

Dell RecoverPoint for Virtual Machines 6.0.3 and later

Events Reference Guide

Notes, cautions, and warnings

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

 **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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As part of an effort to improve product lines, revisions of software are periodically released. Therefore, some functions that are described in this document might not be applicable for all versions of the software in use. The product release notes provide the most up-to-date information about product features.

Contact your technical support professional if a product does not function properly or does not function as described in this document.

 **NOTE:** This document was accurate at publication time. Go to [Dell Support Site](#) to ensure that you are using the latest version of this document.

Purpose

This document includes conceptual information about managing a RecoverPoint for Virtual Machines system.

Audience

This document is intended for use by vSphere administrators who are responsible for managing the RecoverPoint for VMs system.

Related documentation

The following publications provide additional information:

- [Dell RecoverPoint for Virtual Machines Release Notes](#)
- [Dell RecoverPoint for Virtual Machines Quick Start Installation Poster](#)
- [Dell RecoverPoint for Virtual Machines Installation and Deployment Guide](#)
- [Dell RecoverPoint for Virtual Machines Product Guide](#)
- [Dell RecoverPoint for Virtual Machines HTML5 Plugin Administrator's Guide](#)
- [Dell RecoverPoint for Virtual Machines CLI Reference Guide](#)
- [Dell RecoverPoint for Virtual Machines Security Configuration Guide](#)
- [Dell RecoverPoint for Virtual Machines RESTful API at Explore APIs](#)

In addition to the core documents, we also provide white papers, technical notes, and demos.

Typographical conventions

This document uses the following style conventions:

Table 1. Style conventions

Formatting	Description
Bold	Used for names of interface elements, such as names of windows, dialog boxes, buttons, fields, tab names, key names, and menu paths (what the user specifically selects or clicks).
<i>Italic</i>	Used for full titles of publications referenced in text
Monospace	Used for: <ul style="list-style-type: none">● System code● System output, such as an error message or script

Table 1. Style conventions (continued)

Formatting	Description
	<ul style="list-style-type: none">• Pathnames, filenames, prompts, and syntax• Commands and options
<i>Monospace italic</i>	Used for variables
Monospace bold	Used for user input
[]	Square brackets enclose optional values.
	Vertical bar indicates alternate selections - the bar means "or"
{ }	Braces enclose content that the user must specify, such as x or y or z.
...	Ellipses indicate nonessential information that is omitted from the example.

Product documentation

- For release notes and user guides, go to [Online Support](#) at Dell Support.
- For API documentation, see [Dell Developer Portal](#).

Product information

For documentation, release notes, software updates, or information about products, go to [Online Support](#) at Dell Support.

Where to get help

Go to [Online Support](#) at Dell Support and click **Contact Support**. To open a service request, you must have a valid support agreement. Contact your sales representative for details about obtaining a valid support agreement or with questions about your account.

Where to find the support matrix

Consult the **Simple Support Matrix** for RecoverPoint for Virtual Machines at [E-Lab Navigator](#).

Your comments

Your suggestions help Dell Technologies continue to improve the accuracy, organization, and overall quality of the user publications. Send your opinions of this document to [Content Feedback Platform](#).

Introduction

This guide contains a detailed description of all RecoverPoint for VMs events, and describes how to monitor and filter their appearance.

For more information about troubleshooting your specific RecoverPoint for VMs solution, see the following documents:

- *Dell RecoverPoint for Virtual Machines HTML5 Plugin Administrator's Guide* if your VMs are being protected on-premises.

For advanced event monitoring and troubleshooting options, log in to the RecoverPoint for VMs **Command Line Interface (CLI)** and run the `get_events_log` command. For more information, see the *Dell RecoverPoint for Virtual Machines CLI Reference Guide*.

Topics:

- [Launching RecoverPoint for VMs plugin](#)
- [Monitor system events](#)
- [Monitor system alerts](#)
- [Monitor system limits](#)
- [Monitor system components](#)
- [RecoverPoint for VMs Dashboard](#)
- [Monitor group and copy protection](#)

Launching RecoverPoint for VMs plugin

Learn about how to launch the RecoverPoint for VMs plugin from vCenter Server.

Steps

1. Connect to a vCenter Server hosting RecoverPoint for VMs components.
2. Click **LAUNCH VSPHERE CLIENT (HTML5)**. You can also launch the **vSphere Client (HTML5)** directly by entering `https://vCenter-IP or FQDN:/ui/` into your address bar.
3. Click the **vSphere Client Navigation** menu, and then click **RecoverPoint for VMs** to display the RecoverPoint for VMs plugin in the vSphere Client

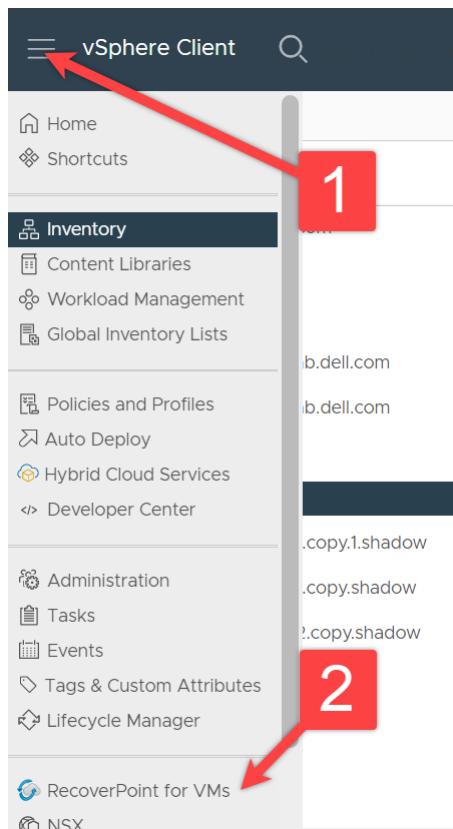


Figure 1. vSphere Client

Monitor system events

Monitor system events to troubleshoot your RecoverPoint for VMs environment.

An event is a notification that a change has occurred in the state of a system component. Sometimes, the change indicates an error or warning condition for a system component. Multiple events can occur simultaneously on a single component, and a single incident can generate multiple events across multiple system components.

By default, the following information is displayed for every event in the **Event**:

- **Level**, which can be: **Info**, **Warning**, or **Error**.
- **Scope**, which can be: **Normal**, **Root Cause**, or **Advanced**.
- **Time** and date that the event log was generated.
- **vRPA Cluster** reporting the event.
- **Event ID** that allows the event to be excluded from the events log using the event logs filter.
- **Topic**, which can be: **Splitter**, **Consistency Group**, **Management**, **Cluster**, **RPA**, or **Array**.
- **Summary** of the event.

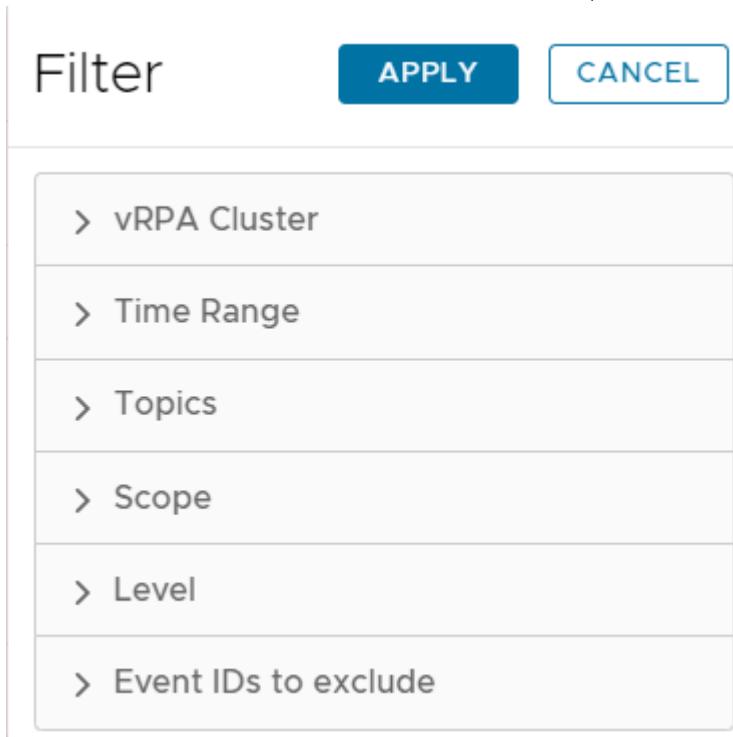
To monitor your system events, click **Monitoring > Event**.

Event Logs						
Warnings and errors only from the last 24 hours						
	Level	Scope	Time	vRPA Cluster	Event Id	Topic
>	Transient Error	Root Cause	Jul 7, 2021 4:53:54 PM	TX-Cluster	16038	RPA
>	Transient Error	Root Cause	Jul 7, 2021 4:54:11 PM	NY-Cluster	16014	RPA
>	Transient Error	Root Cause	Jul 7, 2021 4:54:11 PM	NY-Cluster	16038	RPA
>	Error	Normal	Jul 7, 2021 5:02:04 PM	NY-Cluster	4003	Consistency Group
>	Error	Normal	Jul 7, 2021 5:31:04 PM	NY-Cluster	4003	Consistency Group
>	Error	Normal	Jul 7, 2021 5:49:31 PM	NY-Cluster	4003	Consistency Group
>	Error	Normal	Jul 7, 2021 5:49:46 PM	NY-Cluster	4003	Consistency Group
>	Error	Normal	Jul 7, 2021 6:00:04 PM	NY-Cluster	4003	Consistency Group
>	Error	Normal	Jul 7, 2021 6:00:45 PM	NY-Cluster	4003	Consistency Group
>	Error	Normal	Jul 7, 2021 6:29:05 PM	NY-Cluster	4003	Consistency Group

Items per page: 20 < 2 / 6 > | 1 101 Event Logs

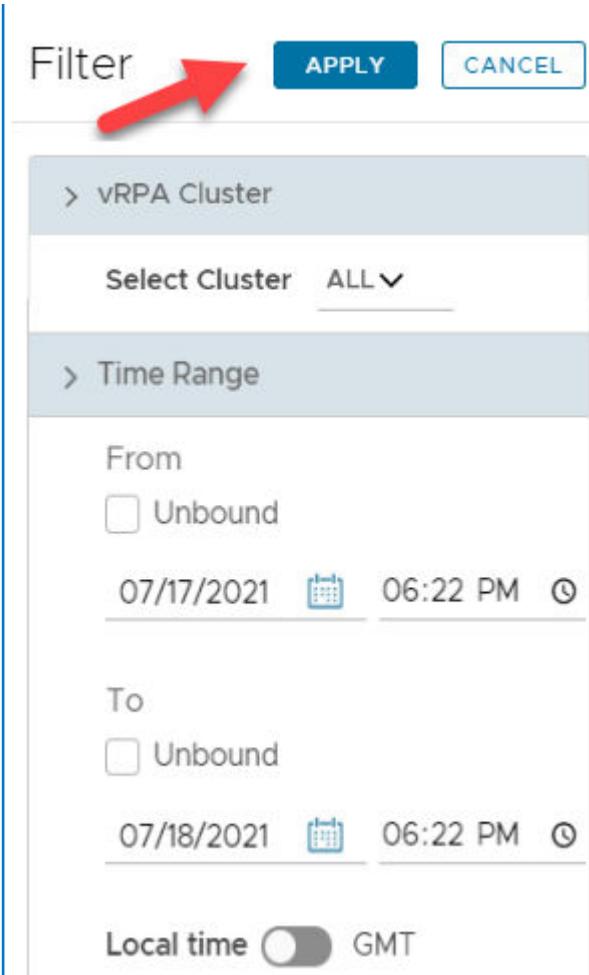
Figure 2. RecoverPoint for VMs event logs

1. Note the total number of events in the event logs.
2. Use the table controls to move to the next page, a previous page, or control the number of events that are displayed per page.
3. Click the **Event Filter** to control which events are displayed in the **Event** and which are hidden.

