

**Dell Engineered Solutions for VMware
EVO:RAIL
Version 1.2 Release Notes**



Notes, cautions, and warnings

 **NOTE:** A NOTE indicates important information that helps you make better use of your computer.

 **CAUTION:** A CAUTION indicates either potential damage to hardware or loss of data and tells you how to avoid the problem.

 **WARNING:** A WARNING indicates a potential for property damage, personal injury, or death.

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What's new

VMware EVO:RAIL release 1.2.0

EVO:RAIL release 1.2.0 contains the following enhancement:

Support for VMware vSphere loyalty program

EVO:RAIL release 1.2 introduces support for the VMware vSphere Loyalty Program.

- The VMware vSphere Loyalty Program enables you to apply your vSphere Enterprise Plus licenses to the EVO:RAIL appliances. This allows you to preserve existing investment in VMware software, reducing the overall cost of an EVO:RAIL appliance.
- Customers with licenses obtained through Enterprise Licensing Agreements, OEM partners, distribution, or other resale channels are eligible.
- For vSphere with Operations Management Enterprise Plus, vCloud Suite, and Horizon Suite licenses. For more information, contact your Sales Representative.

For more information, see the *VMware vSphere Loyalty Program Frequently Asked Questions* document at <http://www.vmware.com/products/evorail/>.

VMware EVO:RAIL release 1.1.0

EVO:RAIL release 1.1.0 contains the following enhancements:

Increased scalability

EVO:RAIL is now scalable up to eight EVO:RAIL appliances per cluster, for a total of 32 server nodes. This effectively doubles maximum supported scale for CPU, memory, and storage. It provides the ability to support:

- Up to 800 general purpose server Virtual Machines (VMs)
- Up to 2000 VMware Horizon View VMs

EVO:RAIL expansion is always per appliance – you cannot add individual nodes to a cluster.

Improved hardware monitoring

The updates to the EVO:RAIL Management interface offer an improved look into your hardware's health status. You are able to see the status of every node in every appliance, and monitor hard disk drives (HDDs), solid state drives (SSDs), Network interface controllers (NICs), and ESXi boot devices.

Serviceability automation

The EVO:RAIL Management interface now automates the Hardware Replacement Process for HDDs, SSDs, and 10 GbE NICs. ESXi boot device replacement is now semi-automated.

Configuration validation

Deeper configuration validation is provided to address common errors while configuring or adding an appliance. This validation ensures that:

- All hosts are able to communicate with each other on a link-local network.
- Only the primary ESXi host is running vCenter Server.
- Only two configured port groups exist: one for EVO:RAIL and one for the vCenter network.
- All Dell Solution VMs are configured properly.
- An uploaded JSON configuration file is valid and any incorrect fields are highlighted in EVO:RAIL Configuration.

Support for mixed CPU clusters

EVO:RAIL now supports mixing Ivy Bridge (2620–v2) and Haswell (2620–v3) CPUs in the same EVO:RAIL cluster. This applies only to EVO:RAIL appliances that are initially built with release 1.1.0 and later. EVO:RAIL appliances that are updated from release 1.0.x are not automatically enabled. For more information, see the Enable EVC instructions section in this document.

Documentation changes

Extensive documentation changes have been made based on feedback. The updated documentation includes both release 1.1 and 1.2. The EVO:RAIL User's Guide has been expanded and split into two separate documents (Initial Configuration and Network Guide and Management and Maintenance Guide).

Internationalization

VMware EVO:RAIL is available in the following languages:

- English
- French
- German
- Japanese
- Korean
- Simplified Chinese
- Traditional Chinese

Installation

Dell installs this software bundle onto an integrated hardware, software, and supported hyper-converged infrastructure appliance. This release includes both updated binaries and updated documentation as described here.

Release contents

The only component that has changed for release 1.2 is the EVO:RAIL engine. The files you need to download are the EVO:RAIL offline bundle, and the EVO:RAIL Appliance RPM.

