vSphere Enterprise Plus	ESXi	6.5 U1***
	vCenter Server Appliance	6.5 U1
	vSphere Update Manager	6.5 U1
VMware vSAN Standard or higher	vSAN	6.6.1
VMware NSX for vSphere Enterprise	NSX for vSphere	6.3.3 ** ***
VMware Site Recovery Manager Enterprise	VMware Site Recovery Manager	6.5.1
VMware vSphere Replication	VMware vSphere Replication	6.5.1
VMware vRealize Automation Advanced or higher	vRealize Automation	7.3 ****
	vRealize Orchestrator	7.3
VMware vRealize Business for Cloud Advanced	vRealize Business for Cloud	7.3 *
VMware vRealize Operations Manager Advanced or higher	vRealize Operations Manager	6.6.1
	vRealize Operations Management Pack for NSX for vSphere	3.5.1
	vRealize Operations Management Pack for Storage Devices	6.0.5
VMware vRealize Log Insight	vRealize Log Insight	4.5
	vRealize Log Insight Content Pack for NSX for vSphere	3.6
	vRealize Log Insight Content Pack for vRealize Automation 7	1.5
	vRealize Log Insight Content Pack for vRealize Operations Manager	2.0

Product Group and Edition	vRealize Orchestrator 7.0.1+	
	Product Name	Product Version
	vRealize Log Insight Content Pack for Microsoft SQL Server	3.1
	vRealize Log Insight Content Pack for Linux	1.0
VMware vSphere Data Protection	vSphere Data Protection	6.1.4

- * Shortly after VMware Validated Design 4.1 was released, VMware released the vRealize Business for Cloud 7.3.1 patch which includes an important hotfix. VMware Validated Design supports this hotfix and VMware recommends that you apply it immediately
- ** VMware released the NSX for vSphere 6.3.4 patch which includes an important hotfix. VMware Validated Design supports this hotfix and VMware recommends that you apply it immediately. If you installed NSX for vSphere 6.3.3 in your environment, see [VMware Knowledge Base article 2151719](#) before you proceed with upgrading to version 6.3.4.
- *** **Important:** If you are already running VMware Validated Design 4.1, you must apply the vCenter Server 6.5 U1c and NSX for vSphere 6.3.5 patch releases. Both vCenter Server and NSX for vSphere have been updated to address the problems mentioned in VMware Knowledge Base articles [000051124](#), [2151719](#) and [000051144](#).
- **** If you are already running VMware Validated Design 4.1, you must apply the patches in VMware Knowledge Base article [2151693](#).

If the communication in the vRealize Automation cluster is interrupted or is slow, the root partition of the vRealize Automation appliance can be filled up with log data. To prevent from having the space of the root partition of the vRealize Automation appliance exhausted, you must apply patches of the vRealize Automation 7.3 appliance and its Health Service. See VMware Knowledge Base article [2151693](#).

In this version of VMware Validated Design, the vRealize Automation servers in the cluster are vra01svr01a.rainpole.local and vra01svr01b.rainpole.local. Actual names vary according to your environment.

VMware makes available patches and releases to address critical security issues for several products. Verify that you are using the latest security patches for a given component when deploying VMware Validated Design.

VMware Solution Exchange and in-product marketplace store only the latest versions of the management packs for vRealize Operations Manager and the content packs for vRealize Log Insight. This table contains the latest versions of the packs that were available at the time this VMware Validated Design was validated. When you deploy the VMware Validated Design components, it is possible that the version of a management or content pack on VMware Solution Exchange and in-product marketplace is newer than the one used for this release.

What's New

VMware Validated Design for Software-Defined Data Center 4.1 provides the following new features:

- Updated Bill of Materials that incorporates new product versions
- New consolidated SDDC architecture that is an alternative to the standard architecture of VMware Validated Design for Software-Defined Data Center for lower startup cost and hardware footprint. Use the VMware Validated Design for Management and Workload Consolidation to deploy a single-region SDDC with a smaller hardware footprint and less strict availability, for example, in smaller environment with less virtual machines, or as a proof of concept or production pilot. You can scale

environment with less virtual machines, or as a proof of concept or production pilot. You can scale out a Consolidated SDDC to a Standard SDDC at a later stage. The consolidated architecture contains the conventional set of validated design documents, such as *Architecture and Design*, *Planning and Preparation*, and *Deployment* guidance.