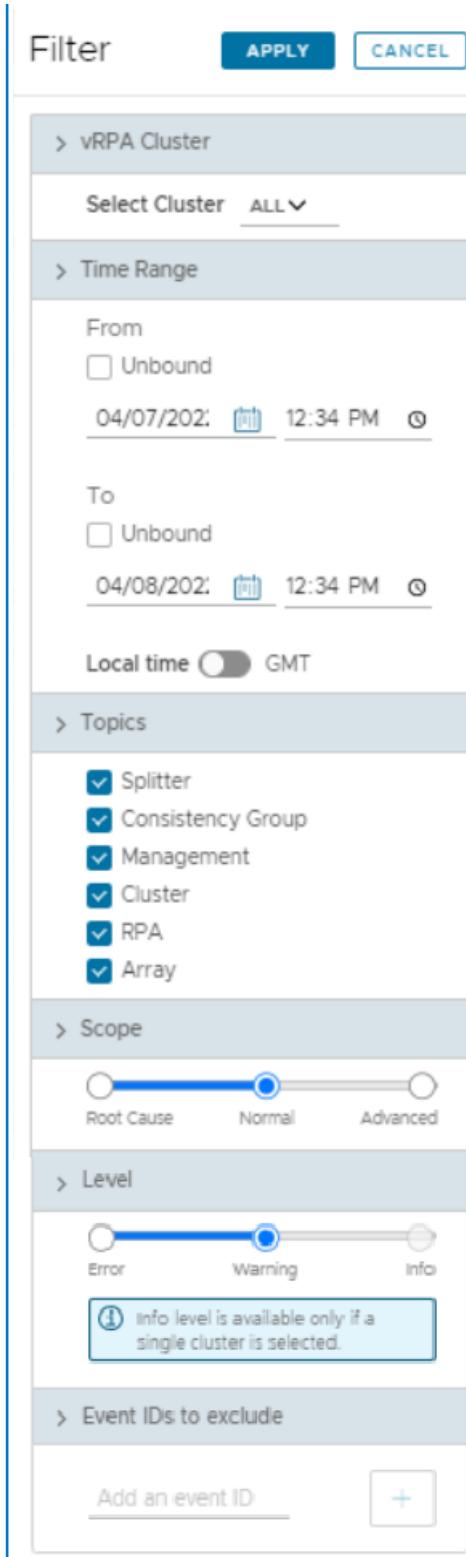


NOTE: Click **APPLY** after changing the event filter settings.

- Click **vRPA Cluster** to select the events for a specific vRPA cluster to display. By default, the events of all vRPA clusters are displayed.
- Click **Time Range** to select the events of a specific time period to display. Select **Unbound** to display all events. Display events based on your local time (the default) or GMT.



- Click **Topics** to hide or display events for specific system components. The event topic can be: **Splitter**, **Consistency Group**, **Management**, **Cluster**, **RPA**, or **Array**.
- Click **Scope** to hide or display logs of specific event scope. The event scope can be: **Normal**, **Root Cause**, or **Advanced**
- Click **Level** to hide or display events of a specific level. The event level can be **Info**, **Warning**, or **Error**.
- Click **Event IDs to exclude** to select the events to exclude from display in the events log.



4. Note the date and time that the **Event Logs** were **Last Updated** and use the **Refresh** icon to update the **Event Logs**.
5. Hover over the **Summary** of an event with an ellipses (...) after it, to display hidden text.

While troubleshooting:

- Use the search bar to display only events that include specific text.

Search				
--------	--	--	--	--



- Click the **Clear Filters** button to clear all event filters.
- Click an arrow to expand an event and display the event **Description** and **Details**.

System Events

Warnings and errors only from the last 24 hours

Last Updated Apr 6, 2022 6:50:23 PM

Level	Scope	Time	vRPA Cluster	Event ID	Topic	Summary	
Warning	Normal	Apr 6, 2022 ...	local-cluster	5016	Splitter	Splitter has restarted	
Description		Splitter has restarted(Splitter(s))					
>	Warning	Normal	Apr 6, 2022 ...	local-cluster	5016	Splitter	Splitter has restarted
>	Warning	Normal	Apr 6, 2022 ...	local-cluster	4008	Consistency ...	Pausing data transf...
>	Warning	Normal	Apr 6, 2022 ...	local-cluster	4008	Consistency ...	Pausing data transf...
>	Error	Normal	Apr 6, 2022 ...	local-cluster	4009	Consistency ...	Pausing data transf...
>	Warning	Normal	Apr 6, 2022 ...	local-cluster	4001	Consistency ...	Minor problem in gr...
>	Error	Normal	Apr 6, 2022 ...	local-cluster	4009	Consistency ...	Pausing data transf...
>	Warning	Normal	Apr 6, 2022 ...	local-cluster	5016	Splitter	Splitter has restarted
>	Warning	Normal	Apr 6, 2022 ...	local-cluster	5016	Splitter	Splitter has restarted
>	Warning	Normal	Apr 6, 2022 ...	local-cluster	5016	Splitter	Splitter has restarted
Items per page	20	< <	1 / 19 > >				
						367 System Events	

Monitor system alerts

System alerts are a mechanism that enables vRPA clusters to send events about system components in real time. Monitor system alerts to troubleshoot your RecoverPoint for VMs environment.

Steps

- Click **Monitoring > Alerts** to monitor your system alerts.

A system alert type can be **Warning** or **Error**.

Alerts

Search

Cluster	Category	Severity	Description
Vegas	System	● Error	You are using the default password for the admin user. To change the default password, log in to the S...
	System	● Warning	You are using an unlicensed trial version for non-commercial use only of Dell EMC RecoverPoint for VMs.
Belgrade	Consistency g...	● Warning	The virtual RPA is running on the same ESX as the VM it is replicating. It is recommended not to have th...
Barcelona	RPA	● Warning	At least two virtual RPAs are running on same ESX. It is recommended to run only one virtual RPA on a...
Vegas	Consistency g...	● Warning	At least one virtual RPA is running on the same ESX as the VM it is replicating. It is recommended not t...
Alerts per page	20		
			5 Alerts

- Alternatively, you can also monitor system alerts in the [RecoverPoint for VMs Dashboard](#).



Monitor system limits

Monitor the limits that are imposed on your RecoverPoint for VMs system and system components to troubleshoot your system.

To monitor the state of your system limits, click **Monitoring > System Limits**. The **System Limits** screen displays the limits imposed on a system, or on consistency groups, vRPA clusters, or splitters in a system.

A system component's limit status can be '**Critical**', '**Warning**', or '**OK**'. Ensure an OK status is displayed for all of your system limits.

System Limits			
Consistency Groups	System	Splitters	vRPA Clusters
Status	Description	VRPA Cluster	Current Value of Limit
● OK	Number of VMs protected per vC...		2 out of 8192
● OK	Number of vRPA clusters	local-cluster	1 out of 5
● OK	Number of vRPA clusters connect...		1 out of 50
Items per page		20	3 System limits

Figure 3. System limits

System Limits					
Consistency Groups		System	Splitters	vRPA Clusters	
Status	Description	↑	vRPA Cluster	Consistency Group	Current Value of Limit
● OK	Lag (in seconds)		Site2	cg_Win5	1 out of 25
● OK	Lag (in seconds)		Site1	cg_Win1	0 out of 25
● OK	Lag (in seconds)		Site1	cg_Win1	1 out of 25
● OK	Number of non-production copies		Site1	cg_Win1	2 out of 4
● OK	Number of non-production copies		Site1	cg_Win5	1 out of 4
● OK	Number of VMs		Site1	cg_Win1	1 out of 128
● OK	Number of VMs		Site1	cg_Win5	1 out of 128

Items per page ▼ 7 Consistency Groups limits

Figure 4. Consistency group limits

System Limits				
Consistency Groups		System	Splitters	vRPA Clusters
Status	Description	↑	vRPA Cluster	Current Value of Limit
● OK	Number of consistency groups		Site1	2 out of 512 groups
● OK	Number of ESX clusters		Site2	1 out of 8 clusters
● OK	Number of ESX clusters		Site1	1 out of 8 clusters
● OK	Number of ESX hosts with a splitter		Site2	2 out of 256
● OK	Number of ESX hosts with a splitter		Site1	2 out of 256
● OK	Number of protected VMDKs		Site2	4 out of 4096 protected VMDKs
● OK	Number of protected VMDKs		Site1	4 out of 4096 protected VMDKs
● OK	Number of protected VMs		Site2	2 out of 1024 protected VMs
● OK	Number of protected VMs		Site1	3 out of 1024 protected VMs
● OK	Number of vCenter Servers		Site1	1 out of 4 VCs
● OK	Number of vCenter Servers		Site2	1 out of 4 VCs

Items per page ▼ 11 vRPA Clusters Limits

Figure 5. vRPA cluster limits

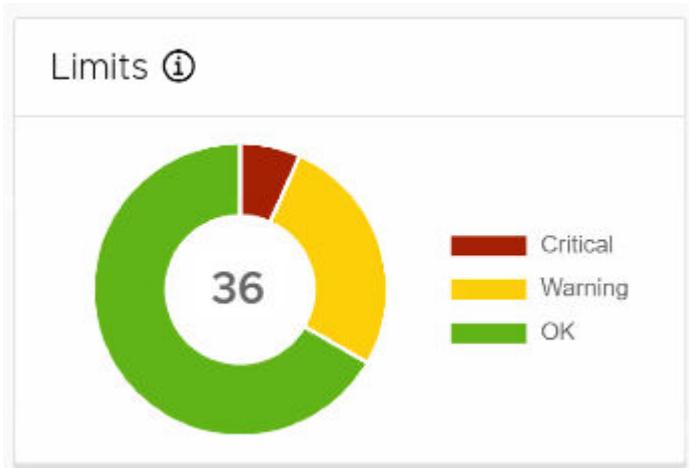
System Limits

Consistency Groups System **Splitters** vRPA Clusters

Status	Description	Splitter	Current Value of Limit
● OK	Number of vRPA clusters attached to splitter		1 out of 128
● OK	Number of vRPA clusters attached to splitter		1 out of 128
● OK	Number of vRPA clusters attached to splitter		1 out of 128
● OK	Number of vRPA clusters attached to splitter		1 out of 128
● OK	Total number of VMDKs attached to splitter		4 out of 25000
● OK	Total number of VMDKs attached to splitter		4 out of 25000
● OK	Total number of VMDKs attached to splitter		6 out of 25000
● OK	Total number of VMDKs attached to splitter		6 out of 25000

Items per page: 20 ▾ 8 Splitter Limits

Figure 6. Splitter limits



Monitor system components

Monitor RecoverPoint for VMs system components to better understand and troubleshoot your RecoverPoint for VMs environment.

To monitor the state of your system components, click **Monitoring > Components**. In the **System Components** screen, ensure an OK status is displayed next to each of your RecoverPoint for VMs system components.