- *EVO_RAIL_1.2.0-2703360.zip*
- *vmware-marvin-1.2.0-2703360.rpm*


Table 1. Release Contents

Component	Release Notes
VMware EVO:RAIL 1.2.0 Build #2703360	This document
VMware vCenter Server 5.5 Update 2b Build #2183109	https://www.vmware.com/support/vsphere5/doc/vsphere-vcenter-server-55u2b-release-notes.html This component did not changed since EVO:RAIL release 1.0.1.
VMware ESXi 5.5 update 2a Build #2143827	https://www.vmware.com/support/vsphere5/doc/vsphere-esxi-55u2-release-notes.html This component did not changed since 1.0.2. ESXi 5.5 Update 2a is the same as ESXi 5.5 P03.
VMware vCenter Log Insight 2.0.5 Build #2193079	https://www.vmware.com/support/log-insight/doc/log-insight-205-release-notes.html This component did not changed since EVO:RAIL release 1.0.0
EVO:RAIL Customer Release Notes Revision 1.2.0-2	Provides customer release notes for EVO:RAIL release 1.2.0.

Component	Release Notes
EVO:RAIL Initial Configuration section Revision 1.1.0-1	<p>Release 1.2</p> <ul style="list-style-type: none"> Updated cover page with new branding. <p>Release 1.1</p> <ul style="list-style-type: none"> Initial Configuration has been expanded into a separate user guide. Detailed JSON configuration information has been added.
EVO:RAIL Network section Revision 1.1.0-1	<p>Release 1.2</p> <ul style="list-style-type: none"> Updated cover page with new branding. <p>Release 1.1</p> <ul style="list-style-type: none"> Network setup has been expanded into a separate user guide. This document includes the EVO:RAIL Setup Checklist, and Network Configuration Table.
EVO:RAIL Management and Maintenance section Revision 1.1.0-2	<p>Release 1.2</p> <ul style="list-style-type: none"> Updated cover page with new branding. Clarified Add Appliance prerequisite. <p>Release 1.1</p> <ul style="list-style-type: none"> Updated for maintenance in release 1.1 Included licensing flow for release 1.2 More details about EVO:RAIL Management tasks.

Update instructions

Check with Dell before proceeding with this update. To update an EVO:RAIL appliance that has already been configured. See the installation instructions in the *Dell Engineered Solutions for VMware EVO:RAIL Version 1.2 Management and Maintenance User's Guide*.

 **NOTE:** Dell recommends you to clear your browser cache after upgrading. For more information, see the [VMware Knowledge Base article 2101828](#). This is a known issue.

Enable EVC

EVO:RAIL appliances that are initially built with release 1.0.x, and then updated to 1.1 or later, are not automatically enabled for mixing Ivy Bridge and Haswell CPUs in the same EVO:RAIL cluster. The following manual procedure is required to enable EVC.

For Ivy Bridge (2620-v2) based appliances built on EVO:RAIL release 1.0.x, and then updated to EVO:RAIL 1.1 or later perform the following steps:

1. Update your EVO:RAIL appliance to EVO:RAIL 1.1 or later.
2. Connect to the vSphere Web Client and log in with administrator credentials.
3. From the **Home** menu, click **Hosts and Clusters**.
4. Click the **EVO:RAIL cluster**, *Marvin-Virtual-SAN-Cluster-<uuid>*.
5. Click **Manage** → **Settings** → **Configuration** → **VMware EVC** → **Edit**.

6. Select the **Enable EVC for Intel Hosts** option.
7. From the **VMware EVC Mode** drop-down menu, select **Intel Ivy Bridge Generation**, and then click **OK**.

The VMware EVC settings is displayed the Intel Ivy Bridge Generation EVC is enabled.

For Haswell (2620-v3) based appliances built on EVO:RAIL release 1.0.x, and then updated to EVO:RAIL 1.1 or later, contact Dell for EVC enablement.