The VMware Validated Design for Management and Workload Consolidation does not use cross vCenter Server features because it is a single-region deployment. Therefore, you can use an NSX Advanced license instead of an NSX Enterprise license. See [Expanding a Consolidated SDDC with an NSX Advanced License to a Standard SDDC](#).

- The Cloud Management Platform design now uses vRealize Orchestrator that is embedded in the vRealize Automation Appliance
- **New** You can now deploy VMware Validated Design Use Cases by using vRealize Suite Lifecycle Manager

vRealize Suite Lifecycle Manager supports automatic deployment of the vRealize management components for three common use cases: IT Automating IT, Intelligent Operations and Micro-Segmentation. Before you start a use case deployment, you must deploy the virtual infrastructure layer of the SDDC. After deployment, you complete the configuration of the environment to provide the SDDC features according to the use case objectives. See the *Use Case Deployment Using vRealize Suite Lifecycle Manager* documentation.

The deployment guidance for the Standard SDDC and Consolidated SDDC still covers manual deployment of all SDDC management components. Follow it if you plan to implement an SDDC that contains the complete set of services for provisioning and monitoring workloads.

- **New** VMware Validated Design now provides a scenario-based guidance about proactive monitoring of your SDDC by using the Intelligent Operations capabilities of vRealize Operations Manager and vRealize Log Insight. See *Scenarios for VMware Validated Design Intelligent Operations*.
- New naming scheme for the SDDC nodes for consistency between infrastructure components and ability to scale across infrastructure components without adding operational overhead
- Overview of the footprint of the SDDC management components
- Metrics about vSAN and vRealize Business in are now available vRealize Operations Manager
- Log data from the operating system of the management virtual appliances is now available in vRealize Log Insight

For more information, see the [VMware Validated Design for Software-Defined Data Center 4.1](#) page.

Internationalization

This VMware Validated Design release is available only in English.

Compatibility

This VMware Validated Design guarantees that product versions in the VMware Validated Design for Software-Defined Data Center 4.1, and the design chosen, are fully compatible. Any minor known issues that exist are described in this release notes document.

Installation

To install and configure an SDDC according to this validated design, follow the guidance in the VMware Validated Design for Software-Defined Data Center 4.1 documentation. For product download information, and guides access, see the [VMware Validated Design for Software-Defined Data Center 4.1](#) page.

New Lifecycle of the VMware Software Components

This VMware Validated Design version is based on one or more VMware products whose versions eventually reach the End of Support Life (EOSL) stage as described by the [VMware Lifecycle Policies](#). Those versions are no longer generally supported by VMware. In such a case, upgrade to a later version by using the upgrade procedures in the *VMware Validated Design Upgrade* documentation.

If you are using an earlier version in your environment, upgrade your environment according to the following scenarios:

Scenarios for Upgrade from a Version that Has Reached EOSL

Scenario	Upgrade Approach
The version of VMware Validated Design that you are using has already entered the EOSL stage but the next VMware Validated Design version is still supported.	Apply the <i>VMware Validated Design Upgrade</i> documentation to bring the VMware environment to a fully supported state
The version of VMware Validated Design that you are using and the next version have both already entered the EOSL stage	Because the <i>VMware Validated Design Upgrade</i> documentation supports upgrade only from one release to the next one, the transition across multiple releases might be complex. Contact a VMware sales representative to plan and perform a custom upgrade procedure with the assistance of VMware Professional Services.

For more information about current and expired product releases, refer to the [VMware Lifecycle Product Matrix](#).

Caveats and Limitations

To install vRealize Automation, you must open certain ports in the Windows firewall. This VMware Validated Design instructs that you disable the Windows firewall before you install vRealize Automation. It is possible to keep Windows firewall active and install vRealize Automation by opening only the ports that are required for the installation. This process is described in the [vRealize Automation Installation and Configuration](#) documentation.

Expanding a Consolidated SDDC with an NSX Advanced License to a Standard SDDC

For easier expansion to a full-featured dual-region SDDC, use NSX universal objects. Using universal objects requires an NSX Enterprise license.

If you have an NSX Advanced license in the original Consolidated SDDC, deploy NSX global objects for distributed logical routers, transport zones, and virtual wires in any places where you must specify universal objects.

