

10 Tips on Getting the Most Out of Your Veeam ONE Deployment



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INTRODUCING:



Veeam ONE

Why advanced monitoring & reporting?

Veeam® ONE™ provides proactive management to prevent data loss, discover malicious activity and maintain compliance



Day one visibility



Alarm lifecycle



Platform analysis

How to deploy



How big is the environment you want to monitor?

All-in-one or custom?

Backup only vs backup & virtual monitoring?

How to deploy



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Backup only vs backup & virtual monitoring?

Veeam ONE Web Services

MSSQL Database

Veeam ONE Server

All-in-one installation

Veeam ONE
Web Services

Large-scale environments

MSSQL
Database

Veeam ONE
Client

Veeam ONE
Client

Veeam ONE
Server

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Day one visibility

Monitoring resource usage is important for every business

It allows you to redistribute/reclaim resources accordingly

Use infrastructure objects view to monitor all virtual machines

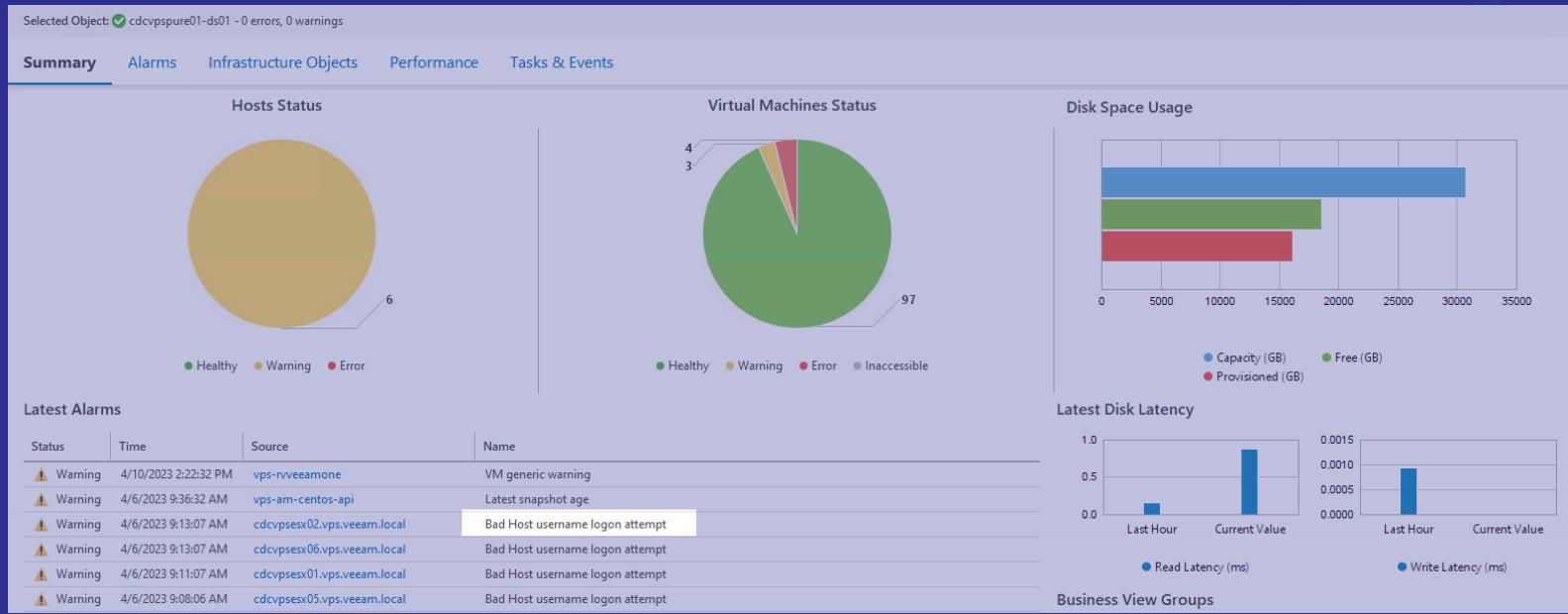
The screenshot shows the Veeam ONE interface with the 'Virtual Infrastructure' tab selected. In the top navigation bar, the 'Infrastructure Objects' tab is highlighted. Below it, there are tabs for 'Summary', 'Alarms', 'Performance', 'Top Objects', and 'Tasks & Events'. The main content area displays a table titled 'Virtual Machines' under the 'Hosts' tab. The table has columns for State, Name, Status, Host, Provisioned Space, Used Space, CPU Usage, and Memory Usage. The table lists several virtual machines, all of which are healthy. The 'Status' column shows green checkmarks for dc01, dc02, ipam, Linux-HR-001, rdslic01, and rdssh01. The 'Host' column shows their respective hosts: cdcvpsesx01.vps.veeam.local, cdcvpsesx05.vps.veeam.local, cdcvpsesx03.vps.veeam.local, cdcvpsesx05.vps.veeam.local, cdcvpsesx04.vps.veeam.local, and cdcvpsesx01.vps.veeam.local. The 'Provisioned Space' column shows values like 104.25 GB, 104.24 GB, 29.24 GB, 528.14 GB, 104.24 GB, and 224.26 GB. The 'Used Space' column shows values like 104.25 GB, 104.24 GB, 10.96 GB, 29.83 GB, 20.98 GB, and 99.02 GB. The 'CPU Usage' column shows values like 4.31%, 2.67%, 0.49%, 0.43%, 3.16%, and 3.68%. The 'Memory Usage' column shows values like 28.21%, 31.21%, 7.77%, 0.99%, 14.16%, and 6.32%. The left sidebar shows a tree view of the infrastructure objects, with 'Primary' selected. Other nodes include 'Virtual Infrastructure', 'vcsa.vps.veeam.local', 'VPS', and 'Resources'. A 'Virtual Lab - DataLab - VPS-RV' node is also listed.