Enter the tasks the user should do after finishing this task (optional).

Product support notices

This software is supported by Dell.

Network Configuration cannot be changed with the EVO:RAIL interface after initial configuration. If changes are required, contact Dell for an appliance reset.

Known issues and limitations

The known issues are grouped as follows:

- Update
- Configuration
- Management or Maintenance
- Miscellaneous

For an updated list of known issues, go to <http://kb.vmware.com/selfservice/microsites/microsite.do>, and then select **EVO:RAIL** from the **Products** drop-down menu.

Update

EVO:RAIL management does not display after updating (1411553)

Description	EVO:RAIL management does not display after updating.
Workaround	Reload your web browser page. For more information, see the VMware Knowledge Base article 2101828 .

Configuration

EVO:RAIL configuration might fail when there is a time mismatch between the appliance and the NTP Server (1376917)

Description	<p>The EVO:RAIL configuration might fail around the 40 percent progress mark with the error message:</p> <pre>EVO:RAIL was not able to configure Virtual Center Server</pre> <p>The issue occurs when the time of the vCenter Server is incorrect and the NTP server is configured by EVO:RAIL.</p>
Workaround	There is no workaround at this time. An appliance reset is necessary. After the reset, the time set on the vCenter Server must be verified that it is the correct time.

If you are using Just Go configuration and progress bar remains at 0 percent (1305595)

Description	If you are using <i>Just Go</i> Configuration and the progress bar remains at 0 percent, this could represent a networking issue, a manufacturing issue, or a product issue.
Workaround	Restart the configuration by browsing to https://evorail_ip_addr:7443 . (default is 192.168.10.200:7443). Go through the <i>Customize</i> configuration and you see your pre-configured values; and then click the <i>Validate</i> button. If validation fails, a message is displayed that you must take note of and pass on to Dell.

EVO:RAIL service VMs storage policy displays as out of date (1400304)

Description	From the vSphere Web Client, the Virtual Machine storage Policy Compliance Status displays as Out of Date for all service VMs.
Workaround	For resolution, see the VMware Knowledge Base article 2117230 .

EVO:RAIL configuration and management is not accessible from a web browser (1409609)

Description	The EVO:RAIL management interface is not accessible from a web browser.
Workaround	For resolution, see the VMware Knowledge article 2099966 .

EVO:RAIL does not support external Single Sign-On (SSO)

Description	EVO:RAIL does not support external Single Sign-On (SSO).
Workaround	There is no workaround at this time.

EVO:RAIL Management displays the total storage size to be 3.35 TB instead of the expected 13.1 TB

Description	EVO:RAIL Management displays the total storage disk space to be 3.35 TB instead of the expected 13.1 TB.
Workaround	For resolution, see the VMWare Knowledge article 2118997 .

vCenter Server Web Client displays Misconfiguration Detection

Description	vCenter Server Web Client displays Misconfiguration Detection in the Network Status field for Virtual SAN.
Workaround	For resolution, see the VMware Knowledge Base article 2118997 .

Management or Maintenance

EVO:RAIL operation might fails with the message

Description EVO:RAIL operation might fail with the message indicating that the license has expired. The EVO:RAIL evaluation period has expired.

Workaround For resolution, see the [VMWare Knowledge Base article 2109758](#).

Cannot import OVA/OVF templates for VM creation through the EVO:RAIL Management (1373483)

Description EVO:RAIL Management does not support importing existing pre-built copies of VMs in OVA/OVF format.

Workaround Use the vSphere Web Client interface to create VMs from an existing OVA/OVF format.

Upload of large ISO image fails in creating VM (1410674)

Description The size of the ISO image is limited by the available space on vCenter Server.

Workaround For resolution, See the [VMware Knowledge Base article 2109915](#).