To expand the SDDC to a dual-region standard architecture, deploy new universal transport zones, universal distributed logical router, and universal virtual wires for the management component and manually migrate the Layer 3 networks and virtual machines to those new virtual wires. This migration would result in an outage to the management components on top of the virtual infrastructure layer

(vRealize Automation, vRealize Orchestrator, vRealize Business, vRealize Operations Manager, and vRealize Log Insight) while the migration occurs.

Known Issues

The known issues are grouped as follows.

- [vSphere](#)
- [Site Recovery Manager and vSphere Replication](#)
- [vRealize Automation and Embedded vRealize Orchestrator](#)
- [vRealize Business](#)
- [vRealize Operations Manager](#)
- [vRealize Log Insight](#)
- [vSphere Data Protection](#)
- [Issues Specific to Consolidated SDDC](#)
- [VMware Validated Design Content](#)

vSphere

- **ESXi host becomes unresponsive and cannot be managed under vCenter Server**

This is a known issue with the `hostd` service in vSphere. To resolve it, restart the `hostd` service on the unresponsive host.

Workaround:

1. Log in to the ESXi Shell of affected host or open an SSH connection as root.
2. Restart the ESXi `hostd` service by running the following command.
`/etc/init.d/hostd restart`

Site Recovery Manager and vSphere Replication

- **New** The vSphere Web Client does not show the option to configure replicated virtual machines in a recovery plan if you are logged in to the Management vCenter Server in Region A

After you pair the `sfo01m01vc01.sfo01.rainpole.local` and `lax01m01vc01.lax01.rainpole.local` sites in Site Recovery Manager, the vSphere Web Client does not show configuration options for the virtual machines in the recovery plans for the Cloud Management Platform and vRealize Operations Manager when you are logged in to the `sfo01m01vc01.sfo01.rainpole.local` vCenter Server. When you right-click a VM object in a recovery plan, you see "No actions available". All options in the context menu including **Configure Recovery** are grayed out.

Workaround: Log in to `https://lax01m01vc01.lax01.rainpole.local/vsphere-client` to configure VM recovery options.

- **After you add a second NIC adapter with a static IP address to the vSphere Replication appliance, the VAMI interface indicates that the IPv4 Default Gateway for both NIC adapters is incorrect.**

After adding a second NIC adapter (`eth1`) with a configuration that contains a static IP address to the vSphere Replication appliance and restarting the appliance, the VAMI interface of the appliance displays the IPv4 Default Gateway of the original NIC adapter (`eth0`) as empty and the IPv4 Default Gateway of the new NIC adapter (`eth1`) as the original default gateway of `eth0`.

Workaround: Do not change the IPv4 Default Gateway field of both NIC adapters. This is a VAMI display issue.

vRealize Automation and Embedded vRealize Orchestrator

- **vRealize Automation Converged Blueprint with NSX routed networks fails with the error "Overlapping IP Addresses are not allowed for different addressGroups. Vnic xxx ip assignments overlaps xxx.xxx.xxx.xxx"**

Provisioning requests intermittently fail with the following error message:

Overlapping IP Addresses are not allowed for different addressGroups. Vnic xxx ip assignments overlaps xxx.xxx.xxx.xxx

Workaround: Perform the following steps:

1. Login to NSX Manager and navigate to **NSX Edges**.
2. Locate the **Distributed Logical Router** under **Test**.
3. Navigate to **Manage > Settings > Interfaces** and delete the Vnic xxx interface from the list of interfaces.

- **Manual installation of an IaaS Website component using the IaaS legacy GUI installer fails with a certificate validation error**

The error message appears when you click **Next** on the **IaaS Server Custom Install** page with the Website component selected. This error message is a false negative and appears even when you select the right option. The error prevents the installation of a vRealize Automation IaaS Website component.

Workaround: See Knowledge Base article [2150645](#).

- **Unable to log in to the vRealize Automation user interface and the embedded vRealize Orchestrator Control Center interface after configuring an authentication provider for the embedded vRealize Orchestrator.**

vRealize Automation user interface and the embedded vRealize Orchestrator control center interface become unavailable when the authentication settings in the embedded vRealize Orchestrator Control Center are configured with a non-existent tenant, for example, if you entered a tenant name with a typo.

Workaround: Resolve the issue by correcting the tenant and restarting the vRealize Orchestrator services on both vRealize Automation appliances.

1. Log in to the vRealize Orchestrator Control Center.
 1. Open a Web browser and go to <https://vra01svr01.rainpole.local:8283/org/vsphere.local>
 2. Log in using the following credentials.