State	Name	Status	Host	Provisioned Space	Used Space	CPU Usage	Memory Usage
Up	dc01	Healthy	cdcvpsesx01.vps.veeam.lo...	104.25 GB	104.25 GB	4.31%	28.21%
Up	dc02	Healthy	cdcvpsesx05.vps.veeam.lo...	104.24 GB	104.24 GB	2.67%	31.21%
Up	ipam	Healthy	cdcvpsesx03.vps.veeam.lo...	29.24 GB	10.96 GB	0.49%	7.77%
Up	Linux-HR-001	Healthy	cdcvpsesx05.vps.veeam.lo...	528.14 GB	29.83 GB	0.43%	0.99%
Up	rdslic01	Healthy	cdcvpsesx04.vps.veeam.lo...	104.24 GB	20.98 GB	3.16%	14.16%
Up	rdssh01	Healthy	cdcvpsesx01.vps.veeam.lo...	224.26 GB	99.02 GB	3.68%	6.32%

Day one visibility

Monitor datastores to help with capacity planning

Hover over bar graphs to get exact GB



Bonus tip

Bad host username login attempt alarm notifies you of failed user login.

How do you track who made this attempt?

The screenshot shows the Veeam ONE interface with the 'Alarms' tab selected. A modal window titled 'Alarm History' is open, displaying information about a 'Bad Host username logon attempt' alarm. The alarm details are as follows:

Status	Time	Description
Warning	5:14:46 PM	esxi-zion-00
Error	4/15/2023 9:01:05 AM	NGINX-008
Warning	4/10/2023 2:49:10 PM	esxi-zion-00
Warning	4/8/2023 11:45:44 AM	tenant001_N
Error	4/7/2023 9:04:50 PM	This object (
Error	4/6/2023 10:33:13 PM	NGINX-004
Warning	4/6/2023 10:32:12 PM	VCC-10
Error	4/6/2023 10:13:25 PM	NGINX-004

The last entry in the history is highlighted, showing the event details:

Fired by event: BadUsernameSessionEvent
Event description: Cannot login demoveeamon@badhost.com@192.168.1.250
Initiated by: demoveeamon@badhost.com

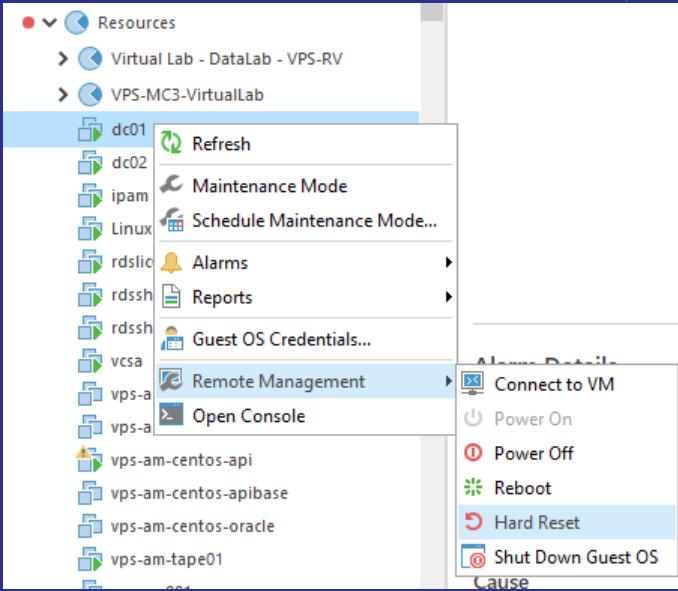
To the right of the history table, a 'Remediation' table is shown, listing actions taken:

Repeat Count	Remediation
1	Delete orphaned snap...
9	Delete orphaned snap...
3	
4	
2	
2	
5	
2	Delete orphaned snap...

At the bottom of the modal, there are buttons for 'Page' (with page number 1), 'Close', and a large green checkmark icon.

