

Veritas NetBackup CloudPoint™ Quick Start Guide for Google Cloud Platform

What is Veritas NetBackup CloudPoint?

Veritas CloudPoint is now integrated into NetBackup 8.3 —meet NetBackup CloudPoint— a simple snapshot-based cloud backup and recovery feature for today's scale-out workloads and multicloud environments.

Highlights:

- NetBackup integration: Natively integrates with NetBackup for centralized visibility, reporting, Role Based Access Control (RBAC) and compliance across physical, virtual, and cloud workloads.
- Backup, Recovery and Replication: Automate backups using policies to meet enterprise SLAs. Replicate across regions and accounts for DR readiness. Allow Rollback, Original and Alternate location restores.
- Automation and orchestration: Disk, File and Database level recovery, application consistent snapshot and restores for Oracle, SQL, SQL AG and MongoDB. Management of encrypted volumes with provider-managed encryption for AWS, Azure and GCP.

Licensing note: All customers with existing NetBackup 8.3 licenses benefit from the full capabilities of NetBackup CloudPoint at no additional cost.

KEY FEATURES

- ✦ Snapshot-based data protection
- ✦ Automated scheduling and creation
- ✦ Multi-cloud visibility and orchestration
- ✦ Auto-deletion of expired snapshots
- ✦ Fast RPO and RTO
- ✦ Deep integration with storage arrays, and public and private cloud platforms
- ✦ Modular architecture for rapid workload proliferation
- ✦ Intuitive interface and reporting
- ✦ RESTful APIs for storage management and administration

Launch Veritas NetBackup CloudPoint

1 Enter your installation parameters

1. At Google Cloud Platform (GCP), navigate to the Veritas NetBackup CloudPoint offer page and press **Launch** button. The screen will take you to deployment template page.
2. Before completing the form ensure that Secret Manager API are enabled for the GCP project. The Compute Engine default service account has "Editor" and "Secret Manager Secret Accessor" roles attached. Then fill the **New Veritas NetBackup CloudPoint deployment** page with below fields.

Category	Parameter Name	Description including defaults
General	Deployment name	Specify a name for NetBackup CloudPoint deployment. This will also be the name of the NetBackup CloudPoint Host VM. Default - netbackup-cloudpoint-1
	OS Image	Select RHEL 7 or Ubuntu 18.04 Operating system for the NetBackup CloudPoint Host VM. Default - Red Hat Enterprise Linux 7 x86_64
	Machine Type	The number of CPU is defaulted to 2 vCPUs. This can be higher depending on the load.
Boot Disk	Boot Disk Type	Boot disk can be Standard Persistent Disk or SSD Persistent Disk. Default - Standard Persistent Disk
	Boot Disk Size in GB	Default - 64 GB
Data Disk Configuration	Data Disk Size in GB	Default - 50 GB
Category	Parameter Name	Description including defaults
Location	Zone	The zone where NetBackup CloudPoint needs to be launched. Default - us-west4-c
	Network Interface	Select the VPC network when NetBackup CloudPoint Host VM will be launched
	Subnetwork	Select the subnet
	External IP	If NetBackup CloudPoint VM needs a public access, then specify. This may lead to security issues. It is highly encouraged to check with the security team. Default is None
	Inbound CIDR	Specify which IP range can access NetBackup CloudPoint VM. If there is more than one IP/CIDR, separate them with comma. Default - NetBackup CloudPoint requires inbound HTTPS (port 443) and RabbitMQ (port 5671) to be open. If the input is not provided, NetBackup CloudPoint VM can only be accessed within the VM subnet.
NetBackup CloudPoint Configuration	User Name	Specify a name for the CloudPoint administrator user account that is configured on the instance.
	Hostname	Specify the Fully Qualified Host Name (FQHN) that you want to use to connect to the CloudPoint instance. The specified host name is used for configuring CloudPoint. If you want to connect to the host using different names, then add all the names here to enable CloudPoint access using those names. The specified names are used to generate a TLS server certificate for the CloudPoint host.