Create VM window has a pop-up message that does not clear (1375600)

Description When an ISO image is imported with the same name as an image already stored on the Virtual SAN datastore, an error message displayed. After you close the error message and start the Create VM process again, a red-color 'X' is displayed and the dialog box cannot be closed.

Workaround Refresh your browser to close the dialog box.

Replacement of a failed hardware component does not reset the hardware alarm (1401667)

Description Hardware alarms cannot be cleared automatically in vCenter Server.

Workaround To clear the alarm, see the [VMware Knowledge Base article 2113427](#).

VSAN Cluster displays as Cluster requirements: HA DRS Status: Not complaint (1431891)

Description VSAN Cluster displays `Cluster requirements: HA DRS Status: Not complaint` after adding a second EVO:RAIL appliance.

Workaround For resolution, see the [VMware Knowledge Base article 1017714](#).

The Add EVO:RAIL Appliance pop-up remains active (1387463)

Description The Add EVO:RAIL Appliance message is displayed even if the appliance being added has a hardware failure.

Workaround For resolution, see the [VMware Knowledge Base article 2106735](#).

In EVO:RAIL Management, few button does not displays on your browser (1305298)

Description In EVO:RAIL Management, refresh your browser if you notice any discrepancies in the user controls. For example, the **Download Log Bundle** button may not be displayed after the log has been generated.

Workaround Depending on your browser (Internet Explorer), you may need to restart it rather than just refreshing the page.

The Add EVO:RAIL Appliance and the Add EVO:RAIL Node processes cannot be minimized (1275613)

Description The Add EVO:RAIL Appliance and the Add EVO:RAIL Node processes cannot be minimized while running and other EVO:RAIL Management tasks cannot be started.

Workaround Not available.

Miscellaneous

Some special characters does not translate correctly (1374539)

Description Some special characters do not translate correctly with international keyboards.

Workaround For resolution, see the [VMware Knowledge Base article 2101467](#).

The mouse is not accessible with a VM (1370756)

Description The mouse is not accessible with a VM created with the Secure option.

Workaround For resolution, see the [VMware Knowledge Base article 2101947](#).

EVO:RAIL remote console may not support international keyboards (1370756)

Description EVO:RAIL remote console may not support international keyboards when the keyboard setting within a VM does not match the physical keyboard used at the management workstation.

Workaround Not available

Fixed in release 1.2

The following issues are fixed in EVO:RAIL Release 1.2:

- EVO:RAIL Management stops responding after changing the language to French.
- Unable to create a VM from EVO:RAIL Management when five or more VM networks exist.


Fixed in release 1.1

The following are known issues that have been fixed in EVO:RAIL release 1.1:

- When a second appliance is added to an EVO:RAIL cluster, the ESXi host does not get updated license information through the EVO:RAIL engine (1404510). See the [VMware Knowledge Base article 2101839](#).
- You must turn on each node separately in an EVO:RAIL appliance with a 10-second delay between each turn-on. If the nodes are turned on at the same time or too close together, certain race conditions can occur. For resolution, see the [VMware Knowledge Base article 2108864](#).
- Clicking the logout button displays an error message in Internet Explorer (1382393). For resolution, see the [VMware Knowledge Base article 2106732](#).
- Under certain conditions EVO:RAIL Configuration can take 45 minutes or longer (1389974). For resolution, see the [VMware Knowledge Base article 2107249](#).
- EVO:RAIL Configuration might fail with an error message `Could not register: License not available`.
- The vCenter Server evaluation period starts when the EVO:RAIL appliance is initially turned on. If the appliance is not configured in this 60 day period, the error message occurs. For resolution, see the [VMware Knowledge Base article 2108768](#).
- EVO:RAIL Configuration allows user to upload out of date configuration file. For resolution, see the [VMware Knowledge Base article 2108787](#).
- Network Time Protocol (NTP) service does not restart automatically on ESXi hosts that are running on an EVO:RAIL appliance. For resolution, see the [VMware Knowledge Base article 2107258](#).
- Configuring EVO:RAIL might fail with the error message `Error creating storage policy` under certain race conditions. This error message can still occur if there is a VSAN configuration issue. (1425937, 1413059)