System Components

Search

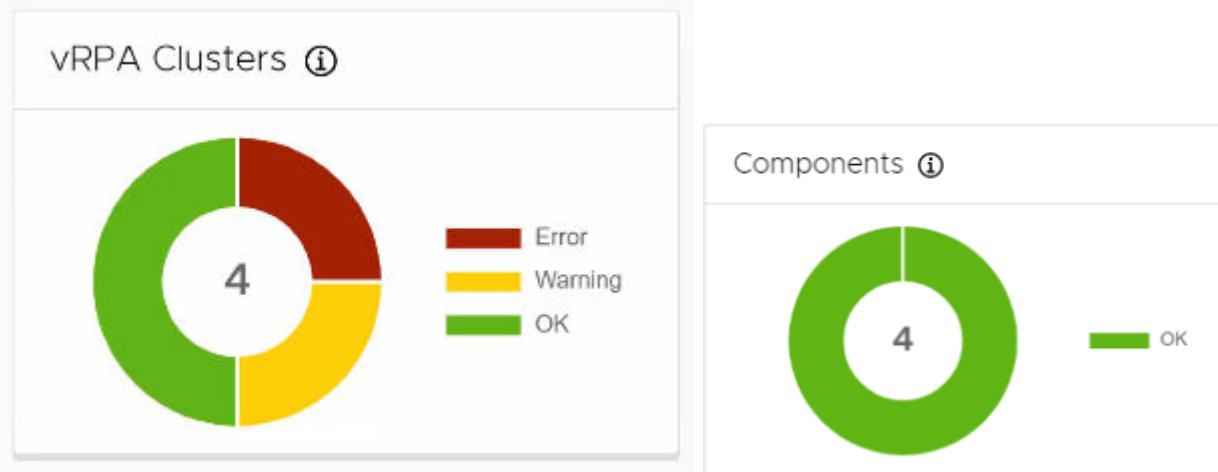


Status	Name	Type	vRPA Cluster	Version
● OK	VRPA1	vRPA	Site2	vRPA: 5.3.SP2(m.240)
● OK	VRPA2	vRPA	Site2	vRPA: 5.3.SP2(m.240)
● OK	[REDACTED]	ESX Splitter	Site2	SPLITTER: 5.3.SP2(m.222) JAM: 5.3.SP2(m.180)
● OK	[REDACTED]	ESX Splitter	Site2	SPLITTER: 5.3.SP2(m.222) JAM: 5.3.SP2(m.180)
● OK	VRPA2	vRPA	Site1	vRPA: 5.3.SP2(m.240)
● OK	VRPA1	vRPA	Site1	vRPA: 5.3.SP2(m.240)
● OK	[REDACTED]	ESX Splitter	Site1	SPLITTER: 5.3.SP2(m.222) JAM: 5.3.SP2(m.180)
● OK	[REDACTED]	ESX Splitter	Site1	SPLITTER: 5.3.SP2(m.222) JAM: 5.3.SP2(m.180)

Items per page 20

8 System Components

(i) NOTE: You can also monitor the state of **vRPA clusters** and **Components** in the [RecoverPoint for VMs Dashboard](#).



RecoverPoint for VMs Dashboard

The RecoverPoint for VMs Dashboard presents a high level overview of the RecoverPoint for VMs system to help you analyze and monitor your system health.

RecoverPoint for VMs Dashboard

The **Dashboard** is displayed every time that you log in to RecoverPoint for VMs. Use the **Dashboard** to monitor the status of your system licenses, limits, alerts, protected VMs, consistency groups, group sets, and recovery activities.

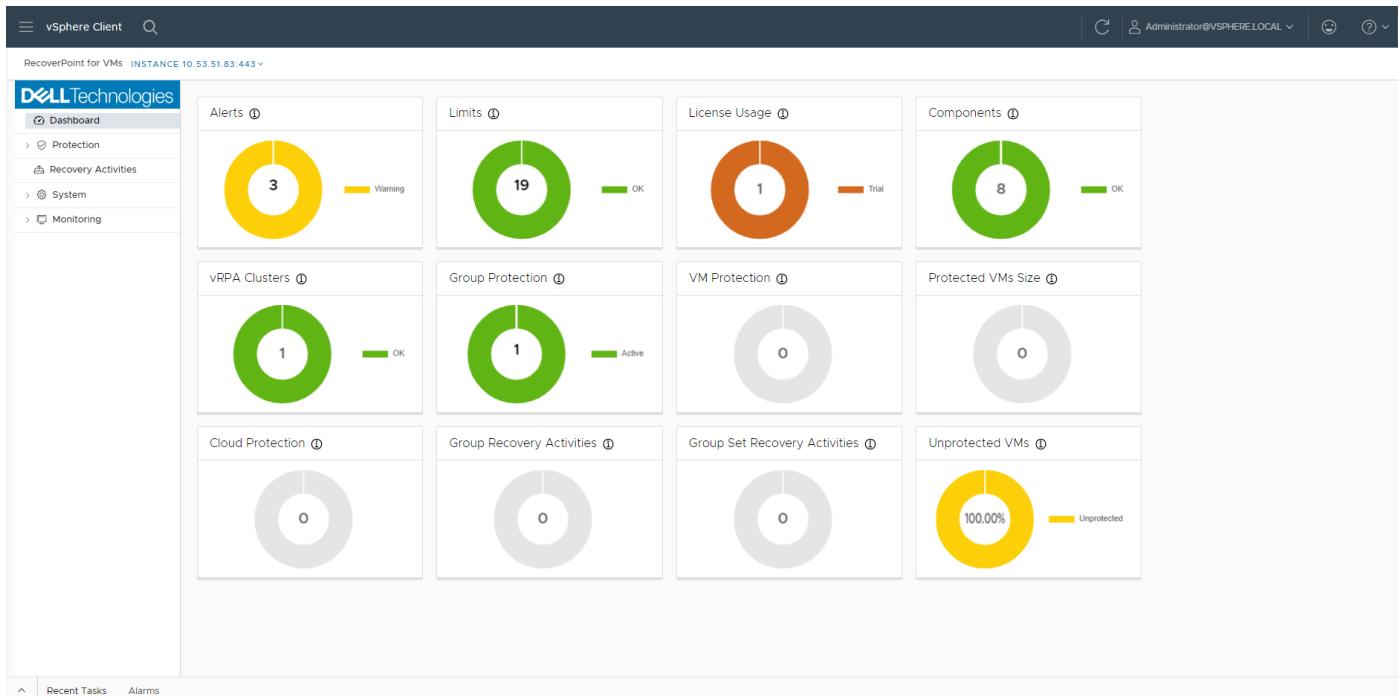
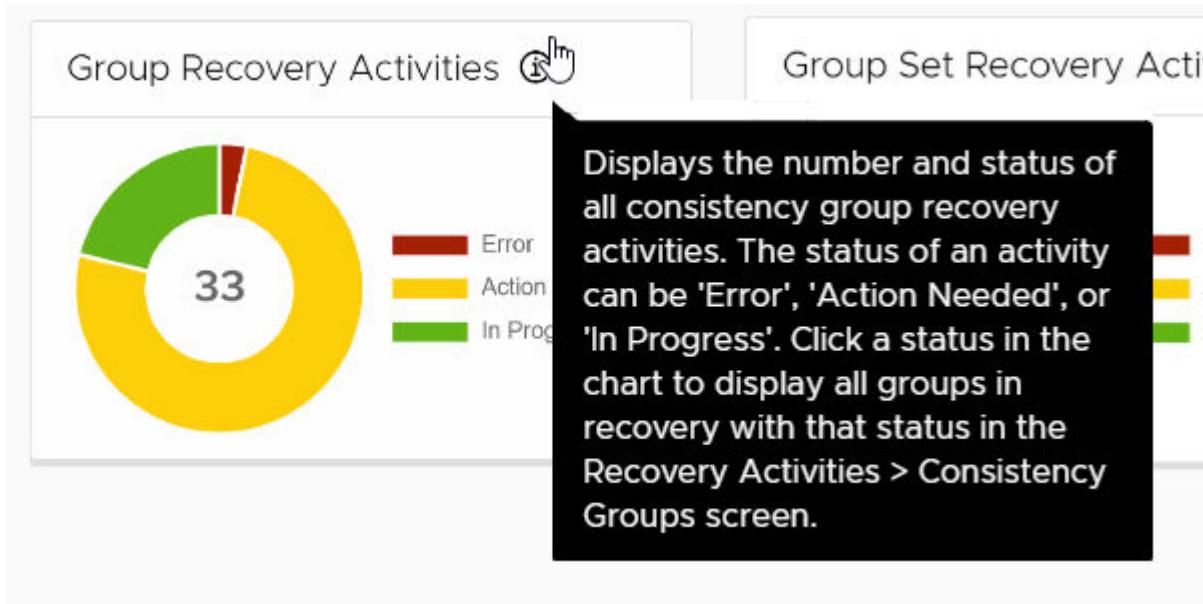


Figure 7. RecoverPoint for VMs Dashboard

In every **Dashboard widget**, you can:

- **Click the help icon** to display more detailed information about the widget system component or activity.
- **Click a status in a legend** (the colored bar or the label) to filter what is shown in the chart and display the number of system components with the status that you clicked. To clear the filter, click the status again.
- **Click a color of a status in a chart** to go to the relevant system component or activity screen, and display only the system component or activity in the clicked status.

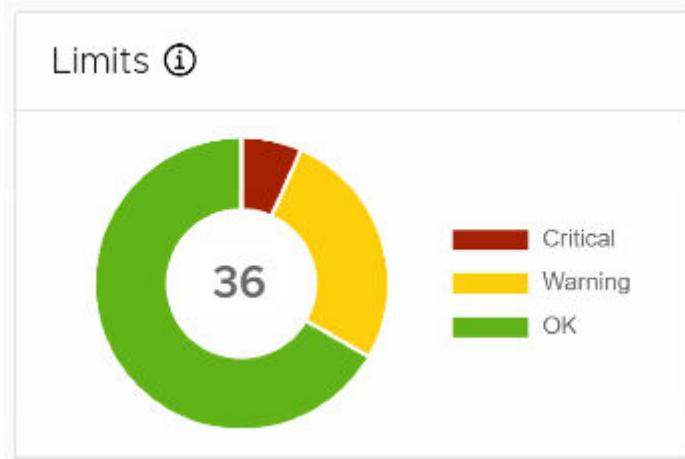


Widgets in RecoverPoint for VMs Dashboard

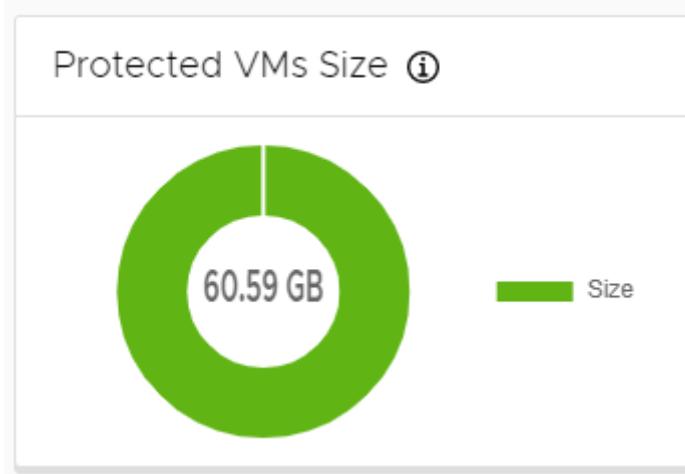
Limits

- Displays the number and status of the limits that are imposed on system components like consistency groups, splitters, and vRPA clusters.
- The limit status of a system component can be '**Critical**', '**Warning**', or '**OK**'.

- Click a status in the chart to display all system components with that status in the **Monitoring > System Limits** screen.
- For more information, see how to [Monitoring System Limits](#).



- Protected VMs Size**
- Displays the total size (in GB) of all protected VMs on this vCenter Server

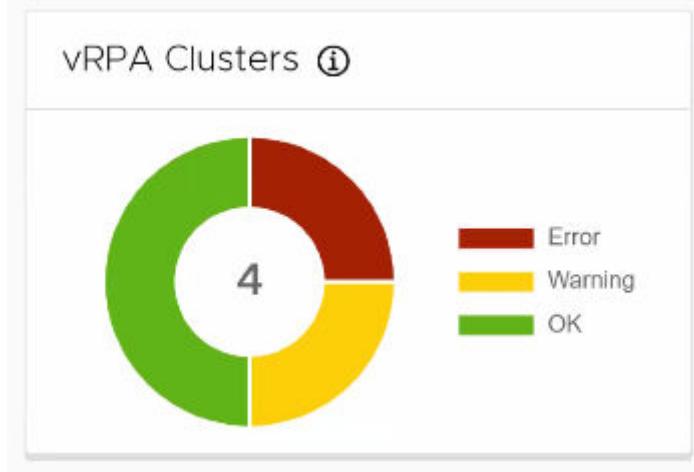


- Unprotected VMs**
- Displays the percentage of unprotected VMs.
 - When you hover over the widget, the exact number of unprotected VMs appears. This widget displays the number of VMs that are unprotected and have to be protected to make data protection available.
 - The number of unprotected VMs = total VMs - protected VMs - vRPAs - RPC - replica or shadow VMs.