2 Verify installation

1. Once all the parameters are entered, click deploy.
2. The NBU CloudPoint deployment can be taken up to 8 minutes to finish.
3. If there is any issue, remotely log to the NBU CloudPoint VM and check the log `/cloudpoint/logs/cloudpoint-gcp-deployment.log`

The screenshot shows the 'New Veritas NetBackup CloudPoint™ deployment' page in the Google Cloud Platform console. The form is pre-filled with the following values:

- Deployment name: netbackup-cloudpoint
- OS Image: Red Hat Enterprise Linux 7 x86_64
- Machine Type: 2 vCPUs, 7.5 GB memory
- Boot Disk: Standard Persistent Disk, 64 GB
- Data Disk Configuration: 50 GB
- Location: us-central1-c
- Networking: default
- External IP: None
- Inbound CIDR: (empty)
- NetBackup CloudPoint Configuration:
 - User Name for NetBackup CloudPoint: (empty)
 - Hostnames of NetBackup CloudPoint: (empty)

At the bottom, there is a checkbox for 'Confirm that Secret Manager API is enabled' and a 'Deploy' button.

4. On successfully deployment, VM information, CloudPoint username, and temporary password are displayed on the deployed page. On right pane displays an example of a screenshot

5. Delete your deployment via GCP console if it's not needed. All resources, which are created by the deployment, will be deleted when the deployment is deleted.

Note: if you want to remotely access the instance on which CloudPoint is running, press 'SSH' button.

Veritas NetBackup CloudPoint is now installed. The next step is to launch the CloudPoint user interface in your browser and complete the final configuration steps. Continue with the next page.

The screenshot displays the Google Cloud Platform console interface. The left pane shows the resource hierarchy for the deployment 'netbackup-cloudpoint-1'. The right pane shows the details for the 'cloudpoint' resource, including the site address, instance zone, machine type, operating system, and user name. It also provides links for 'Get started with Veritas NetBackup CloudPoint', 'Documentation', and 'Support'.

netbackup-cloudpoint-1 has been deployed

- Overview - netbackup-cloudpoint-1
 - cloudpoint cloudpoint.jinja
 - cloudpoint-vm-tripf vm_instance.py
 - netbackup-cloudpoint-1-vm vm_instance
 - netbackup-cloudpoint-1-tcp-443 firewall
 - netbackup-cloudpoint-1-tcp-5671 firewall
 - netbackup-cloudpoint-1-data disk
 - software-status software_status.py
 - netbackup-cloudpoint-1-config config
 - netbackup-cloudpoint-1-software config water

Veritas NetBackup CloudPoint™
Solution provided by Veritas Technologies LLC

Site address <https://35.226.83.56.443/>

Instance [netbackup-cloudpoint-1-vm](#)

Instance zone us-central1-f

Instance machine type n1-standard2

Operating system Red Hat Enterprise Linux 7 x86_64

NetBackup CloudPoint user name admin

NetBackup CloudPoint temporary password [Get CloudPoint password](#)

Get started with Veritas NetBackup CloudPoint™

[VISIT THE SITE](#) [SSH](#)

Documentation

- [Quick Start Guide](#)
- [NetBackup Cloud Solution Brief](#)

All NetBackup CloudPoint documentation including the Administrator's Guide.

Support

Email, online, and phone support included for paid licenses. Community support forum available for all licenses. [Veritas Support](#)

Note: If you select a data disk size larger than 50 GB, Google Launcher displays a warning message asking you to manually resize the partition. You can safely ignore this message.

[Go to Veritas Technologies LLC support](#)

Template properties

[SHOW MORE](#)