Setting	Value
User name	administrator@vsphere.local
Password	vsphere_admin_password

2. Complete the authentication configuration with the correct tenant.
3. Wait for the control center to replicate the settings to all the vRO servers in the cluster
4. Restart the vRealize Orchestrator services on both vRealize Automation appliances.
 1. Open an SSH connection to vra01svr01a.rainpole.local and log in using the following credentials.

Setting	Value
User name	root
Password	vra_appA_root_password

2. Run the following command to restart the vRealize Orchestrator services.

■ service vco-server restart

3. Repeat the procedure for vra01svr01b.rainpole.local

- **Converged blueprint provisioning requests in vRealize Automation might fail in environments that have high workload churn rate**

In environments that have a high churn rate for tenant workloads, requests for provisioning converged

in environments that have a high churn rate for tenant workloads, requests for provisioning converged blueprints in vRealize Automation might fail with one of the following error messages.

- Timeout Customizing machine

Workaround: None.

- **Converged blueprint provisioning requests in vRealize Automation fail in environments with high workload churn rate**

In environments that have a high churn rate for tenant workloads, requests for provisioning converged blueprints in vRealize Automation fail with the following error messages:

- Error creating network vxw-dvs-44-universalwire-431-sid-20160-CBProuted-862d8b0b-4005-4cc6-acf6-ad7b7e7 - Error while waiting for the portgroup to be created
- The following component requests failed: CBProuted. java.lang.RuntimeException: Failed to perform operation deleteNetwork after 5 retries. Aborting. Failure details of the last attempt: [universalwire-293 resource is still in use by 2 number of entities.

Workaround: See VMware Knowledge Base article [2151271](#), or upgrade to vRealize Business 7.3.1.

- **After you perform disaster recovery of the Cloud Management Platform, the status of the shell-ui-app service might appear as Failed in the appliance management console of the vra01svr01b.rainpole.local node**

This issue might occur during both failover to Region B and failback to Region A of the Cloud Management Platform. After you perform disaster recovery of the Cloud Management Platform, you see the follow symptoms when you verify the overall state of the platform:

- In the appliance management console <https://vra01svr01b.rainpole.local:5480>, the status of the shell-ui-app service is Failed.
- The statistics about the vra-svr-443 pool on the NSX load balancer shows that the vra01svr01b node is DOWN.
- Trying to access the <https://vra01svr01b.rainpole.local/vcac/services/api/health> URL results with following error message:

The service shell-ui-app was not able to register the service information with the Component Registry service! This might cause other dependent services to fail. Error Message: I/O error on POST request for "https://vra01svr01b.rainpole.local:443/SAAS/t/vsphere.local/auth/oauth/token?grant_type=client_credentials": Read timed out; nested exception is java.net.SocketTimeoutException: Read timed out"

You can still log in to the vRealize Automation portal because the other vRealize Automation Appliance vra01svr01a can service your requests.

Workaround: Restart the vcac-server service on the vra01svr01b.rainpole.local node.

1. Open an SSH connection to the vra01svr01b.rainpole.local appliance and log in as the root user.
2. Restart the vcac-server service.
service vcac-server restart

- **New After failover or failback during disaster recovery, login to the vRealize Automation Rainpole portal takes several minutes or fails with an error message**

This issue occurs during both failover to Region B and failback to Region A of the Cloud Management Platform when the root Active Directory is not available from the protected region. You see the following symptoms:

- Login takes several minutes or fails with an error
When you log in to the vRealize Automation Rainpole portal at <https://vra01svr01b.rainpole.local/vcac/org/rainpole> using the ITAC-TenantAdmin user, the vRealize Automation portal loads after 2 to 5 minutes.
- An attempt to log in to the vRealize Automation Rainpole portal fails with an error about

incorrect user name and password.

Workaround: Perform one of the following workarounds according to the recovery operation type.