Appendix A: Add Appliance supported configurations

EVO:RAIL release 1.1 introduced combining Ivy Bridge and Haswell CPUs in the same EVO:RAIL cluster. EVO:RAIL appliances that were initially built with release 1.0.x, and then updated to 1.1 or later, are not automatically be enabled for combining Ivy Bridge and Haswell CPUs in the same EVO:RAIL cluster. The following outlines the different combinations that can occur when adding an appliance to an existing cluster and the mandatory or recommended procedures to be completed. See the EVO:RAIL Management and Maintenance section in the *Dell Engineered Solutions for VMware EVO:RAIL Version 1.2 Management and Maintenance User's Guide*.

 **NOTE:** The following assumes that the [Enable EVC](#) instructions have been followed for EVO:RAIL appliances that are initially built with release 1.0.x, and then updated to 1.1 or later.

- If the first EVO:RAIL Appliance is EVO:RAIL release 1.1 or later:
 - Follow the Add EVO:RAIL Appliances to an EVO:RAIL Cluster Procedure of the EVO:RAIL Management and Maintenance section in the *Dell Engineered Solutions for VMware EVO:RAIL Version 1.2 Management and Maintenance User's Guide*.
 - When the process is complete, make sure that all appliances in the cluster are running the same version of EVO:RAIL.
 - * Click **Config** in the left pane. The **About** box indicates if different versions of the software components are installed in the EVO:RAIL cluster.
 - * Recommendation: If all version numbers are not the same, follow the Updating Appliance Software Procedure of the EVO:RAIL Management and Maintenance section in the *Dell Engineered Solutions for VMware EVO:RAIL Version 1.2 Management and Maintenance User's Guide*. Ensure to upload the latest versions of the software components running in the EVO:RAIL cluster as shown in the previous step.
- If the first appliance is EVO:RAIL release 1.0.2 and the appliance being added is EVO:RAIL release 1.0.2:
 - If both appliances are from the same CPU family, follow the Add EVO:RAIL Appliances to an EVO:RAIL Cluster Procedure of the EVO:RAIL Management and Maintenance section in the *Dell Engineered Solutions for VMware EVO:RAIL Version 1.2 Management and Maintenance User's Guide*.
 - If not, this configuration does not support. Do not add appliance.
 - Required steps to have a supported configuration:
 - * Update your current EVO:RAIL cluster to EVO:RAIL release 1.1 or later. Follow Updating Appliance Software Procedure of the EVO:RAIL Management and Maintenance section in the *Dell Engineered Solutions for VMware EVO:RAIL Version 1.2 Management and Maintenance User's Guide*.
 - * Follow the Enable EVC instructions. See [Enable EVC](#).
 - * Follow the Add EVO:RAIL Appliances to an EVO:RAIL Cluster Procedure of the EVO:RAIL Management and Maintenance section in the *Dell Engineered Solutions for VMware EVO:RAIL Version 1.2 Management and Maintenance User's Guide*.