Configure CloudPoint with NetBackup

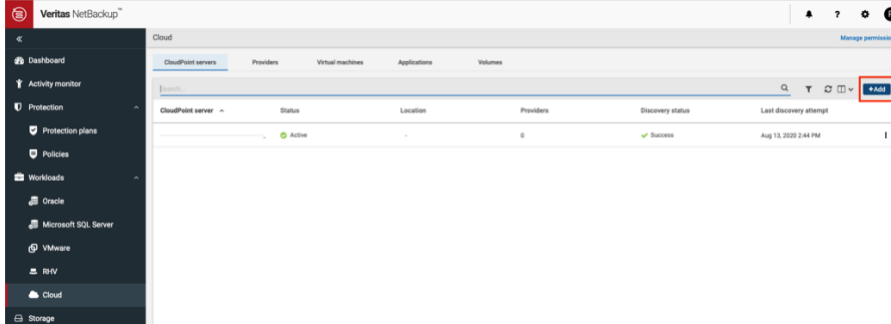
1 Add CloudPoint to Veritas NetBackup

1. Open a browser and point it to the host where Veritas NetBackup is installed.

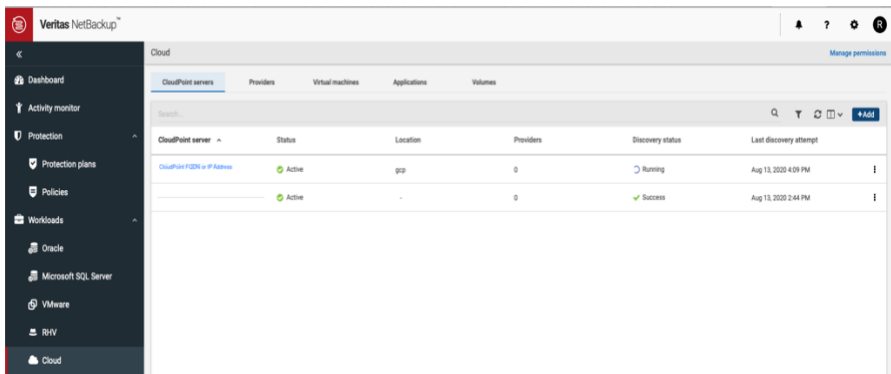
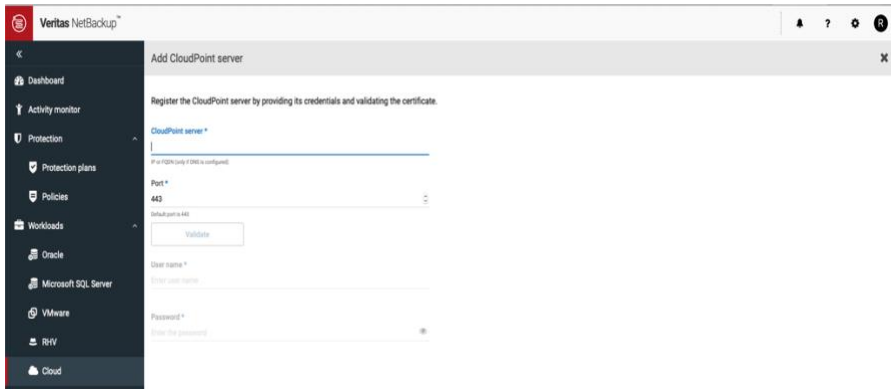
<https://<netbackup-master-fqdn>/webui>

Here, **netbackup-master-fqdn** is the Fully Qualified Domain Name of the host.

1. Go to Cloud section under Workloads tab
And click "+Add" to add a new CloudPoint server.



2. Enter CloudPoint FQDN from deployment manager at GCP or IP address of CloudPoint VM at GCP and validate.
3. Once Validation is complete, add CloudPoint username given at the time of GCP deployment and password from Google secrets manager. Then press "Add" button at the right bottom of the screen.



2 Gather GCP plug-in configuration information

To use CloudPoint for managing assets in Google Cloud Platform (GCP), you will need the following:

- A service account in GCP
- The credentials file that contains the key-value pairs of service account keys that are used to authenticate to Google.

The contents of this file are required while configuring the CloudPoint plug-in for GCP.

Refer to the following Google documentation for details:

<https://cloud.google.com/compute/docs/access/service-accounts>

<https://cloud.google.com/iam/docs/understandingservice-accounts>

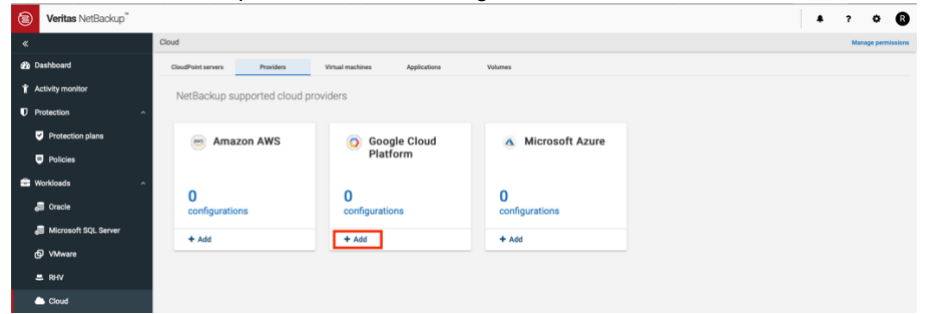
<https://cloud.google.com/iam/docs/creatingmanaging-service-accounts>

Before you configure CloudPoint, have the following information ready:

CloudPoint term	GCP term/description
Project ID	The ID of the project from which the resources are managed.
Client ID	The Client ID that is used for operations.
Client Email	The email address of the client Id.
Private Key ID	The ID of the private key.
Private Key	The private key. You must enter this key without quotes (neither single quotes nor double quotes). Do not enter any spaces or return characters at the beginning or end of the key.
Zones	The list of zones in which the plug-in operates.