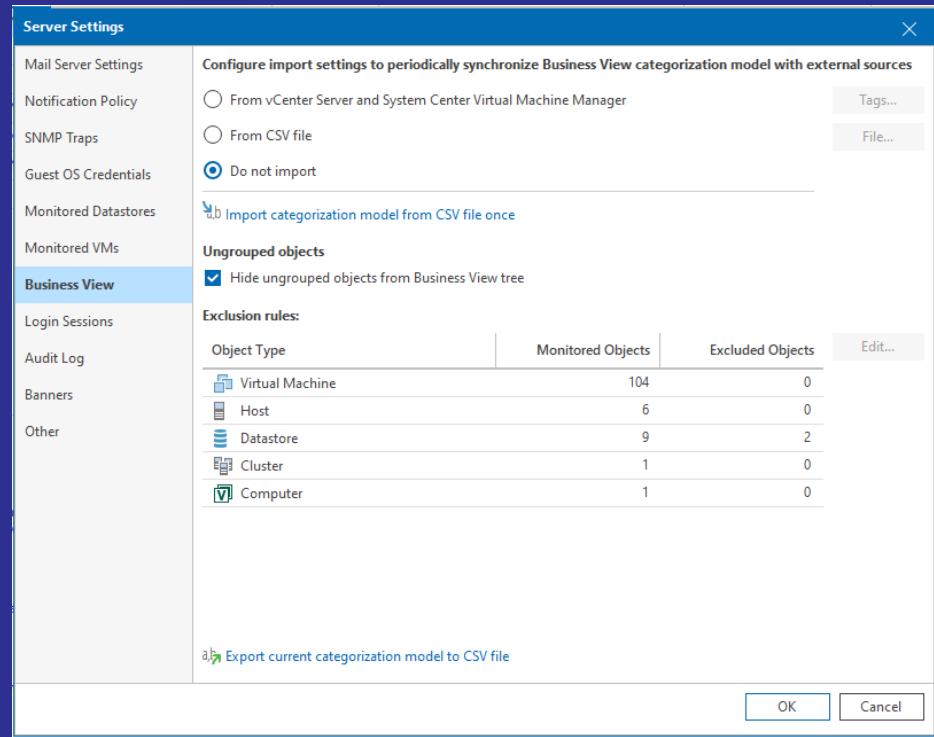
Remote management

- Access VMware Remote Console (VMRC) from Veeam ONE Client interface
- Reboot unresponsive VMs
- Isolate VM performance problems and perform management tasks
- View in-guest processes and services



Utilize business view categorization

- Import or export tags to/from vCenter
- Assign alarms to Business View groups
- Alarms scoped per Business View group
- Set group admin notifications
- Run reports scoped by Business View



Complete backup monitoring



Veeam Agents



Backup for AWS,
Azure, GC



Virtual machines



Veeam Backup for
Microsoft 365



NAS

Alarm lifecycle management

Collects data and checks against alarm configuration

Predefined or build-your-own



Working with alarms

- Suppress alarms during resource-consuming operations
- Disable alarms and only enable ones needed
- Alarm modelling

Type	Name	Assigned to	State	<input type="checkbox"/> Exclude
Host	Active filter drivers detected	This object (Virtual Infrastructure)	Enabled	<input type="checkbox"/>
Host	Admission control disabled	This object (Virtual Infrastructure)	Enabled	<input type="checkbox"/>
Host	Admission control enabled	This object (Virtual Infrastructure)	Enabled	<input type="checkbox"/>
Host	All hosts in cluster isolated	This object (Virtual Infrastructure)	Enabled	<input type="checkbox"/>
Host	Audit log failure	This object (Virtual Infrastructure)	Enabled	<input type="checkbox"/>
Host	Audit log free space	This object (Virtual Infrastructure)	Enabled	<input type="checkbox"/>
Host	Background disk merge failed	This object (Virtual Infrastructure)	Enabled	<input type="checkbox"/>
Host	Background disk merge interruption	This object (Virtual Infrastructure)	Enabled	<input type="checkbox"/>
Host	Bad Host username logon attempt	This object (Virtual Infrastructure)	Enabled	<input type="checkbox"/>
Host	Bad Hyper-V username logon attempt	This object (Virtual Infrastructure)	Enabled	<input type="checkbox"/>
Host	Bad vCenter Server username logon attempt	This object (Virtual Infrastructure)	Enabled	<input type="checkbox"/>
Host	Checkpoint configuration is not accessible	This object (Virtual Infrastructure)	Enabled	<input type="checkbox"/>
Host	Cluster communication session failed	This object (Virtual Infrastructure)	Enabled	<input type="checkbox"/>
Host	Cluster configuration data is missing or corrupt	This object (Virtual Infrastructure)	Enabled	<input type="checkbox"/>
Host	Cluster configuration database cannot be unload...	This object (Virtual Infrastructure)	Enabled	<input type="checkbox"/>
Host	Cluster database could not be loaded	This object (Virtual Infrastructure)	Enabled	<input type="checkbox"/>
Host	Cluster host node network connectivity error	This object (Virtual Infrastructure)	Enabled	<input type="checkbox"/>
Host	Cluster hosts update version mismatch	This object (Virtual Infrastructure)	Enabled	<input type="checkbox"/>
Host	Cluster memory overcommitment	This object (Virtual Infrastructure)	Enabled	<input type="checkbox"/>