- Failover to Region B

1. Log in to the vra01svr01a.rainpole.local appliance using SSH as the root user.
2. Open the /usr/local/horizon/conf/domain_krb.properties file in a text editor.
3. Add the following list of the domain-to-host values and save the domain_krb.properties file.
Use only lowercase characters when you type the domain name.
For example, as you have performed failover, you must map the rainpole.local domain to the controller in Region B: rainpole.local=dc51rpl.rainpole.local:389.
4. Change the ownership of the domain_krb.properties.
chown horizon:www /usr/local/horizon/conf/domain_krb.properties
5. Open the /etc/krb5.conf file in a text editor.
6. Update the realms section of the krb5.conf file with the same domain-to-host values that you configured in the domain_krb.properties file, but omit the port number as shown in the following example.
[realms]
RAINPOLE.LOCAL = {
auth_to_local = RULE:[1:\$0:\$1](^RAINPOLE\.LOCAL\\.*)s/^RAINPOLE\.LOCAL/RAINPOLE/
auth_to_local = RULE:[1:\$0:\$1](^RAINPOLE\.LOCAL\\.*)s/^RAINPOLE\.LOCAL/RAINPOLE/
auth_to_local = RULE:[1:\$0:\$1](^SFO01\.RAINPOLE\.LOCAL\\.*)s/^SFO01\.RAINPOLE\.LOCAL/SFO01/
auth_to_local = RULE:[1:\$0:\$1](^LAX01\.RAINPOLE\.LOCAL\\.*)s/^LAX01\.RAINPOLE\.LOCAL/LAX01/
auth_to_local = DEFAULT
kdc = dc51rpl.rainpole.local
}
7. Restart the workspace service.
service horizon-workspace restart
8. Repeat this procedure on the other vRealize Automation Appliance vra01svr01b.rainpole.local.

- Failback to Region A

If dc51rpl.rainpole.local becomes unavailable in Region B during failback, perform the steps for the failover case using dc01rpl.rainpole.local as the domain controller instead of dc51rpl.rainpole.local and restarting the services.

This workaround optimizes the synchronization with the Active Directory by pointing to a specific domain controller that is reachable from the vRealize Automation Appliance in the event of disaster recovery.

vRealize Business

- **VMware Tools do not start on vRealize Business appliance post deployment**

After vRealize Business appliance is deployed and powered on, VMware Tools do not start.

Workaround: See VMware Knowledge Base article [2151269](#), or upgrade to vRealize Business 7.3.1.

- **When you power on the vRealize Business appliance, the following question appears in the vSphere Web Client: "Cannot connect the virtual device IDE0:0 because no corresponding device is available on the host. Do you want to try to connect this virtual device every time you power on the virtual machine?"**

By default, the virtual CD/DVD drive of the vRealize Business appliance is set to connect at power on. When the appliance is unable to find media at bootup, the question that is described in the symptom appears.

Workaround: See VMware Knowledge Base article [2151287](#).

vRealize Operations Manager

- **The dashboards in vRealize Operations Manager indicate that no data is available although data is collected**

The dashboards display "no data available" in vRealize Operations Manager. The settings of the dashboards are correct, the adapters collect metrics and the assigned license has enough capacity to collect data.

Workaround: Save the widgets that do not show data without making any changes.

- **After you perform a failover operation, the vRealize Operations Manager analytics cluster might fail to start because of an NTP time drift between the nodes**
 - The vRealize Operations Manager user interface might report that some of the analytics nodes are not coming online with the status message Waiting for Analytics.
 - The log information on the vRealize Operations Manager master or master replica node might contain certain NTP-related details.
 - The NTP logs in the `/var/log/` folder might report the following messages:


```
ntpd[9764]: no reply; clock not set
ntpd[9798]: ntpd exiting on signal 15
```
 - The `analytics-wrapper.log` file in the `/storage/log/vcrops/logs/` folder might report the following message:


```
INFO | jvm 1 | YYYY/MM/DD | >>> AnalyticsMain.run failed with error: IllegalStateException: time difference
between servers is 37110 ms. It is greater than 30000 ms. Unable to operate, terminating...
```

Note: The time difference between servers is unique to the time drift between the vRealize Operations Manager nodes.

Workaround: See VMware Knowledge Base article [2151266](#).

- **Answers to Monitoring goals always show the default values**
In the **Define Monitoring Goals** dialog box, your answers to the monitoring goals are not saved. Every time you open the dialog box, the default values for the answers appear.

Workaround: None.

- **New After you perform disaster recovery or planned migration of the vRealize Operations Manager or Cloud Management Platform virtual machines, the vRealize Automation Adapter might be failing to collect statistics**

This issue might occur during both failover to Region B and failback to Region A of the Cloud Management Platform or the vRealize Operations Manager analytics cluster.

After you perform disaster recovery or planned migration of the Cloud Management Platform or virtual machines of the vRealize Operations Manager analytics cluster, the collection state of the vRealize Automation Adapter is Failed on the **Administration > Solutions** page of the vRealize Operations Manager user interface at `https://vrops01svr01.rainpole.local`.