3 Add Service Provider

1. We can add configurations for any of the cloud providers by clicking "+Add" below the Cloud provider to add a configuration for that cloud.



2. At this stage, we need to fill details from Section 2 – Configure CloudPoint with NetBackup after selecting "CloudPoint server" from the drop-down list. Press "Save".

Add configuration - Google Cloud Platform

Configuration name *

Enter configuration name

CloudPoint server *

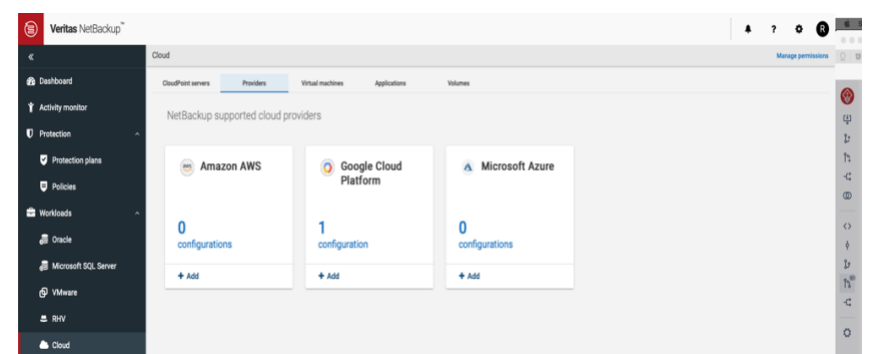
Project ID *

Client Email *

Private Key *

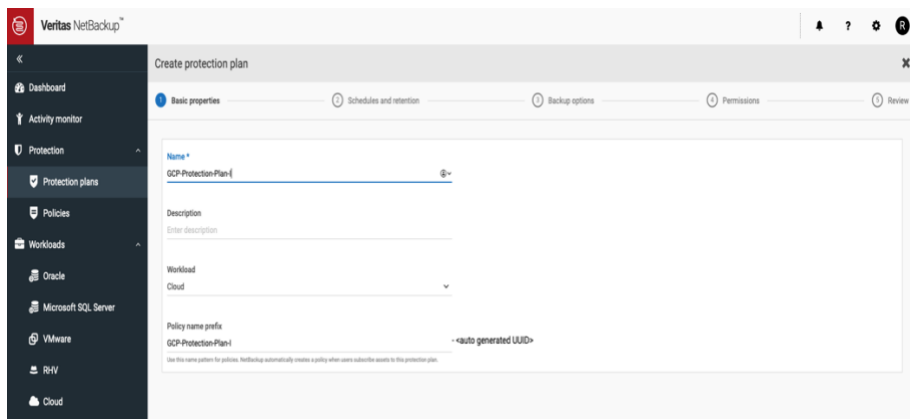
Zones *

3. Google Cloud Platform provider is now successfully added and configured at Veritas NetBackup.

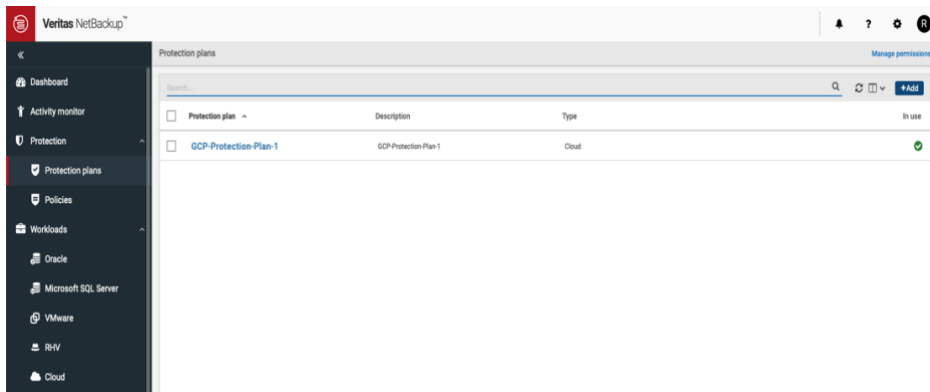


1 Create a protection policy

1. At Veritas NetBackup WebUI, navigate to Protection plan section under Protections tab and click "+Add" to add a new protection plan