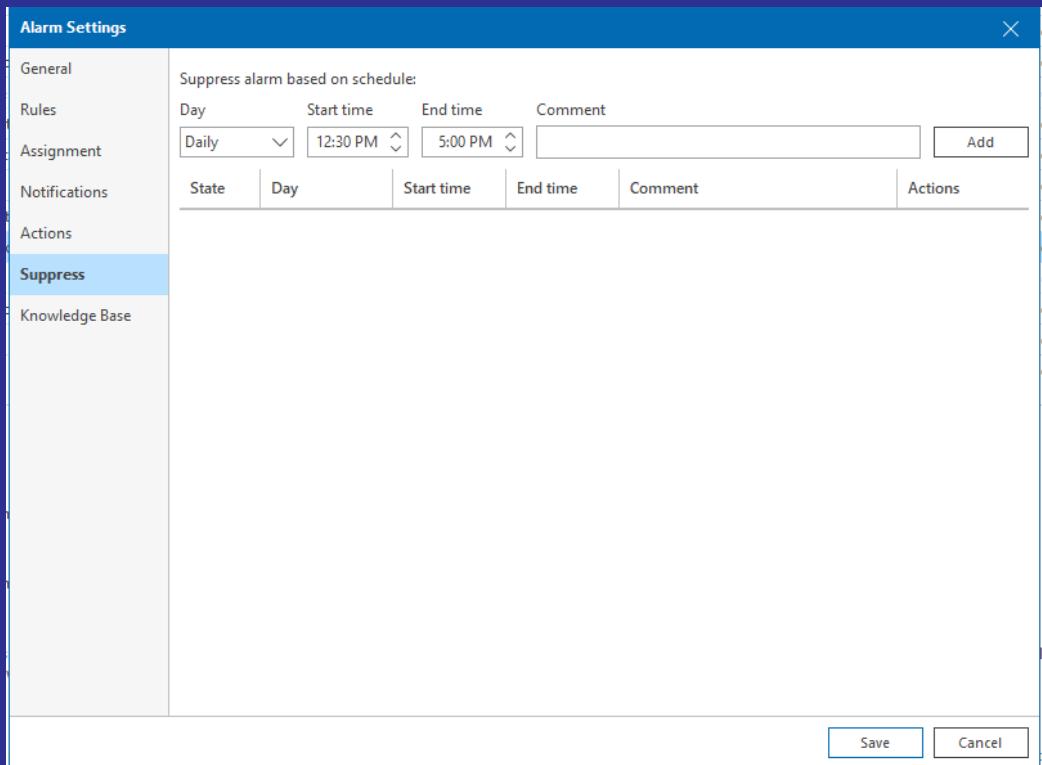
Modifying alarms

Why?

Benchmark is too noisy — adjust to fit your business applications!

Rework rules of alarm to fit your desired counters

Set up notifications



Setting actions

Start setting remediation actions for alarms

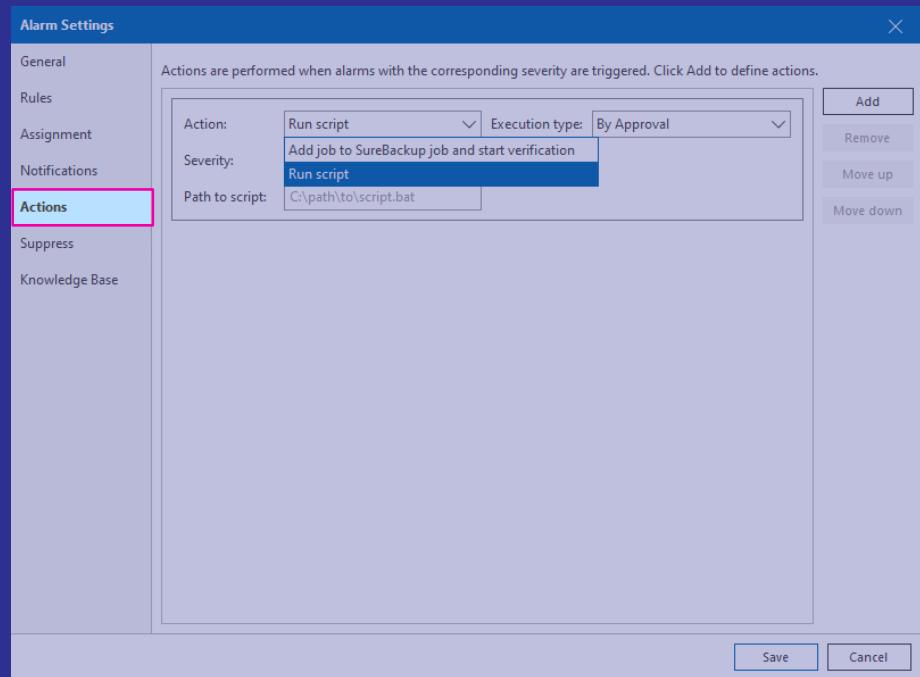
Become more operationally efficient

Complete more tasks with fewer resources

Set action to resolve an alarm in real-time

- Manual or automatic.

Predefined action or custom script

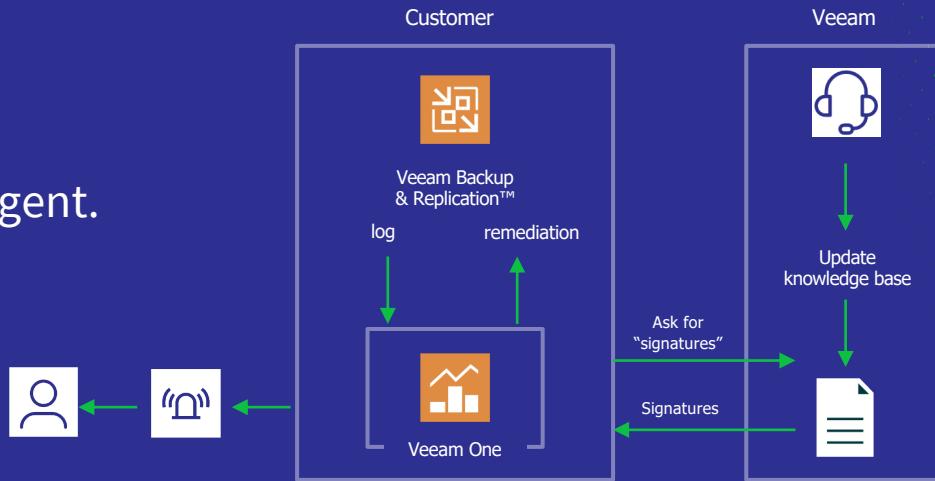


Veeam intelligent diagnostics

Automatically detect known issues in configuration and performance

Components:

- Signatures.
- Veeam ONE Agent.