Workaround: Click the **Stop Collecting** button and click the **Start Collecting** button to manually restart data collection in the vRealize Automation Adapter.

vRealize Log Insight

- **You see no logs from the vRealize Proxy Agent in vRealize Log Insight because these logs are located in a custom folder**
In VMware Validated Design 4.0, the vSphere Proxy Agent has a custom name `vSphere-Agent-01`. As a result, the log data is stored in the `log-insight-home-dir\vSphere-Agent-01\logs`, instead of in the default `log-insight-home-dir\vSphere\logs` folder.

Workaround: Configure the log agent on the vSphere Proxy Agents with the valid log directory.

1. Log in to the vRealize Log Insight instance in the region.

Region	vRealize Log Insight URL
--------	--------------------------

Region A	https://vrli-cluster-01.sfo01.rainpole.local
----------	--

Region B	https://vrli-cluster-51.lax01.rainpole.local
----------	--

2. Click the **Configuration** drop-down menu icon and select **Administration**
3. Under **Management**, click **Agents**.
4. From the drop-down at the top, select **vRealize Automation 7 - Windows** from the **Available Templates** section.
5. Under **File Logs**, select **vra-agent-vcenter** and in the **Directory** text box enter the following value.

Region	Directory Value
--------	-----------------

Region A	C:\Program Files (x86)\VMware\VCAC\Agents\VSphere-Agent-01\logs\
----------	--

Region B	C:\Program Files (x86)\VMware\VCAC\Agents\VSphere-Agent-51\logs\
----------	--

6. Click **Save Agent Group**.

vSphere Data Protection

- **After you restore a Platform Services Controller appliance, you might not be able to enable the Bash shell or some services might not be started**

After you restore a Platform Services Controller appliance, you might encounter one or more of the following issues:

- If you run the `shell.set --enabled True` command to enable the Bash shell on a restored Platform Services Controller virtual appliance, the following error might appear:

```
Command> shell.set --enabled True
Unknown command: 'shell.set'
Command> shell
Shell is disabled
```

- Running the `psc_restore` script fails to restore the Platform Services Controller. Not all services of Platform Services Controller start, synchronization with the partner Platform Services Controller fails, and so on.

Workaround: Restore the Platform Services Controller from another restore point in vSphere Data Protection.

- **An error message is reported during backup of the vRealize Automation VMs by using vSphere Data Protection**

During backup of the vRealize Automation VMs, the following error message appears in the vSphere Events section:

Failed to add disk scsi0:4.

Regardless of the error message, the backup job completes successfully. If you restore the VMs from the backup, the process completes and validates successfully.

Workaround: None.

- **The vSphere Data Protection appliance is disconnected while backing virtual machines up, or the backup job or restore job for them shows no progress beyond 92%**

the backup job or restore job for them shows no progress beyond 92%

When you back up virtual machines with multiple VMDKs on a vSAN datastore, such as the vRealize Log Insight nodes, vSphere Data Protection stops responding, or the backup job or restore job remains at 92% for days.

Workaround: Deploy an external vSphere Data Protection proxy on the vSAN datastore and disable the SAN mode check on the proxy. See VMware Knowledge Base article [2149101](#).

- **Backup of a VM that requires disk consolidation fails**

If you try to back up a VM that requires disk consolidation, the job fails due to a disk lock error. vSphere Data Protection can not release the lock and perform backup. If you try to power on the VM or consolidate its disks, the same error occurs.

Workaround: Perform either of the following workarounds:

- Migrate the VM that experiences the issue to a different ESXi host and consolidate the disk manually. After successful consolidation, back up the VM.
- Migrate the VM that experiences the issue to a different datastore and consolidate the disk manually. After successful consolidation, back up the VM.

- **Attempting to configure vSphere Data Protection with vCenter Server fails on allocating storage and CPU and memory.**

Errors appear when you perform the following deployment tasks:

1. Deploy the vSphere Data Protection appliance.
2. Replace the default certificate on the appliance in Region A or in Region B.
3. Try to configure the resources of the appliance and register it with the Management vCenter Server.

During the device allocation and CPU and Memory phases, the following errors appear and you cannot complete the configuration:

On the Device Allocation page	On the CPU and Memory page
Failed to retrieve the list of datastores.	Failed to retrieve the current hardware configuration.
Failed to compare the current resource settings with the minimum hardware requirements.	Failed to retrieve the hardware information.
The list of available datastores is empty.	The list of Virtual CPUs and Memory allocated are both 0.