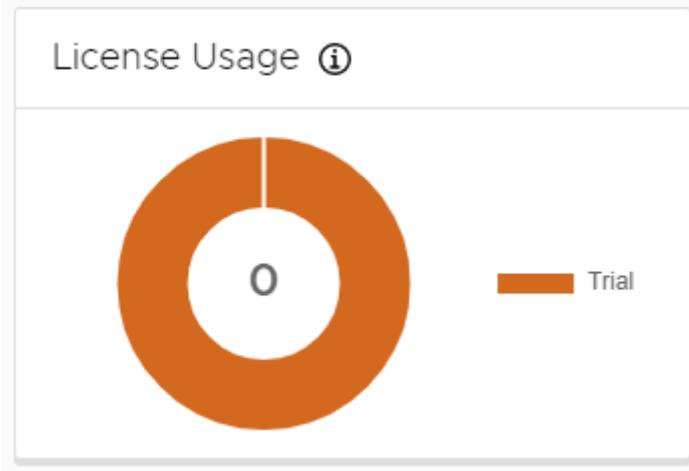
- vRPA Clusters**
- Displays the number and status of all registered vRPA clusters on all registered and linked vCenter Servers.

- The status of a vRPA cluster can be '**Error**', '**Warning**', or '**OK**'.
- Click a status in the chart to display all vRPA clusters with that status in the **System > Administration > vRPA Clusters** screen.



License Usage

- Displays the number of protected sockets out of the total number of licensed sockets.
- The usage status of a system license can be '**Trial**', '**OK**', or '**Violated**'.
- Click a status in the chart to display all licenses with that status in the **System > Licenses** screen.



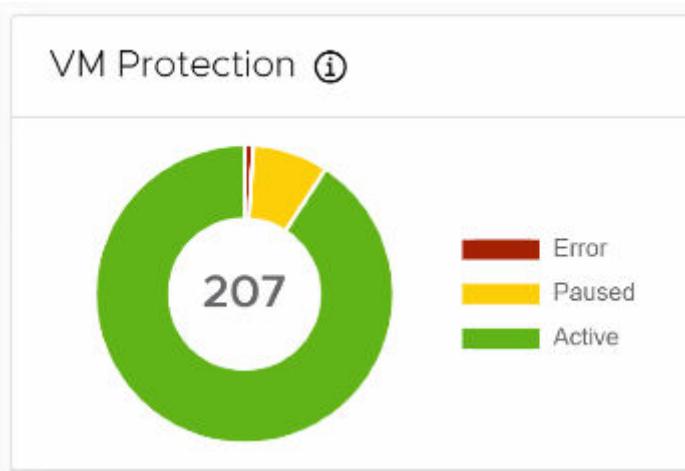
Alerts

- Displays the number and types of alerts in the system.
- The type of an alert can be '**Error**' or '**Warning**'.
- Click an alert type in the chart to display all alerts of that type in the **Monitoring > Alerts** screen.
- For more information, see [Monitor system alerts](#).



VM Protection

- Displays the number and status of protected VMs on the vCenter Server that you are connected to, or a registered vCenter Server that is linked to the vCenter that you are connected to.
- The status of a protected VM can be '**Active**', '**Error**', '**Initializing**', '**Inactive**', or '**Paused**'.
- Click a status in the chart to display all protected VMs with that status in the **Protection > Protected VMs** screen.



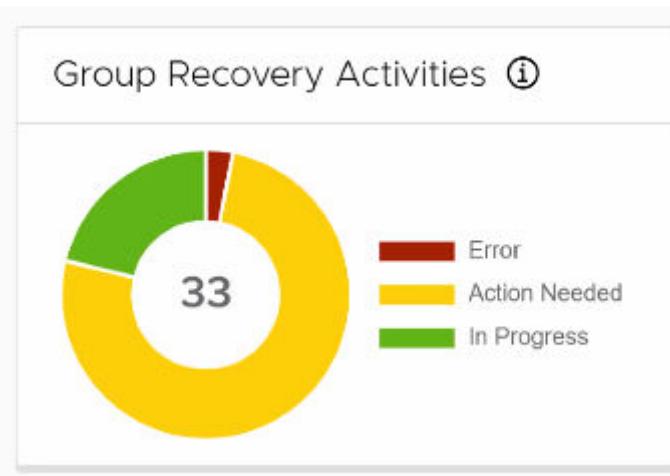
Group Protection

- Displays the number and status of all consistency groups in the system.
- The status of a consistency group can be '**Active**', '**Inactive**', '**Initializing**', '**Paused**', or '**Error**'.
- Click a status in the chart to display all groups with that status in the **Protection > Consistency Groups** screen.



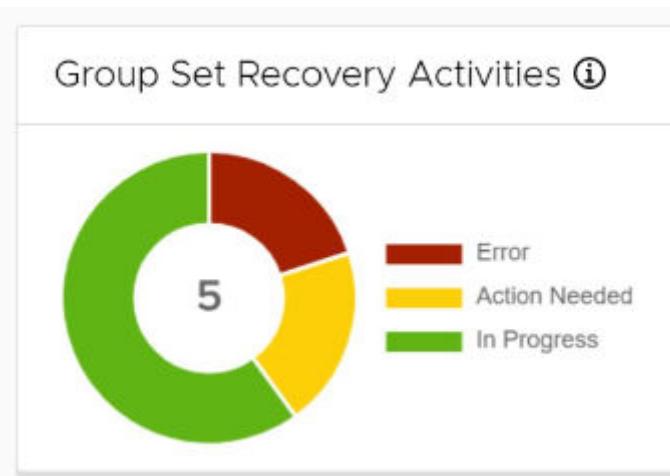
Group Recovery Activities

- Displays the number and status of all consistency group recovery activities.
- The status of an activity can be 'Error', 'Action Needed', or 'In Progress'.
- Click a status in the chart to display all groups with that status in the **Recovery Activities > Consistency Groups** screen.



Group Set Recovery Activities

- Displays the number and status of all group set recovery activities.
- The status of an activity can be 'Error', 'Action Needed', or 'In Progress'.
- Click a status in the chart to display all group sets with that status in the **Recovery Activities > Group Sets** screen.



Monitor group and copy protection

Monitor the status of replication for consistency groups and copies, when managing or troubleshooting your system.

Steps

1. Select **Protection > Consistency Groups**.
2. Expand a group.
3. Note the **Transfer Status (1)** and **State (2)** of each consistency group and the **Status (3)** of each copy.

The screenshot shows the 'Consistency Groups' page in the vSphere Replication interface. At the top, there are tabs: PROTECTION POLICY, BOOKMARK, TEST A COPY, RECOVER PRODUCTION, FAILOVER, and three dots. On the right, there are icons for Transfer Status (1), State (2), and a search bar. Below the tabs is a table with columns: Consistency Group, Production vCenter Server, Production vRPA Cluster, Protected Size, Transfer Status, and State. Two rows are shown: 'cg_copyVmRemote' (Protected Size: 40 MB, Transfer Status: Error, State: Enabled) and 'cg_newVm' (Protected Size: 20.2 GB, Transfer Status: Active, State: Enabled). Under 'cg_newVm', a 'Production' section shows a tree view with 'Production' expanded, revealing 'vRPA Cluster Patagonia'. Below this is a 'Copies (3)' section with three entries: 'Local Copy' (Status: OK), 'Remote Copy 1' (Status: OK), and 'Remote Copy 2' (Status: OK). Each copy entry has a red circle with the number '3' above it, indicating they are the focus of the numbered steps in the steps section. At the bottom, there are buttons for 'Items per page' (set to 20) and a note '2 Consistency groups'.

Results

- The **Transfer Status (1)** of a consistency group can be:
 - **Active:** Data is being transferred to a copy.
 - **Initializing:** A copy is being initialized: volume sweep, short init, or full sweep.
 - **High Load:** The system enters a temporary high-load state while data is being transferred to a copy, when the journal is full and cannot accept new writes. The system attempts to resolve the high-load state without user action.
 - **Paused by System:** System paused replication so data is not being transferred. If this state occurs for long periods of time, check the system alerts and events in the **Dashboard** for more information.
 - **Error:** An error has occurred.
 - **Permanent High Load:** The system enters a permanent high-load state while data is being transferred to a copy. A permanent high-load can occur after a temporary high-load. The system pauses replication and waits for user action.
 - **Paused:** User paused replication so data is not being transferred to a copy.
 - **Disabled:** User disabled a copy so data is not being transferred.
- The **State (2)** of a consistency group can be:
 - **Enabled:** A group is enabled for replication.
 - **Failed over:** A multicopy group has completed temporary failover.
 - **Being recovered:** A group is in the process of recovering production.
 - **Partially suspended:** Some of the copies of a group have been momentarily suspended while being upgraded.
 - **Suspended:** All the copies of the group have been momentarily suspended while being upgraded.
 - **Disabled:** A group is disabled for replication.
- The **Status (3)** of a copy can be:
 - **OK:** Data can be transferred to the copy.
 - **Initializing:** A copy is being initialized: volume sweep, short init, or full sweep.
 - **High Load:** A copy enters a temporary high-load state while data is being transferred to the copy, when the journal is full and cannot accept new writes. The system attempts to resolve the high-load state for the copy without user action.
 - **Paused by System:** System paused replication so data is not being transferred to a copy. If this state occurs for long periods of time, check the system alerts and events in the **Dashboard** for more information.
 - **Error:** An error has occurred on the copy.
 - **Permanent High Load:** A copy enters a permanent high-load state while data is being transferred to the copy. A permanent high-load can occur after a temporary high-load. The system pauses replication to the copy and waits for user action.
 - **Paused:** User paused replication so data is not being transferred to a copy.
 - **Disabled:** User disabled a copy so data is not being transferred.

Events reference

RecoverPoint for VMs events are displayed along with their ID, scope, summary, details, and when relevant, a recommended user action.

Topics:

- Detailed events
- Normal events
- Advanced events

Detailed events

The following table contains the **Detailed** scope events that the RecoverPoint for VMs system issues.