Data platform analysis



Reports



Dashboards



Job calendar

Dashboards

At a-glance view of environment

Create your own dashboard views based on infrastructure, VMware Cloud Director, Business View objects or VM folders

Schedule delivery to your inbox

Direct link or public access

The screenshot shows the Veeam Backup and Replication interface. At the top, there's a header with a back arrow, the product name, and user icons. Below the header, a navigation bar includes 'New Widget', 'Refresh Dashboard', 'Edit Layout', 'Schedule', and 'Share'. The main area displays a dashboard titled 'Backup Infrastructure Inventory' with a subtitle 'Updated a few seconds ago'. It features a table with two rows: 'Backup Servers (2)' and 'Backup Proxies (9)', both marked as 'Healthy'. Below this, a modal window titled 'Share Dashboard' is open. It contains settings for 'Direct link access' (off) and a generated URL: <https://vps-rveeamone.vps.veeam.local:1239/#/dashboards/1?secret=...>. It also has 'Copy Link' and 'Reset Link' buttons. The 'Public access' setting is turned 'On', with a note explaining it allows VMware vSphere users with permissions on virtual infrastructure objects to view dashboards containing data on these objects. A 'Close' button is at the bottom right of the modal.

Dive deeper into heatmaps

The screenshot shows a Veeam ONE dashboard with three main heatmap components:

- Repository Free Space**: Updated 3 minutes ago. This heatmap shows free space across multiple repositories. It includes details for two specific repositories:
 - Scale-out Backup Repository (vps-rvbrprod): Capacity 12.7 TB, Free 10.2 TB.
 - NAS Share - NFS (vps-rvrtm): Capacity 12.7 TB, Free 6.4 TB.
- Proxy Usage**: Updated a few seconds ago. This heatmap displays usage metrics for a VMware Backup Proxy. Key details:
 - Backup server: vps-rvbrprod
 - CPU count: 2
 - Concurrent tasks limit: 1
 - Max concurrent tasks processed: 1
 - CPU usage: 40%
 - Memory usage: 88%
- Repository Usage**: Updated 3 minutes ago. This heatmap shows repository usage over time (11 Apr to 17). It lists various repositories and their average usage:
 - All Repositories Average
 - Default Backup Repository (vps-rvbrprod)
 - Scale-out Backup Repository (vps-rvbrprod)
 - Scale-out Backup Repository - Double Play Immutability (vps-rvrtm)
 - Default Backup Repository (vps-rvrtm)
 - Linux - Veeam Hardened Repository (vps-rvrtm)
 - NAS Share - NFS (vps-rvrtm)
 - Object Storage - Standard (vps-rvrtm)
 - Object Storage - Standard - Microsoft Azure 2 (vps-rvrtm)
 - Object Storage - Immutable - Microsoft Azure (vps-rvrtm)
 - Object Storage - Standard - Wasabi (vps-rvrtm)
 - Object Storage - Immutable - AWS 2 (vps-rvrtm)
 - Object Storage - Standard - Microsoft Azure (vps-rvrtm)

Reporting tools

Quick search for the one you need

Category-oriented search tool

The screenshot shows the Veeam Reporting interface. At the top, there is a navigation bar with tabs: Dashboards, Reports (which is selected), Scheduling, Jobs Calendar, Deployment Projects, and REST API. Below the navigation bar, there are two main sections: "Report Templates" and "Saved Reports".

Report Templates: This section contains a list of report templates categorized under "All Templates". The categories include:

- Custom Reports
- Infrastructure Chargeback
- Offline Reports
- Veeam Backup Agents
- Veeam Backup Assessment
- Veeam Backup Billing
- Veeam Backup Capacity Planning
- Veeam Backup for Microsoft 365
- Veeam Backup Monitoring
- Veeam Backup Overview
- Veeam Backup Tape Reports
- Veeam Enterprise Application Plug-ins
- vSphere Capacity Planning
- vSphere Configuration Tracking
- vSphere Infrastructure Assessment
- vSphere Monitoring
- vSphere Optimization
- vSphere Overview

Saved Reports: This section contains a list of saved reports. It includes a search bar for "Name" and a dropdown menu for "All Reports". The reports listed are:

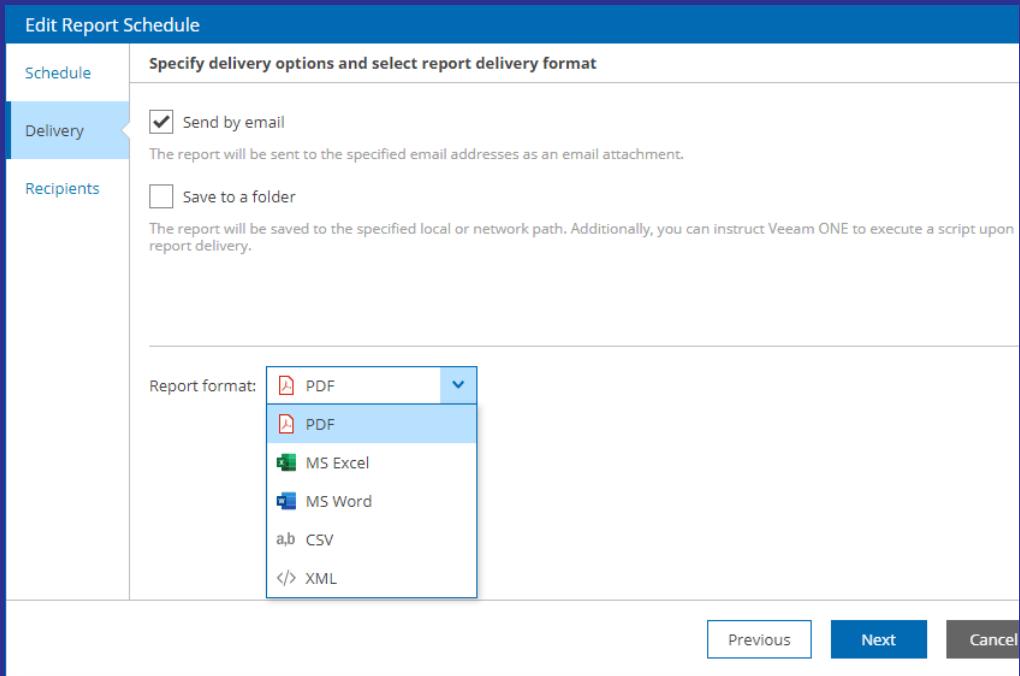
- Active Snapshots**: This report lists all VMs with their active snapshots.
- Agent Backup Job and Policy History**: This report provides historical information for Veeam Agent backup jobs.
- Alarms Current State Overview**: This report shows all currently unresolved alarms.
- Alarms Overview**: This report provides an overview of your virtual environment's alarm status.
- Backup Alarms Overview**: This report provides an overview of your data protection alarms.
- Backup Billing**: This report provides chargeback capabilities for the backup infrastructure.
- Backup Copy Job**: This report provides information on backup copy jobs including data transfer efficiency.
- Backup Infrastructure Assessment**: This report helps you to assess your backup configuration and identify potential issues.

Reporting tools

Quick search for the one you need

Category-oriented search tool

Save reports and schedule them
to be delivered



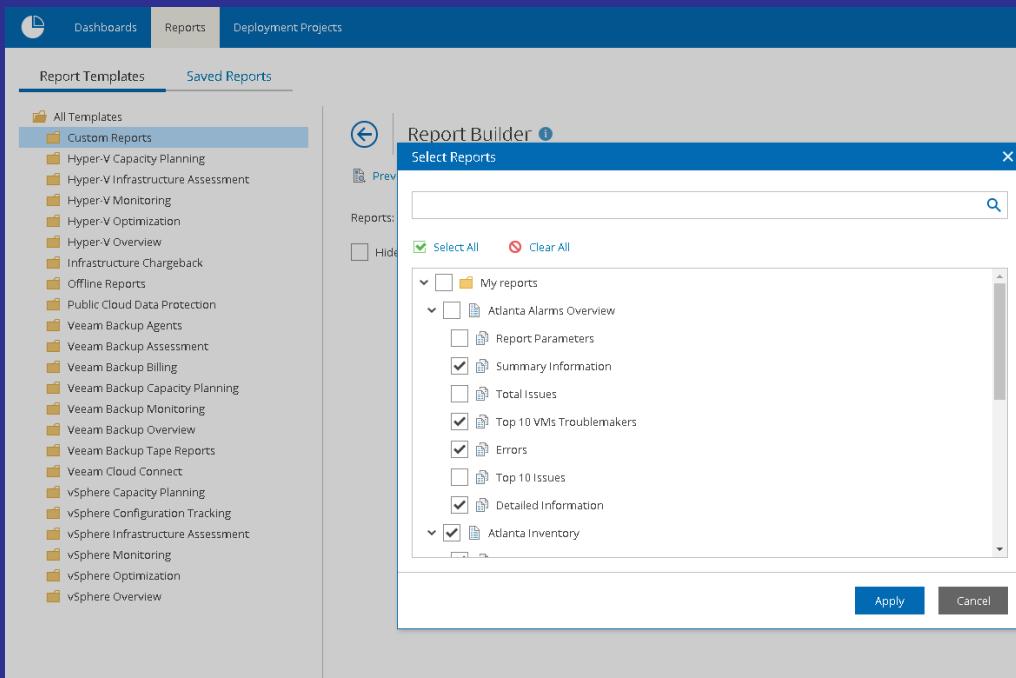
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Quick search for the one you need