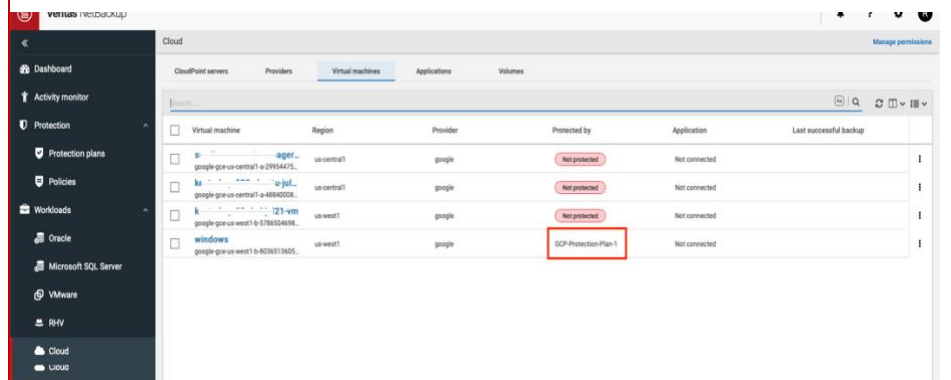
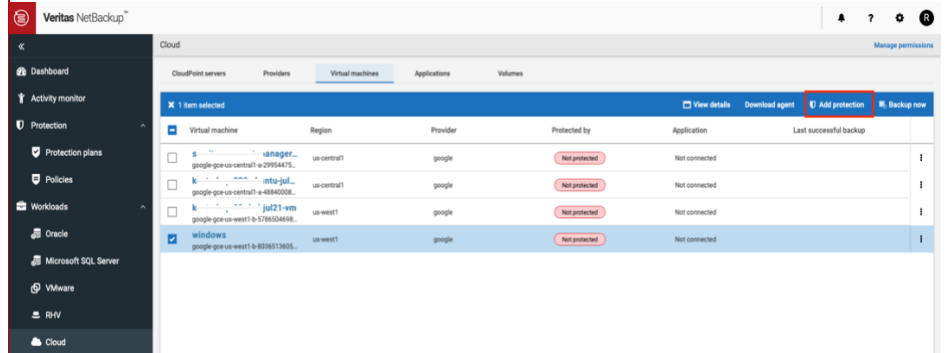
2. Set the properties for the Protection Plan and press "Save" button. A new Protection Plan is now created.



2 Protect Assets

Once the Protection Plan is created you may select any asset from the virtual Machine tab of cloud section to protect a VM and add the Protection Plan for scheduled backups or do a "Backup now" and select the protection plan using which you want to back up the VM .

Similarly, you may protect any volume/application.



Troubleshooting Veritas NetBackup CloudPoint Deployment

1. Symptom:

CloudPoint deployment logs (/cloudpoint/logs/cloudpoint-gcp-deployment.log) within CloudPoint VM displays below error:

[Tue Jul 21 05:05:36 UTC 2020] ERROR: Accessing CloudPoint password from the Secret Manager "netbackup-cloudpoint-1" is failed.

Or

Deployment manager reports below error:

```
{"ResourceType":"runtimeconfig.v1beta1.waiter","ResourceErrorCode":"504","ResourceErrorMessage":"Timeout expired."}
```

Steps to resolve:

Secret key with similar name to deployment name may exist. GCP logging console may show that Secrets Manager API throws error that secret key with the same name already exists from previous deployment.

Delete secret key name matching to your deployment name.

2. Symptom:

CloudPoint deployment logs (/cloudpoint/logs/cloudpoint-gcp-deployment.log) within CloudPoint VM displays below error:

ERROR: The instance, <instance name>, doesn't have network connectivity to Google Marketplace and/or Google API.

Or

Deployment manager reports below error:

```
{"ResourceType":"runtimeconfig.v1beta1.waiter","ResourceErrorCode":"504","ResourceErrorMessage":"Timeout expired."}
```

Steps to resolve:

At the time of deployment, if External IP is set to default option (None) then ensure that CloudPoint VPC has Cloud NAT configured. The error occurs as CloudPoint fails to pull MongoDB container from GCP marketplace.