Table 2. Detailed events

ID	Topic	Level	Summary	More Info
1012	Mgmt	Warning	License grace period about to expire	License grace period expires in less than <xx> days. You must obtain a new RecoverPoint for VMs license.
1013	Mgmt	Error	License expired	Obtain a new RecoverPoint for VMs license.
2000	vRPA Cluster	Info	Cluster management running on vRPA	
3002	vRPA	Warning	Cluster management switched over to vRPA	
3007	vRPA	Warning off	vRPA is up.	
3014	vRPA	Warning	vRPA unable to access volume	
3022	vRPA	Warning off	LAN link to vRPA restored	
3023	vRPA	Warning	LAN link to vRPA down	
3024	vRPA	Warning	DHCP changed one or more of the vRPAs	
3025	vRPA	Warning	VMDK capacity almost full	VMDK <xx> of VM <xx> at vRPA cluster <xx> is almost at full capacity. To ensure that replication is not interrupted, see KB article 000180105 for instructions on how to fix this issue. If problem persists, contact Customer Support.
3026	vRPA	Info	VMDK capacity issue resolved	VMDK <xx> of VM <xx> at vRPA cluster <xx> was almost at full capacity, but the issue has been resolved.
3165	Group	Error	Full sweep is taking more time due to incoming data.	Consider changing the link policy.
3170	Mgmt	Info	New site keys and certificates are generated and being synchronized between clusters.	
3171	Mgmt	Info	New site keys and certificates are synchronized between clusters.	
4000	Group	Info	Group capabilities OK	

Table 2. Detailed events (continued)

ID	Topic	Level	Summary	More Info
4001	Group	Warning	Minor problem in group capabilities	
4003	Group	Error	Group capabilities problem	
4007	Group	Info	Pausing data transfer for group	
4008	Group	Warning	Pausing data transfer to copy.	<ul style="list-style-type: none"> 1. To determine the cause of this event, check adjacent events for this group, both before and after this event. 2. Verify that transfer resumes in a timely manner. To do so, check the transfer state in the UI or CLI, or check subsequent events for this group. 3. If transfer does not resume, collect logs for the period when the event occurred, and contact Customer Support.
4009	Group	Error	Pausing data transfer for group	
4010	Group	Info	Starting data transfer to copy.	
4015	Group	Info	Transferring latest snapshot	Transferring latest snapshot before pausing transfer (no data loss).
4016	Group	Warning	Transferring latest snapshot	Transferring latest snapshot before pausing transfer (no data loss).
4017	Group	Error	Transferring latest snapshot	Transferring latest snapshot before pausing transfer (no data loss).
4018	Group	Warning	Transfer of latest snapshot complete	Transfer of latest snapshot from source complete (no data loss).
4019	Group	Warning	Group under high load	Group in high load -- transfer to be paused temporarily.
4020	Group	Warning off	Group high load over	
4021	Group	Error	Initialization paused	To complete initialization, add journal volumes to the journal or enable long initialization.
4022	Group	Error off	Initialization resumed	
4023	Group	Error	Transfer paused	To restart transfer, first disable access to the accessed image.
4024	Group	Error off	Transfer restarted	
4025	Group	Warning	Group under high load	Group is undergoing a high load so initialization is restarted.
4026	Group	Warning off	Group high load is over.	
4027	Group	Error	Group under high load	Roll to the physical image is paused and transfer is paused.
4028	Group	Error off	Group high load is over.	
4040	Group	Error	Journal error	Full sweep to be performed.
4041	Group	Info	Group side activated	
4042	Group	Info	Group side deactivated	
4043	Group	Warning	Group side deactivated	
4044	Group	Error	Group side deactivated	

Table 2. Detailed events (continued)

ID	Topic	Level	Summary	More Info
4045	Group	Error	Journal error	Volume(s) sweep to be performed.
4051	Group	Info	Resuming distribution	Disabling access to image and resuming distribution.
4054	Group	Error	Failed to access an image	
4057	Group	Error	Specified image removed from journal	The specified image has been removed from the journal. Disable image access and then enable image access on a different image.
4062	Group	Info	Access enabled to latest image	
4063	Group	Warning	Access enabled to latest image	
4064	Group	Error	Access enabled to latest image	
4070	Group	Warning	Journal error	Synchronization is a full sweep.
4084	Group	Info	Markers cleared	
4085	Group	Warning	Unable to clear markers	
4086	Group	Info	Synchronization started	
4087	Group	Info	Synchronization completed	
4088	Mgmt	Info	Set Markers was requested by user	
4091	Group	Error	Image access log is full	<p>Access to copy volumes for this group at this vRPA cluster has been disabled.</p> <p>If you do not wish to retain the writes that were added to the copy image while image access was enabled, disable image access; the relevant writes are automatically undone. Alternatively, use the undo writes command to undo the same writes; image access remains enabled.</p> <p>If, however, you want to retain the writes that were added to the copy image while image access has been enabled, you can do one of the following:</p> <ul style="list-style-type: none"> • Increase the size of the copy journal by adding one or more volumes to the journal. • Fail over to the copy. Note: The copy journal is erased. • Set the image access mode to direct access. Note: The copy journal is erased, and a full sweep synchronization is required to restore consistency between the production and copy images. <p>To help prevent this problem from recurring, increase the size of your image access log, using one or both of the following:</p> <ul style="list-style-type: none"> • Add volumes to the journal. • Modify the policy setting for the portion of the journal that is allocated to the image access log. This is permitted only when image access is disabled.
4097	Group	Warning	Starting three-phase distribution	<p>Check the maximum journal lag setting value, and verify that the current value is indeed required.</p> <ul style="list-style-type: none"> • If the maximum journal lag value has not been defined or the current journal lag is lower than

Table 2. Detailed events (continued)

ID	Topic	Level	Summary	More Info
				<p>the maximum journal lag value, this is probably a journal space or performance issue.</p> <ul style="list-style-type: none"> In this case, enlarge your journal or increase the speed of the journal by placing it in a faster array, on faster media, or any other procedure that can increase the journal write-rate.
4098	Group	Warning off	Maximum journal lag within limit	
4099	Group	Warning	Starting long initialization	
4120	Group	Warning	Journal usage exceeding threshold	
4122	Group	Error off	Trying to regain write permissions	Trying to regain write permissions to nonproduction copy.
4129	Group	Warning	Logged access enabled for unusually long time	Logged access has been enabled on a group copy for an unusually long time.
4130	Group	Warning off	Logged access no longer enabled for unusually long time	Logged access on group copy is now disabled, or it has been enabled to a different image.
4135	Group	Info	Copy entered maintenance mode	All copy activities have been suspended.
4136	Group	Info	Copy exited maintenance mode	All copy activities have resumed.
4137	Group	Info	Snapshot consolidation has been successful	
4138	Group	Warning	Snapshot consolidation failed	
4140	Group	Info	Change pipe mode because of sync/async dynamic settings	
4141	Group	Info	Snapshot consolidation policy change	The user has changed the snapshot consolidation policy setting(s).
4142	Group	Info	Snapshot consolidation request registered	
4160	Group	Info	Volumes were resized	
4161	Group	Info	Short initialization started	
4171	Group	Info	Volume changes	
4174	vRPA Cluster	Info	Volume migration started	Migration of <volume name> configuration data has started.
4216	Group	Warning	One or more failover networks are unavailable	
5013	Splitter	Error	Splitter is down	
5015	Splitter	Error off	Splitter is up	
5016	Splitter	Warning	Splitter has restarted	
5017	Splitter	Error off	Splitter version is supported	
5018	Splitter	Error	Splitter version is not supported	
5030	Splitter	Error	Possible splitter write failure	
5031	Splitter	Warning	Splitter not splitting to replication volumes	
5032	Splitter	Info	Splitter splitting to replication volumes	
5035	Splitter	Info	Writes to replication volumes disabled	
5036	Splitter	Warning	Writes to replication volumes disabled	
5037	Splitter	Error	Writes to replication volumes disabled	

Table 2. Detailed events (continued)

ID	Topic	Level	Summary	More Info
5038	Splitter	Info	Splitter delaying writes	
5039	Splitter	Warning	Splitter delaying writes	
5040	Splitter	Error	Splitter delaying writes	
5041	Splitter	Info	Splitter not splitting to replication volumes	
5042	Splitter	Warning	Splitter not splitting to replication volumes	
5043	Splitter	Error	Splitter not splitting to replication volumes	
5045	Group	Warning	Splitter and vRPA problem detected	Simultaneous problems reported in splitter and vRPA. Full-sweep resynchronization is required upon restarting data transfer.
5047	Group	Warning	Splitter problem detected	Problem reported in splitter. Volume sweep required.

Normal events

The following table contains the **Normal** scope events that the RecoverPoint for VMs system issues.

Table 3. Normal events

ID	Summary	More Info
1000	User logged in	
1001	User login failed	
1003	Mailed to generate SNMP trap	
1004	Mailed to send email alert	<p>Failed to send email alert to the specified address.</p> <p>Check whether there is an issue with your selected method of transfer. If a problem exists, fix it and then, perform a connectivity test by running the <code>test_syr_connectivity</code> CLI command.</p> <p>If problem persists contact Customer Support. For more information, see the <i>RecoverPoint for VMs CLI Reference Guide</i>.</p>
1005	Mailed to update local file	

Table 3. Normal events (continued)

ID	Summary	More Info
	e p e t	
	m t n g	
1006	Settings changed g fm b	
1007	Settings change failed g fm b	
1008	User action succeeded g fm b	
1009	User action failed g fm b	
1014	User bookmarked an image g fm b	
1015	User bookmarked an image g fm b	
1017	MRPA to host multipathing problem m b i n g	
1018	MRPA multipathing problem fixed g m b i n g off	
1019	User action performed successfully m b i n g	

Table 3. Normal events (continued)

ID	Summary	More Info
1020	Failed to send system report	<p>Check whether there is an issue with your selected method of transfer. If a problem exists, fix it and then, perform a connectivity test by running the <code>test_syr_connectivity</code> CLI command.</p> <p>If problem persists contact Customer Support. For more information, see the <i>RecoverPoint for VMs CLI Reference Guide</i>.</p>
1031	System limit exceeded low watermark	
1032	System limit passed below low watermark	
1033	System limit exceeded high watermark	
1034	System limit passed below high watermark	
1035	System limit exceeded	
1036	System limit passed below limit	
3000	vRPA successfully communicating with cluster	
3001	vRPA problem communicating with cluster	vRPA is currently experiencing a problem communicating with its cluster.

Table 3. Normal events (continued)

ID	Summary	More Info
3005	Settings conflict between clusters R P A Cluster r	A settings conflict has been discovered between two vRPA clusters.
3006	Settings conflict between clusters Resolved P A Cluster r off	An user action resolves the settings conflict between vRPA clusters .
3008	vRPA appears to be down B P A i n g	
3036	vRPA clock out of sync R P A r	Contact Customer Support.
3037	vRPA clock is back in sync R P A r off	
3040	vRPA cluster added R P A Cluster	
3041	vRPA cluster removed R P A Cluster	
4056	No image in journal matches query r o o p	
4078	Replication set resized n b o p	
4082	Next synchronization will be a full sweep o o p n g	The copy marked all its replication volumes as dirty.

Table 3. Normal events (continued)

ID	Summary	More Info
4083	Next synchronization will be a volume sweep	The copy marked some of its replication volumes as dirty. Next synchronization will be a volume sweep on these volumes.
4090	Image access log 80% full	<p>Image access is enabled to a nonproduction copy. The capacity of the copy journal image access log has nearly been reached; only limited further information can be written to it.</p> <p>If the log becomes full, the system blocks access by host applications to the replication volumes that belong to that group (and the application receives I/O errors). When the system is in this state, it is recommended that immediate action is taken to prevent the log from becoming 100% full.</p> <p>If you do not want to retain the writes that were added to the copy image while image access was enabled, disable image access; the relevant writes are automatically undone. Alternatively, use the undo writes command to undo the same writes; image access remains enabled.</p> <p>If, however, you want to retain the writes that were added to the copy image while image access has been enabled, you can do one of the following:</p> <ul style="list-style-type: none">• Increase the size of the copy journal by adding one or more volumes to the journal.• Fail over to the copy. Note: The copy journal is erased.• Set the image access mode to direct access. Note: The copy journal is erased, and a full sweep synchronization is required to restore consistency between the production and copy images. <p>To help prevent this problem from recurring, increase the size of your image access log, using one or both of the following:</p> <ul style="list-style-type: none">• Add volumes to the journal.• Modify the policy setting for the portion of the journal that is allocated to the image access log. This is permitted only when image access is disabled.
4107	Replication integrity check successful	
4108	Replication integrity issue detected	A possible replication integrity issue has been detected. Contact Customer Support.
4121	Error writing to volume	<p>Ensure that RecoverPoint for VMs has write permission to all volumes.</p> <p>System retries automatically.</p> <p>If the problem recurs repeatedly, possible causes may be:</p> <ul style="list-style-type: none">• Volume is thin device that is not attached to any storage pool.• Volume is attached to storage pool that is full.• Volume contains bad sector.