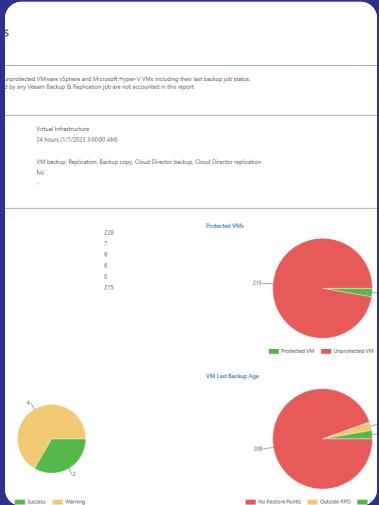
Category-oriented search tool

Save reports and schedule them
to be delivered

Build your own reports



Our favorite reports



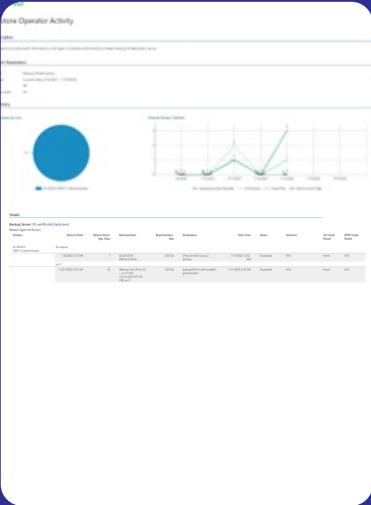
Protected VMs

Powerful report that helps us visualize our data protection compliance



Immutable workloads

Global data resilience
overview, received daily
into our mailbox



Restore operator activity

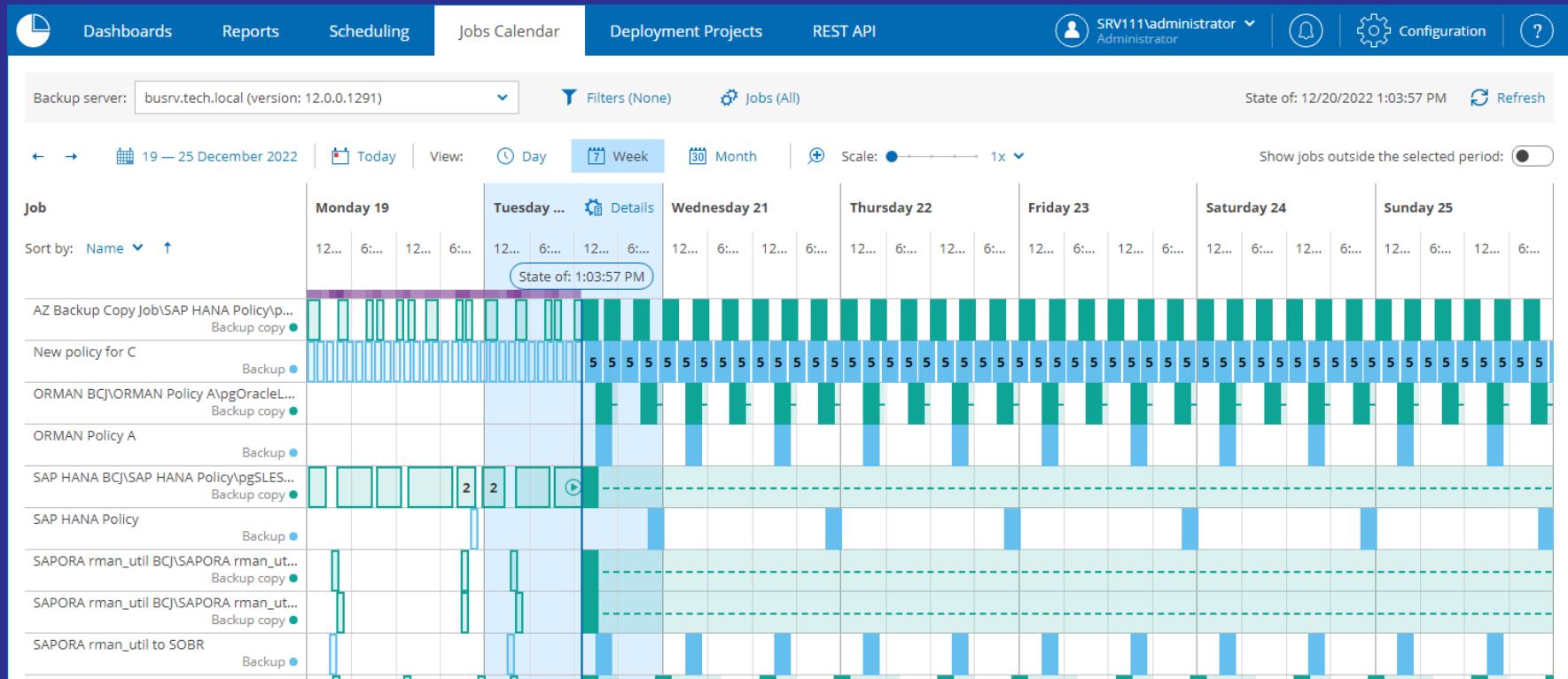
Monitor all restore activities by backup administrators



Job configuration change tracking

Review user activity and track job modifications

Have you seen the job calendar?



Take advantage of the REST APIs



**Veeam ONE v12
REST API**

Virtual infrastructure

- Virtual machines configuration.
- Hosts (CPU/RAM/IPMI sensors, etc.).
- Storage (capacity, Path, VMs, etc.).
- Organizations (VMware cloud director).
- File servers (Hyper-V).

Protected data

- Cloud VMs.
- Virtual machines.
- Veeam Agents.
- File shares.
- Enterprise applications.
- Microsoft 365.

Veeam infrastructure

- Veeam Backup & Replication™.
- Veeam Backup for Microsoft 365.
- Cloud policies status.
- Alarms triggered.
- Licensing.
- Cloud Connect.

Take advantage of the REST APIs

The screenshot shows the Veeam Backup and Replication interface with the REST API tab selected. The dashboard includes sections for Backup Infrastructure Inventory and Protected VMs Overview, both updated recently. The REST API panel shows a curl command, request URL, server response code (200), response body (containing JSON data for a backup job), and response headers.