On the vSphere Data Protection appliance, the `/space/vdp/logs/vdp_logs/vdr/server_logs/vdr-configure.log` file contains the following entries:

```
2017-04-10 09:04:17,623 INFO [http-nio-8543-exec-7]-network.NetworkInfoApi: Found IP Address: [172.18.11.81] link local? [false], site local? [true], loopback? [false]
2017-04-10 09:04:17,624 INFO [http-nio-8543-exec-7]-network.NetworkInfoApi: Found IP Address: 172.18.11.81
2017-04-10 09:04:18,255 ERROR [http-nio-8543-exec-8]-vi.ViJavaAccess: getPoweredOnVmByIpAddr(): Did not find powered on AVE virtual machine with IP Address [172.18.11.81]
2017-04-10 09:04:18,308 ERROR [http-nio-8543-exec-8]-storage.VirtualMachineServiceImpl: Unable to collect the correct hardwareinfo values java.lang.NullPointerException
    at com.emc.vdp2.common.storage.VirtualMachineServiceImpl.getMaxVcpuForVM(VirtualMachineServiceImpl.java:551)
    at
com.emc.vdp2.common.storage.VirtualMachineServiceImpl.getMinimumHardwareInfo(VirtualMachineServiceImpl.java:1349)
    at com.emc.vdp2.config.services.StorageService.getHotswapCheckResult(StorageService.java:323)
    at com.emc.vdp2.config.services.StorageService.hotswapCheck(StorageService.java:307)
    at sun.reflect.NativeMethodAccessorImpl.invoke0(Native Method) at
```

```
sun.reflect.NativeMethodAccessorImpl.invoke(Unknown Source)
  at sun.reflect.DelegatingMethodAccessorImpl.invoke(Unknown Source)
  at java.lang.reflect.Method.invoke(Unknown Source)
```

Workaround: See <http://support.emc.com/kb/501443>. You must log in to the EMC Knowledge Base system.

Issues Specific to Consolidated SDDC

In a Consolidated SDDC deployment, you come across known issues that appear in addition to the issues in a Standard SDDC deployment.

- **Converged blueprint provisioning requests in vRealize Automation might fail in environments that have high workload churn rate**

In consolidated SDDC environments that have a high churn rate for tenant workloads, requests for provisioning converged blueprints in vRealize Automation might fail with the following error messages:

The following component requests failed: app-lc. Request failed: Machine Churn-App-LC03504: CloneVM : [CloneVM_Task] - File /vmfs/volumes/vsan:527a7636b51f0ce2-c8bd6ebd76000523/86285b59-2741-6d43-74a4-ecf4bbdbf538/Churn-App-LC03504.vmx was not found. On-Demand_Load_Balancer_1. Marking as ABORTED. A preceding component request has failed

Workaround: None.

- **vRealize Orchestrator Control Center consistently warns that a server restart is required**

In a consolidated SDDC deployment, vRealize Orchestrator Control Center displays the warning Server restart is required because of not applied configuration change when you access the **Validate Configuration** page. This message still appears after you restart the vRealize Orchestrator appliance or the host appliance.

Workaround: See VMware Knowledge Base article [2151288](#).

VMware Validated Design Content

- **New The minimum requirements for the vRealize Automation 7.3 IaaS Windows Servers in this version of VMware Validated Design are different from the official vRealize Automation requirements.**

The minimum memory requirements for the vRealize Automation IaaS Windows Servers in the *Architecture and Design* and *Planning and Preparation* documents are 4 GB for the IaaS Web Server, IaaS Manager Server, and Proxy Agent nodes, and 6 GB for the IaaS DEM Worker nodes. According to the official vRealize Automation product documentation, you must allocate 8 GB memory to each vRealize Automation Windows Server node. See <http://docs.vmware.com/en/vRealize-Automation/7.3/com.vmware.vra.install.upgrade.doc/GUID-47F45416-D297-4C38-A1C0-06E6DFC1EBB5.html>.

Workaround: When you deploy the vRealize Automation IaaS Windows Servers for a new environment, set the minimum memory for each IaaS Windows Server to 8 GB of memory.

When you upgrade from an earlier release, update the memory for each IaaS Windows Server to 8 GB.