Table 3. Normal events (continued)

ID	Summary	More Info
		If you extended a storage pool or attached a device to a storage pool, run the CLI command <code>rescan_san</code> . For more information, see the <i>RecoverPoint for VMs CLI Reference Guide</i> . If problem persists, contact Customer Support.
4125	Journal capacity insufficient	Journal capacity is currently insufficient for the required retention period.
4126	Journal capacity sufficient	Journal capacity is currently sufficient for the required retention period.
4127	Predicted journal capacity insufficient	Journal capacity is predicted to be insufficient for the required retention period.
4128	Predicted journal capacity sufficient	
4131	Transfer paused or synchronizing for unusually long time	
4132	Transfer resumed	Transfer has resumed (following long pause or synchronization).
4133	Starting copy regulation	The system has detected an unstable state in this copy, and the copy is being regulated for <xx> minutes in order to allow for the environment to stabilize. See event Details for cause of regulation. Event logs can also be a good source for the detection of system issues. Look for repetitive errors, that may indicate a specific problem in the system. Also, check SAN/IP events outside of RecoverPoint for VMs, as instabilities may not originate from RecoverPoint for VMs.

Table 3. Normal events (continued)

ID	Summary	More Info
	e p e t	If regulation persists, collect all system information, and contact Customer Support.
4134	Copy regulation has ended r o o poff	Copy regulation has ended due to a user action or internal timeout.
4158	Journal capacity extended a o a p n g	Journal capacity is currently extended for the required retention period.
4175	System has entered maintenance Rnode P A	The RecoverPoint for VMs system is adding an vRPA to the cluster.
4176	System has entered maintenance Rnode P A Cluster	The RecoverPoint for VMs system is performing a major version upgrade.
4177	System has entered maintenance Rnode P A Cluster	The RecoverPoint for VMs system is performing a minor version upgrade.
4178	System has entered maintenance Rnode P A	The RecoverPoint for VMs system is performing an vRPA replacement.
4179	System has exited maintenance Rnode P A	The RecoverPoint for VMs system is no longer adding an vRPA to the cluster.
4180	System has exited maintenance Rnode P A Cluster	The RecoverPoint for VMs system is no longer performing a major version upgrade.
4181	System has exited maintenance Rnode P A Cluster	The RecoverPoint for VMs system is no longer performing a minor version upgrade.
4182	System has exited maintenance Rnode P A	The RecoverPoint for VMs system is no longer performing an vRPA replacement.
4183	System has entered maintenance Rnode P A	The RecoverPoint for VMs system is performing an vRPA conversion from class to RPSE.

Table 3. Normal events (continued)

ID	Summary	More Info
4184	System has entered maintenance mode P A	The RecoverPoint for VMs system is no longer performing an vRPA conversion from class to RPSE.
4185	System has entered maintenance mode P A Cluster	System has entered user-initiated maintenance mode
4186	System has exited maintenance mode P A Cluster	System has exited user-initiated maintenance mode
4311	Load balancing recommendation n b o p	None
4505	Events deleted by user g m b	All the events (info, warning, and error) have been deleted, as requested by the user.
8000	Dialling home g m b r	A service request is being opened for you with Customer Support.
8001	Dial home event failure g m b r	Contact Customer Support.
8002	VM created R P A Cluster	
8003	VM network reconfigured R P A Cluster	
8004	Private network created on ESX R P A Cluster	
8005	Private network on ESX erased R P A Cluster	
8103	Storage was registered R	

Table 3. Normal events (continued)

ID	Summary	More Info
	E P E T	
	P A Cluster	
8104	Storage was unregistered R P A Cluster	
8105	Lost connectivity to storage R P A Cluster i n g	Ensure that there is connectivity with the storage and that the entered credentials are correct, and try again. If problem persists, contact Customer Support.
8106	Restored connectivity to storage R P A Cluster	
8107	Resource pool was registered R P A Cluster	
8108	Resource pool was unregistered R P A Cluster	
8202	Bookmark has been applied n o o p	
8204	Failed to replicate snap on time a d a p n g	
8206	Next snapshot was not created within configured RPO o u p n g	Please check the status of the group and verify it does not have problems. If external tool is managing snapshots, please align its settings with RPO configured for this group in RecoverPoint for VMs.
8300	Failed to load system Configuration P A Cluster r	
8328	Connectivity to the Amazon S3 Bucket was lost	

Table 3. Normal events (continued)

ID	Summary e p e t	More Info
	P A Cluster i n g	
8329	Connectivity to the Amazon S3 Bucket was restored P A Cluster	
9998	Cannot identify event R P A	
10203	vRPA cluster was down R P A r off	
10206	External process restarted R P A f error	
10207	External process restarted R P A f error	
10210	High load occurring during group Initialization P A r	High load situation is ongoing. Consider enabling fast first-time initialization.
10211	SAN communication problem Between splitters and vRPAs Existed but has resolved itself A r	Temporary issue on the SAN caused communication problems between splitters and vRPAs at the specified cluster. The problem resolved itself.
10213	High load occurring during group Initialization P A r off	High load situation is ongoing. Consider enabling fast first-time initialization.
10501	Initialization ended R P A	
10502	Access to image enabled R P A	Access to an image at the copy has been enabled.

Table 3. Normal events (continued)

ID	Summary e p e t	More Info
10503	Transferring latest snapshot R P A r	Transferring latest snapshot before pausing transfer (no data loss)
10504	Access to image disabled R P A	Access to an image at the copy has been disabled.
10505	Image access log writes have been undone P A	None
10506	Roll to physical image complete R P A	Logged access to physical image now enabled.
10507	Journal available again R P A	Due to system changes the journal was temporarily out of service, but it is now available again.
10509	Initial long initialization complete R P A	
10510	Following a pause transfer system row cleared to restart transfer P A	
10511	Finished recovering replication backlog P A	
10512	Following a pause transfer system row cleared to restart transfer P A	
12001	Splitter is down R P A r	
12002	Error in links to all other clusters R P A r	<p>Check if the other cluster is down.</p> <p>In case of IP connectivity issues:</p> <ul style="list-style-type: none"> • Check RecoverPoint gateways and IPs configuration. • Check if there are any ISP-related issues. • Check RecoverPoint for VMs firewall configuration. • If there is FC connectivity, check RecoverPoint zoning.

Table 3. Normal events (continued)

ID	Summary	More Info
	Error in link to an vRPA at other cluster(s) P A r	<ul style="list-style-type: none"> If you recently changed the network configuration, verify that RecoverPoint for VMs configuration matches the new network configuration. <p>If none of the above instructions resolve this issue, collect system information from all clusters experiencing connectivity issues, and contact Customer Support.</p>
12003	Error in link to an vRPA at other cluster(s) P A r	
12004	Error in data link to other cluster(s) P A r	<p>Error in data link. All vRPAs at cluster are unable to transfer replicated data to other cluster(s) due to communication failure over the WAN link. Data transfer between vRPA clusters has stopped.</p> <ol style="list-style-type: none"> Check if replication process at other cluster is down. If there is IP connectivity issues: <ul style="list-style-type: none"> Check RecoverPoint for VMs gateways and IP configuration. Check firewall configuration. If you recently changed network configuration, verify that RecoverPoint configuration matches the new network configuration.
12005	Error in data link over WAN. vRPA is unable to transfer replicated data to other cluster A r	<ol style="list-style-type: none"> Check if replication process at other cluster is down. If there is IP connectivity issues: <ul style="list-style-type: none"> Check RecoverPoint for VMs gateways and IPs configuration. Check firewall configuration. If you recently changed network configuration, verify that RecoverPoint configuration matches the new network configuration.
12006	vRPA is disconnected from the vRPA cluster P A r	
12007	All vRPAs are disconnected from the vRPA cluster P A r	
12008	vRPA is down R P A r	
12009	Link entered high load R P A r	<p>Due to heavy I/O activity a link entered a high load state in order to prevent I/O failures on that link. The following are among the possible causes of the high load:</p> <ul style="list-style-type: none"> vRPA is unable to handle the large volume of incoming data. vRPA performance statistics are available in the Release Notes that accompany each RecoverPoint for VMs product release. Journal reaches capacity, because the rate of the distribution process consistently lags behind the rate of incoming data to the copy journal. WAN is too slow to handle the data rate. Compression for WAN optimization is too high, such that the vRPA is unable to handle the volume of incoming data.

Table 3. Normal events (continued)

ID	Summary	More Info
		<ul style="list-style-type: none">Peak I/O activity in the SAN causes a temporary bottleneck in the environment. This can be considered normal behavior, and does not necessarily require user action. <p>If high load persists, consider:</p> <ul style="list-style-type: none">Running the <code>balance_load</code> command and applying the load-balancing recommendation.Manually modifying the preferred vRPA of each group.Checking for scheduled activities in your environment.Enabling fast first-time initialization.
12010	Journal error -- full sweep to be performed after error is corrected P A r	
12011	Image access log or virtual buffer is full P A r	<p>Access to copy volumes for this group at this vRPA cluster has been disabled. If you do not wish to retain the writes that were added to the copy image while image access was enabled, disable image access; the relevant writes are automatically undone. Alternatively, use the <code>undo writes</code> command to undo the same writes; image access remains enabled.</p> <p>If, however, you wish to retain the writes that were added to the copy image while image access has been enabled, you can do one of the following:</p> <ul style="list-style-type: none">Increase the size of the copy journal by adding one or more volumes to the journal.Fail over to the copy. Note: The copy journal is erased.Set the image access mode to direct access. Note: The copy journal is erased, and a full sweep synchronization is required to restore consistency between the production and copy images. <p>To help prevent this problem from recurring, increase the size of your image access log, using one or both of the following:</p> <ul style="list-style-type: none">Add volumes to the journal.Modify the policy setting for the portion of the journal that is allocated to the image access log. This is permitted only when image access is disabled.
12013	Cannot enable image access P A r	Cannot enable image access to the specified image.
12026	Error occurred in link to an vRPA at other cluster(s) P A r	
12027	vRPAs are unable to access any volume at this cluster that belongs to this consistency group A r	<p>vRPAs cannot complete I/O operations at this cluster to any volume -- replication or journal -- in the consistency group.</p> <p>Check your SAN and storage configurations for any irregularities; for example, incorrect LUN masking or zoning.</p>
12031	Error occurred in link between one or more vRPAs at cluster and all vRPAs at other cluster(s)	Ensure that at vRPA cluster are connected properly to the other clusters.

Table 3. Normal events (continued)

ID	Summary e p e t	More Info
	B A	
12032	Error occurred in link between all vRPAs at cluster and all vRPAs at other cluster(s) A Cluster r	Ensure that all vRPAs at cluster are connected properly to the other clusters.
12033	Volume is not accessible; Repository data may be lost P A r	
12034	Writes to storage may have occurred without corresponding writes to vRPA A r	
12035	Cluster control at other cluster(s) Unavailable P A r	Error occurred in link to cluster leader vRPA at other clusters.
12036	Negotiation of transfer protocol failed P A r	Negotiation of transfer protocol failed due to network issues in TCP layer between clusters. If problem persists, check your TCP network.
12037	All replication volumes in the consistency group (or groups) are not accessible A r	
12038	All journal volumes in the consistency group (or groups) are not accessible A r	
12039	Wrong initialization started R P A i n g	
12041	Error writing to volume R P A r	Ensure that RecoverPoint for VMs has write permission to all volumes. If the problem recurs repeatedly, possible causes may be: <ul style="list-style-type: none">• Volume is thin device not attached to any storage pool.• Volume is attached to storage pool that is full.• Volume contains bad sector.