Curl

```
curl -X 'GET' \
  'https://veeamone.jorgedelacruz.es:1239/api/v2.1/protectedData/virtualMachines?offset=0&limit=100' \
  -H 'Accept: application/json' \
  -H 'Authorization: Bearer eyJhbGciOiIuIiU1N1tsImpzC16InRwv2UiidHuijois1dIn0..eyJqdGkiOiJhNzIm2Iw0jIuWjk0NTE1OT1mZj1j001wZGmNZDjZCTsInVuXF1ZV9uYw11joiVkfQUMPtKvXEfkNuaxXNcmF0b31lCjVc2y5M0101y...' --compressed
```

Request URL

```
https://veeamone.jorgedelacruz.es:1239/api/v2.1/protectedData/virtualMachines?offset=0&limit=100
```

Server response

Code 200

Details

Response body

```
[{"lastProtectedDate": "2022-03-30T21:02:00Z", "jobId": "43466857-4600-41b2-a52b-4a7b823f273"}, {""vmId": "191", "vmIdName": "1a3b08c8-85d0-4dd8-8c23-18eb81ae71d", "vmIdInHypervisor": "vm-130709", "backupServerId": 11, "name": "NGINX-001", "platform": "Vsphere", "parentHostName": "vcsa_jorgedelacruz.es", "ipAddresses": ["192.168.1.21", "fe80::250:56ff:fe0:2e8b"], "useSourceSizeBytes": 5003573504, "provisionedSourceSizeBytes": 21474836480, "lastProtectedDate": "2023-02-09T21:01:05Z", "jobId": "4dd4f62d-c44a-4e66-95a1-d6c95dbbfecb"}, {""vmId": "99", "vmIdName": "6a1ac376-7a4b-485b-8d0f-20b06f7c5146", "vmIdInHypervisor": "vm-130709", "backupServerId": 11, "name": "VSphere", "platform": "Vsphere", "parentHostName": "vcsa_jorgedelacruz.es", "ipAddresses": [
```

Download

Response headers

```
api-deprecated-versions: 2.0
api-supported-versions: 2.1
content-type: application/json
content-security-policy: default-src 'self'; script-src 'unsafe-inline' 'self'; style-src 'unsafe-inline' 'self'; object-src 'none'; base-uri 'none'; img-src 'self' data; font-src 'self' data; font-src 'self' data; frame-ancestors 'self'; script-src 'unsafe-inline' 'self'; style-src 'unsafe-inline' 'self'; object-src 'none'; base-uri 'none'; img-src 'self' data; font-src 'self' data; frame-ancestors 'self';
content-type: application/json; charset=utf-8
date: Fri, 14 Apr 2023 22:04:01 GMT
server: Veeam
strict-transport-security: max-age=31536000; includeSubDomains,max-age=31536000; includeSubDomains
x-content-type-options: nosniff,nosniff
x-frame-options: SAMEORIGIN,SAMEORIGIN
x-powered-by: Veeam
x-xss-protection: 1; mode:block,1; mode:block
```

Additional ways to use Veeam ONE

Veeam ONE v12 Alarms to Syslog
How to leverage the powerful Veeam ONE Alarm Engine (340+ templates) to send real-time notifications to Syslog (Job Results, VMs state, and more)



12 Grafana + 15 influxdata + 2 veeAM

LOOKING FOR THE PERFECT DASHBOARD
INFLUXDB, TELEGRAF, AND GRAFANA - PART XLII
(VEEAM ONE V12 AUDIT EVENTS)

Times 02/10/2023, 12:18:30 PM User domain\testuser failed to log in. Login failed. Infor... 192.168.1.250 veeamone.jorgedelacruz.es

02/09/2023, 02:23:00 PM User domain\testic failed to log in. Login failed. Infor... 192.168.1.250 veeamone.jorgedelacruz.es

01/30/2023, 01:49:00 PM User \vialymadness failed to log in. Login failed. Infor... 192.168.1.250 veeamone.jorgedelacruz.es

Veeam ONE + Microsoft Teams

Veeam: Using Microsoft Teams for our Veeam ONE notifications when alerts are being generated

www.jorgedelacruz.UK

Need more of that ONE thing?

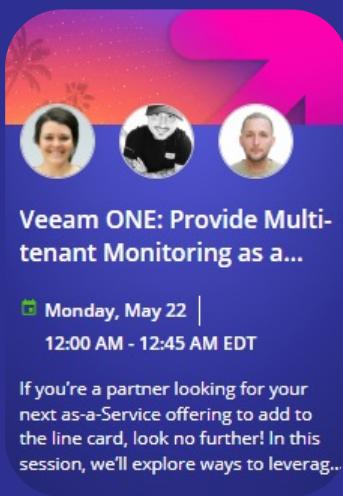
Check out these sessions!



Build Your Own Backup Compliance Dashboards

Wednesday, May 31 | 12:00 AM - 12:45 AM EDT

Do you ever have to pull data for auditors and compliance reporting? Do you need to separate the data manually into business groups? Do...



Veeam ONE: Provide Multi-tenant Monitoring as a Service

Monday, May 22 | 12:00 AM - 12:45 AM EDT

If you're a partner looking for your next as-a-Service offering to add to the line card, look no further! In this session, we'll explore ways to leverag...



Say Goodbye to Ransomware Worries,...

Tuesday, May 23 | 6:00 AM - 6:45 AM EDT

Immutability continues to be a hot topic especially when it comes to ransomware and security, but did you know Veeam partners with 30+...



Thank you!

veeAMON2023