- If the first appliance is EVO:RAIL release 1.0.2 and the appliance being added is EVO:RAIL release 1.1 or later:
 - If both appliances are from the same CPU family,
 - * Follow the Add EVO:RAIL Appliances to an EVO:RAIL Cluster Procedure of the EVO:RAIL Management and Maintenance section in the *Dell Engineered Solutions for VMware EVO:RAIL Version 1.2 Management and Maintenance User's Guide*
 - * Click **Config** in the left pane. The **About** box indicates if different versions of the software components are installed in the EVO:RAIL cluster.
 - * Follow the Updating Appliance Software Procedure of the EVO:RAIL Management and Maintenance section in the *Dell Engineered Solutions for VMware EVO:RAIL Version 1.2 Management and Maintenance User's Guide*. Ensure to upload the latest versions of the software components running in the EVO:RAIL cluster as shown in the previous step.
 - * Follow the Enable EVC instructions. See [Enable EVC](#).
 - * If the appliances are not in the same CPU family, this configuration does not support. Do not add appliance.
 - Required steps to have a supported configuration:
 - * Update the first appliance to EVO:RAIL 1.1 or later. Follow the Updating Appliance Software Procedure of the EVO:RAIL Management and Maintenance section in the *Dell Engineered Solutions for VMware EVO:RAIL Version 1.2 User's Guide*. Use the EVO:RAIL release that the appliance you are adding is configured with.
 - * Follow the Enable EVC instructions. See [Enable EVC](#).
 - * Click **Config** in the left pane. The **About** box indicates if different versions of the software components are installed in the EVO:RAIL cluster. They should match if you updated with the correct EVO:RAIL release.
 - * Recommendation: If all version numbers are not the same, follow the Updating Appliance Software Procedure of the EVO:RAIL Management and Maintenance section in the *Dell Engineered Solutions for VMware EVO:RAIL Version 1.2 Management and Maintenance User's Guide*. Ensure to upload the latest versions of the software components running in the EVO:RAIL cluster as shown in the previous step.

Getting help

Contacting Dell

Dell provides several online and telephone-based support and service options. If you do not have an active Internet connection, you can find contact information on your purchase invoice, packing slip, bill, or Dell product catalog. Availability varies by country and product, and some services may not be available in your area. To contact Dell for sales, technical support, or customer-service issues:

1. Go to **Dell.com/support**.
2. Select your country from the drop-down menu on the bottom right corner of the page.
3. For customized support:
 - a. Enter your system Service Tag in the **Enter your Service Tag** field.
 - b. Click **Submit**.
The support page that lists the various support categories is displayed.
4. For general support:
 - a. Select your product category.
 - b. Select your product segment.
 - c. Select your product.
The support page that lists the various support categories is displayed.

Documentation matrix

The documentation matrix provides information on documents that you can refer to for setting up and managing your system.

Table 2. Documentation matrix

To...	Refer to...
Install your system into a rack	Rack documentation included with your rack solution
Set up your system and know the system technical specifications	<i>Getting Started With Your System</i> that shipped with your system or see Dell.com/poweredgemanuals
Install the operating system	Operating system documentation at Dell.com/operatingsystemmanuals
Get an overview of the Dell Systems Management offerings	Dell OpenManage Systems Management Overview Guide at Dell.com/openmanagemanuals

To...	Refer to...
Configure and log in to iDRAC, set up managed and management system, know the iDRAC features and troubleshoot using iDRAC	Integrated Dell Remote Access Controller User's Guide at Dell.com/idracmanuals
Know about the RACADM subcommands and supported RACADM interfaces	RACADM Command Line Reference Guide for iDRAC at Dell.com/idracmanuals
Launch, enable and disable Lifecycle Controller, know the features, use and troubleshoot Lifecycle Controller	Dell Lifecycle Controller User's Guide at Dell.com/idracmanuals
Use Lifecycle Controller Remote Services	Dell Lifecycle Controller Remote Services Quick Start Guide at Dell.com/idracmanuals
Set up, use, and troubleshoot OpenManage Server Administrator	Dell OpenManage Server Administrator User's Guide at Dell.com/openmanagemanuals
Install, use, and troubleshoot OpenManage Essentials	Dell OpenManage Essentials User's Guide at Dell.com/openmanagemanuals
Know the features of the storage controller cards, deploy the cards, and manage the storage subsystem	Storage controller documentation at Dell.com/storagecontrollermanuals
Check the event and error messages generated by the system firmware and agents that monitor system components	Dell Event and Error Messages Reference Guide at Dell.com/openmanagemanuals >OpenManage software.