Table 3. Normal events (continued)

ID	Summary	More Info
	<p>e p e t</p>	If you extended a storage pool or attached a device to a storage pool, run the CLI command <code>rescan_san</code> . For more information, see the <i>RecoverPoint for VMs CLI Reference Guide</i> . If problem persists, contact Customer Support.
12043	Splitter writes may have failed R P A r	
12044	Problem with IP link between vRPAs (in at least one direction) A r	
12045	Problem with all IP links between vRPAs P A r	
12046	Problem with IP link between vRPAs P A r	
12047	vRPA network interface card (NIC) problem P A r	
12048	Unsupported splitter version R P A r	
12049	vRPA has entered maintenance mode P A	
12050	RecoverPoint for VMs has dynamically started replicating asynchronously to one of the replicas of this group. The group is now initialized. During initialization, data is not transferred synchronously.	
12057	Replication volume reservation conflict P A Cluster	This is OK for disabled groups.

Table 3. Normal events (continued)

ID	Summary	More Info
12058	vRPA to splitter communication error P A r	
12059	vRPA communication problem with volumes P A r	vRPA has encountered a communication problem with all volumes
12060	vRPA communication problem with journal volumes P A r	
12061	vRPA communication problem with replication volumes P A r	
12062	vRPA communication problem with replication volume P A r	
12063	vRPA communication problem with journal volume P A r	
12073	vRPA communication problems with repository volume P A r	
12078	Splitter communication error P A r	<p>Although the vRPA sees the splitter, the cluster control has been unable to communicate with it for the past five minutes, and therefore, cannot detect whether any writes have passed through it.</p> <p>Transfer will be paused to ensure consistency between the copy and production.</p> <p>When the system re-starts transfer, an initialization or full sweep will follow.</p> <p>NOTE: To ensure data integrity, it is highly recommended that any snapshots created in the past five minutes are not selected for recovery.</p>
12080	Communications problem in internal process P A r	<p>The cause of this problem may be:</p> <ul style="list-style-type: none"> Failure of a RecoverPoint for VMs process. Disconnection between internal RecoverPoint for VMs processes. <p>To determine the cause of this problem, collect logs for the period when the event occurred, and contact Customer Support.</p>

Table 3. Normal events (continued)

ID	Summary	More Info
12081	Communications problems between vRPA and site control	<p>The cause of this problem may be:</p> <ul style="list-style-type: none">• Failure of a RecoverPoint for VMs process.• Disconnection between internal RecoverPoint for VMs processes. <p>To determine the cause of this problem, collect logs for the period when the event occurred, and contact Customer Support.</p>
12090	Splitter disaster	
12091	ESX disaster	
12092	VM disaster	
12093	VM disaster	
12094	VM disaster	
12095	Datastore disaster	
12096	Datastore disaster	
12097	Datastore disaster	
12098	Datastore disaster	

Table 3. Normal events (continued)

ID	Summary	More Info
14001	Splitter is up, and version is Supported P A r off	
14002	All links to all other clusters have been restored P A r off	
14003	Link to an vRPA at other clusters has been restored P A r off	
14004	Data link has been restored. All vRPAs at cluster can transfer replicated data to other cluster. A r off	
14005	Data link over WAN has been restored. vRPA can transfer replicated data to other cluster A r off	
14006	Connection of vRPA to the vRPA cluster is restored. P A r off	
14007	Connection of all vRPAs to the vRPA cluster is restored. P A r off	
14008	vRPA is up R P A r off	
14009	Link was in high load, but has now returned to normal operation P A r off	<p>Due to heavy I/O activity, the link entered a high load state in order to prevent I/O failures on that link. The link has since exited the high load state, and has returned to normal operation.</p> <p>The following are among the possible causes of the high load:</p> <ul style="list-style-type: none">• vRPA is unable to handle the large volume of incoming data. vRPA performance statistics are available in the Release Notes that accompany each RecoverPoint for VMs product release.• Journal reaches capacity, because the rate of the distribution process consistently lags behind the rate of incoming data to the copy journal.• WAN is too slow to handle the data rate.

Table 3. Normal events (continued)

ID	Summary	More Info
		<ul style="list-style-type: none"> Compression for WAN optimization is too high, such that the vRPA is unable to handle the volume of incoming data. Peak I/O activity in the SAN causes a temporary bottleneck in the environment. This can be considered normal behavior, and does not necessarily require user action. <p>If high load persists, consider:</p> <ul style="list-style-type: none"> Running the <code>balance_load</code> command and applying the load-balancing recommendation. Manually modifying the preferred vRPA of each group. Checking for scheduled activities in your environment. Enabling fast first-time initialization. <p>For more information, see the <i>RecoverPoint for Virtual Machines HTML5 Plugin Administrator's Guide</i>.</p>
14010	E rror journal error corrected -- full S econdary sweep required P referred vRPA A uto failover off	
14011	E rror image access log or virtual buffer R esource no longer full P referred vRPA A uto failover off	
14013	E rror no longer trying to access a R esource diluted image P referred vRPA A uto failover off	
14026	E rror link to an vRPA at other R esource cluster has been restored P referred vRPA A uto failover off	
14027	E rror access to all volumes in the R esource consistency group (or groups) is R estored A uto failover off	
14031	E rror link between one or more vRPAs R esource at cluster and all vRPAs at the R esource other cluster(s) has been restored A uto failover off	
14032	E rror link between all vRPAs at cluster R esource and all vRPAs at the other R esource cluster(s) has been restored A uto Cluster F ailover off	
14033	E rror access to volume restored R esource	Restored repository data integrity.

Table 3. Normal events (continued)

ID	Summary	More Info
14034	B A off	
14034	Replication consistency to storage Restored P A r off	Replication consistency in writes to storage has been restored.
14035	Ecluster control at other cluster(s) Available P A r off	The link to cluster leader vRPA at other cluster(s) has been restored.
14036	Enegotiation of transfer protocol Successful again P A r off	Negotiation of transfer protocol, which failed to due to network issues in TCP layer between clusters, has been restored.
14037	Eaccess to all replication volumes Ethe consistency group (or groups) has been restored A r off	
14038	Eaccess to all journal volumes in Ethe consistency group (or groups) Erestored A r off	
14039	Elong initialization completed B P A i n g off	
14041	Ewrite access to volume restored R P A r off	
14042	Esynchronization in progress to Erestore any failed writes in group P A r off	
14043	Esynchronization in progress to Erestore any failed writes P A r off	

Table 3. Normal events (continued)

ID	Summary	More Info
14044	Problem with IP link between vRPAs (in at least one direction) corrected A r off	
14045	All IP links between vRPAs restored P A r off	
14046	IP link between vRPAs restored R P A r off	
14047	vRPA network interface card (NIC) problem corrected P A r off	
14049	vRPA is out of maintenance mode R P A	
14050	RecoverPoint for VMs has dynamically resumed synchronous replication to one of the replicas of this group. The group is now initialized. During initialization, data is not transferred synchronously.	
14059	End of connectivity problems between all group volumes and vRPA A r off	
14060	End of connectivity problems between group journal volumes and vRPA A r off	
14061	End of connectivity problems between group replication volumes and vRPA A r off	
14062	End of connectivity problems between group replication volume and vRPA A r off	

Table 3. Normal events (continued)

ID	Summary	More Info
	e p e t	
14063	Connectivity problems with group Journal volume and vRPA were Fixed A r off	
14073	Connectivity between repository Volume and vRPA restored P A r off	
14075	Control issues between volume End splitter corrected P A Cluster r off	
14076	Control issues between group and Splitter corrected P A Cluster r off	
14078	End of splitter communication Error P A r off	The cluster control can communicate with the splitter again. To ensure consistency between the copy and production, initialization or full sweep follows.
14080	Fix of communications problem in Internal process P A r off	
14081	Internal process communication Problem has been fixed P A r off	
14090	Splitters fix R P A Cluster r off	
14091	ESX fix R P A Cluster r off	
14092	EM fix r o o poff	

Table 3. Normal events (continued)

ID	Summary	More Info
14093	EM fix r o o poff	
14094	EM fix r o o poff	
14095	Datastore fix R P A Cluster r off	
14096	Datastore fix R P A Cluster r off	
14097	Datastore fix R P A Cluster r off	
14098	Datastore fix R P A Cluster r off	
16001	Brief splitter error corrected. Problem has been corrected. P A f error	Splitter was down. Problem has been corrected.
16002	Brief error in links to all other clusters corrected P A f error	Error occurred in all links to all other clusters. Problem has been corrected.
16003	Brief error in link to an vRPA at other cluster(s) corrected P A f error	Error occurred in link to an vRPA at other cluster(s). Problem has been corrected.
16004	Brief error in data link to other cluster(s) corrected P A f error	Error in data link. All vRPAs at cluster are unable to transfer replicated data to other cluster(s). Problem has been corrected.

Table 3. Normal events (continued)

ID	Summary	More Info
16005	Error occurred in data link over WAN. vRPA is unable to transfer replicated data to other cluster. Problem has been corrected f error	
16006	vRPA was disconnected from the vRPA cluster. Connection has been restored A f error	
16007	All vRPAs were disconnected from the vRPA cluster. Problem has been corrected A f error	
16008	vRPA was down. Problem has been corrected P A f error	
16009	Link was in high load but has now returned to normal operation P A f error	<p>Due to heavy I/O activity, a link entered a high load state in order to prevent I/O failures on that link. The link has since exited the high load state, and has returned to normal operation.</p> <p>The following are among the possible causes of the high load:</p> <ul style="list-style-type: none">• vRPA is unable to handle the large volume of incoming data. vRPA performance statistics are available in the Release Notes that accompany each RecoverPoint for VMs product release.• Journal reaches capacity, because the rate of the distribution process consistently lags behind the rate of incoming data to the copy journal.• WAN is too slow to handle the data rate.• Compression for WAN optimization is too high, such that the vRPA is unable to handle the volume of incoming data.• Peak I/O activity in the SAN causes a temporary bottleneck in the environment. This can be considered normal behavior, and does not necessarily require user action. <p>If high load persists, consider:</p> <ul style="list-style-type: none">• Running the <code>balance_load</code> command and applying the load-balancing recommendation.• Manually modifying the preferred vRPA of each group.• Checking for scheduled activities in your environment.• Enabling fast first-time initialization. <p>For more information, see the <i>RecoverPoint for VMs Flex Administrator's Guide</i>.</p>
16010	Journal error occurred. Problem has been corrected -- full sweep required A f error	
16011	Briefly image access log or virtual buffer was full i	Problem has been corrected.

Table 3. Normal events (continued)

ID	Summary	More Info
	E rror	
16012	Briefly unable to enable virtual access to image P A f error	Problem has been corrected.
16013	Was unable to enable access to specified image. Problem has been corrected A f error	
16026	Brief vRPA and all storage error Corrected P A f error	Error occurred in link to an vRPA at other cluster(s). Problem has been corrected.
16027	Brief group(s) volumes Accessibility error corrected P A f error	All volumes in the consistency group (or groups) were not accessible. Problem has been corrected.
16031	Brief link error between vRPA(s) At cluster and all vRPAs at other cluster(s) corrected A f error	Error occurred in link between one or more vRPAs at cluster and all vRPAs at the other cluster(s). Problem has been corrected.
16032	Brief link error between all vRPAs At cluster and all vRPAs at other cluster(s) corrected A Cluster f error	Error occurred in link between all vRPAs at cluster and all vRPAs at other cluster(s). Problem has been corrected.
16033	Brief volume accessibility error Corrected P A f error	volume was not accessible. Problem has been corrected.
16034	Brief write consistency error Corrected P A f error	Writes to storage may have occurred without corresponding writes to vRPA. Problem has been corrected.
16037	Brief group(s) replication volumes Accessibility error corrected P A f error	All replication volumes in the consistency group (or groups) were not accessible. Problem has been corrected.
16038	Brief group(s) journal volumes Accessibility error corrected P A	All journal volumes in the consistency group (or groups) were not accessible. Problem has been corrected.

Table 3. Normal events (continued)

ID	Summary	More Info
	e p e t	
	e f error	
16039	System ran long resync R P A	
16040	System had detected bad sectors R volume. Problem has been Corrected A f error	
16041	There was a problem writing R volume. Problem has been Corrected A f error	
16042	Splitter write may have failed R while group was transferring Data). Problem has been Corrected f error	
16043	Splitter writes may have failed R P A f error	
16044	There was a problem with an IP link between vRPAs (in at least in One direction). Problem has been Corrected f error	
16045	There was a problem with all IP links between vRPAs. Problem Has been corrected A f error	
16046	There was a problem with an IP link between vRPAs. Problem has Been corrected A f error	
16047	There was a vRPA network Interface card (NIC) problem. Problem has been corrected A f error	
16048	Brief unsupported splitter version Error corrected P A f error	Splitter version was not supported. Problem has been corrected.

Table 3. Normal events (continued)

ID	Summary	More Info
16049	vRPA temporarily entered Maintenance mode but has since Exited	
16050	RecoverPoint for VMs had Dynamically resumed synchronous Replication to one of the replicas of this group but has since started replicating asynchronously again. Consequentially the group has been initialized twice. During initialization, data was not transferred synchronously. If this is not the expected behavior contact Customer Support	
16057	Brief reservation conflicts on Group volumes	
16059	Brief connectivity problem Between all group volumes and vRPA	
16060	Brief connectivity problem Between group journal volumes and vRPA	
16061	Brief connectivity problem Between group replication Volumes and vRPA	
16062	Brief connectivity problem Between group replication volume and vRPA	
16063	Brief connectivity problem Between group journal volume and vRPA	
16073	Brief connectivity problem Between repository volume and vRPA	
16075	Brief control issues between Volume and splitter corrected	

Table 3. Normal events (continued)

ID	Summary	More Info
	e p e t	
	E A cluster	
16076	Brief control issues between Group and splitter corrected P A Cluster f error	
16078	Brief splitter communication error R P A f error	A temporary splitter communication error occurred, but the problem has since been corrected. To ensure consistency between the copy and production, initialization or full sweep will follow.
16080	Eternal process communication problem P A f error	The cause of this problem may be: <ul style="list-style-type: none">● Failure of a RecoverPoint process.● Disconnection between internal RecoverPoint for VMs processes. To determine the cause of this problem, collect logs for the period when the event occurred, and contact Customer Support.
16081	Eternal process communication problem P A f error	The cause of this problem may be: <ul style="list-style-type: none">● Failure of a RecoverPoint process.● Disconnection between internal RecoverPoint for VMs processes. To determine the cause of this problem, collect logs for the period when the event occurred, and contact Customer Support.
16090	Splitters temporary disaster R P A Cluster f error	
16091	BSX transient disaster R P A Cluster f error	
16092	BM temporary disaster r b e ferror	
16093	BM temporary disaster r b e ferror	
16094	BM temporary disaster r b e ferror	
16095	Datastore temporary disaster R i	

Table 3. Normal events (continued)

ID	Summary	More Info
	E P E t	
	E A Cluster	
16096	Datastore temporary disaster R P A Cluster f error	
16097	Datastore temporary disaster R P A Cluster f error	
16098	Datastore temporary disaster R P A Cluster f error	
18001	Splitter problem, which was considered to have been corrected, has reoccurred A r	
18002	Error occurred in all links to all other clusters. Problem was temporarily corrected, but has since returned r	
18003	Error occurred in link to an vRPA at other cluster(s). Problem was temporarily corrected, but has since returned r	
18004	Error in data link. All vRPAs at cluster are unable to transfer replicated data to other cluster(s). Problem was temporarily corrected, but has since returned	Due to communication failure over the WAN link, data transfer between the clusters has stopped.
18005	vRPA is unable to transfer replicated data to other cluster. Data link was temporarily restored, but problem has returned	
18006	Connection of vRPA to the vRPA cluster was temporarily restored But problem has returned A r	
18007	All vRPAs were temporarily restored to the vRPA cluster but problem has returned	

Table 3. Normal events (continued)

ID	Summary	More Info
	e p e t	
	B A	
18008	vRPA was temporarily up, but problem has returned -- vRPA is down A r	
18009	Group temporarily exited high load but problem has returned P A r	
18010	Journal error was temporarily corrected, but problem has returned A r	
18011	Image access log or virtual buffer was temporarily no longer full and writing by hosts at copy was reenabled -- but problem has returned	
18013	Access to image was temporarily enabled but problem has returned P A r	
18026	Error occurred in link to an vRPA at other cluster(s). Problem was temporarily corrected, but has since returned r	
18027	Access to all volumes in the consistency group (or groups) was temporarily restored but problem has returned r	
18031	Error occurred in link between one or more vRPAs at cluster and all vRPAs at the other cluster(s). Problem was temporarily corrected, but has since returned	
18032	Error occurred in link between all vRPAs at cluster and all vRPAs at other cluster(s). Problem was temporarily corrected, but has since returned	
18033	Access to volume was temporarily restored but problem has returned	

Table 3. Normal events (continued)

ID	Summary e p e t	More Info
	B A	
18034	Replication consistency in writes to storage and writes to vRPAs was temporarily restored but problem may have returned r	
18037	Access to all replication volumes in the consistency group (or groups) has been temporarily restored, but problem has returned	
18038	Access to all journal volumes in the consistency group (or groups) was temporarily restored but problem has returned r	
18039	Wrong resync was completed but has now restarted P A i n g	
18040	User marked volume as OK but Bad sectors problem persists P A r	
18041	Problem writing to volume was corrected, but has recurred P A r	
18042	Synchronization had restored any failed writes in group, but problem has returned A r	
18043	Internal problem R P A r	
18044	Problem with IP link between vRPAs (in at least one direction) was corrected but problem has returned r	
18045	Problem with IP link between vRPAs (in at least one	

Table 3. Normal events (continued)

ID	Summary	More Info
	e p e t	
	Direction) was corrected but Problem has returned r	
18046	Problem with IP link between vRPAs was corrected, but Problem has returned Å r	
18047	vRPA network interface card (NIC) problem was corrected but Problem has returned Å r	
18049	vRPA temporarily exited Maintenance mode but has since re-entered Å	
18050	RecoverPoint for VMs had dynamically resumed synchronous replication to one of the replicas of this group but has since started replicating asynchronously again. Consequentially the group has been initialized twice. During initialization, data was not transferred synchronously. If this is not the expected behavior contact Customer Support	
18057	Reservation conflicts from group Replication volumes were briefly fixed Å Cluster	
18059	Connectivity problems between all Group volumes and vRPA were briefly corrected Å r	
18060	Connectivity problems between Group journal volumes and vRPA were briefly corrected Å r	
18061	Connectivity problems between Group user volumes and vRPA were briefly corrected Å r	
18062	Connectivity problems between Group user volume and vRPA were briefly corrected Å r	

Table 3. Normal events (continued)

ID	Summary	More Info
18063	Connectivity problems between Group journal volume and vRPA were briefly corrected. A r	
18073	Connectivity between repository volume and vRPA was temporarily restored but problem has returned. A r	
18075	Control issue between volume and Splitter was temporarily corrected. But problem has returned. A Cluster r	
18076	Control issue between group and Splitter was temporarily corrected. But problem has returned. A Cluster r	
18078	Splitter communication error Returned P A r	<p>The cluster control was temporarily able to communicate with the splitter, but since then, it has lost communication with the splitter again.</p> <p>Transfer will be paused to ensure consistency between the copy and production.</p> <p>When the system re-starts transfer, an initialization or full sweep will follow.</p> <p>NOTE: To ensure data integrity, it is highly recommended that any snapshots created in the past five minutes are not selected for failover.</p>
18080	External process communication problem P A r	<p>The cause of this problem may be:</p> <ul style="list-style-type: none">Failure of a RecoverPoint process.Disconnection between internal RecoverPoint for VMs processes. <p>To determine the cause of this problem, collect logs for the period when the event occurred, and contact Customer Support.</p>
18081	External process communication problem P A r	<p>The cause of this problem may be:</p> <ul style="list-style-type: none">Failure of a RecoverPoint process.Disconnection between internal RecoverPoint for VMs processes. <p>To determine the cause of this problem, collect logs for the period when the event occurred, and contact Customer Support.</p>
18090	Splitters temporary fix R P A Cluster r	
18091	ESX transient fix R P A Cluster r	

Table 3. Normal events (continued)

ID	Summary	More Info
18092	VM temporary fix r o o p	
18093	VM temporary fix r o o p	
18094	VM temporary fix r o o p	
18095	Datastore temporary fix R P A Cluster r	
18096	Datastore temporary fix R P A Cluster r	
18097	Datastore temporary fix R P A Cluster r	
18098	Datastore temporary fix R P A Cluster r	

Advanced events

The following table contains the **Advanced** scope events that the RecoverPoint for VMs system issues.

Table 4. Advanced events

ID	Topic	Level	Summary	More Info
2004	vRPA Cluster	Info	Repository volume created	
2006	vRPA Cluster	Info	Splitter(s) added	
2007	vRPA Cluster	Info	Splitter(s) removed	

Table 4. Advanced events (continued)

ID	Topic	Level	Summary	More Info
3003	vrPA	Warning	Stopping a system process	
3004	vrPA	Info	Starting a system process	
3009	vrPA	Warning	A system process stopped	
3031	vrPA	Warning	An internal process restarted	
3033	vrPA	Info	Negotiating transfer protocol	
3034	vrPA	Info	Negotiating transfer protocol	
3035	vrPA	Info	An internal process restarted	
4005	Group	Info	Negotiating transfer protocol	
4013	vrPA	Info	Negotiating transfer protocol	
4014	Group	Info	Negotiating transfer protocol	
4050	Group	Info	Enabling access to image	
4052	Group	Warning	Enabling access to image	
4072	Group	Info	Journal cleared	
4073	Group	Warning	Journal cleared	
4074	Group	Error	Journal cleared	
4075	Group	Info	Journal available	
4076	Group	Info	Adding volume(s)	
4077	Group	Info	Removing volume(s)	
4089	Group	Info	Delta marker moved to bitmap mode, next synchronization may not be optimal	
4092	Group	Info	Accessing image	Writing by hosts to the accessed image has been enabled.
4093	Group	Info	Undoing writes to image access log	
4094	Group	Info	Writes to image access log have been undone	
4100	vrPA Cluster	Info	Group created	Creating a new group modifies the load distribution across vRPAs. To balance the write load across all vRPAs run the <code>balance_load</code> CLI command in seven days and apply the recommendation.
4101	vrPA Cluster	Info	Group removed	
4102	Group	Info	Journal volume(s) removed	
4103	Group	Info	Journal volume(s) added	
4104	Group	Info	Group started accepting writes	
4105	Group	Info	Group stopped accepting writes	
5049	Splitter	Warning	Splitter write to vrPA failed	
10000	vrPA	Info	Analyzing changes in system	

Table 4. Advanced events (continued)

ID	Topic	Level	Summary	More Info
10001	vRPA	Info	System is stable	System changes have occurred. System is now stable.
10002	vRPA	Info	Issuing intermediate report	System activity has not stabilized and therefore, an intermediate report is being issued.
10101	vRPA	Error	Unrecognised system activity	Cause of system activity unclear. To obtain more information filter events using Detailed scope.
10102	vRPA	Info	Internal changes occurred	Cluster control recorded internal changes that do not impact system operation.
10201	vRPA	Info	Settings have changed	
10202	vRPA	Info	System changes at other cluster	System changes have occurred at the another cluster. For details of the system changes, refer to the event log at the other cluster(s).
10513	vRPA	Info	Internal changes occurred	Cluster control recorded internal changes that do not impact system operation.
12042	vRPA	Error	Splitter write may have failed during transfer	Splitter write may have failed (while group was transferring data). Synchronization is required.