VERITAS™

Veritas Alta™ Recovery Vault Troubleshooting Guide

Cloud-based Storage-as-a-Service to Isolated Cloud Data Vault

This paper is designed to highlight common troubleshooting steps with Veritas Alta™ Recovery Vault

For more information on Veritas products and solutions, visit www.veritas.com

May 2024

Contents

Revision History

Version	Date	Changes	Author
1.00	5/01/2024	Initial Version	Neil Glick

Introduction

Executive Summary

Veritas Alta Recovery Vault is a cloud-based data vault designed to protect applications and infrastructure from threats that target backup data, by immutably isolating an off-site data copy in the cloud with a virtual air gap. With Veritas Alta Recovery Vault, there is no need to build, manage, and protect a physical site to isolate backup data.

Target Audience

This document is for customers experiencing issues with Veritas Alta Recovery Vault.

Checking Your Environment

1. The minimum version of NetBackup required:

   a. 9.1 for AWS - Recommended 10.4 or higher.

   b. 10.0 for Azure – Recommended 10.2 or higher.

   c. The minimum version for Azure short lived tokens is NetBackup 10.2

   d. The minimum version for AWS short lived tokens is NetBackup 10.4

2. Alta Recovery Vault does not support Windows Media servers.

3. Do you have the necessary EEBs installed?

   a. Review the table below and check your Primary and Media servers for correct EEBs.

   b. EEBs can be found at: https://www.veritas.com/content/support/en_US/downloads

   c. If you are having trouble finding these EEBs, please contact Veritas Support.

NetBackup Version	Azure	AWS
NetBackup 9.1.01	NetBackup 9.1.0.1 / 4.1.0.1 Hotfix - MSDP Preferred EEB Bundle (Etrack 4047040) NetBackup 9.1.0.1 / 4.1.0.1 Hotfix - MSDP Direct Cloud Tiering EEB bundle with the latest fixes (Etrack 4055084) Veritas Alta Recovery Vault for NetBackup 9.1.0.1	NetBackup 9.1.0.1 / 4.1.0.1 Hotfix - MSDP Preferred EEB Bundle (Etrack 4047040) NetBackup 9.1.0.1 / 4.1.0.1 Hotfix - MSDP Direct Cloud Tiering EEB bundle with the latest fixes (Etrack 4055084) Veritas Alta Recovery Vault for NetBackup 9.1.0.1
NetBackup 10.0	Contact Veritas Support for NetBackup 10.0 MSDP Preferred EEB Bundle Contact Veritas Support for NetBackup 10.0 MSDP Direct Cloud Tiering EEB bundle with latest fixes. Veritas Alta Recovery Vault for NetBackup 10.0	Contact Veritas Support for NetBackup 10.0 MSDP Preferred EEB Bundle Contact Veritas Support for NetBackup 10.0 MSDP Direct Cloud Tiering EEB bundle with latest fixes. Veritas Alta Recovery Vault for NetBackup 10.0

NetBackup 10.0.0.1	NetBackup 10.0.0.1 / 5.0.0.1 Hotfix - MSDP Direct Cloud Tiering EEB bundle with the latest fixes (Etrack 4079016) NetBackup 10.0.0.1 / 5.0.0.1 - MSDP Preferred EEB Bundle (Etrack 4078688)	NetBackup 10.0.0.1 / 5.0.0.1 Hotfix - MSDP Direct Cloud Tiering EEB bundle with the latest fixes (Etrack 4079016) NetBackup 10.0.0.1 / 5.0.0.1 - MSDP Preferred EEB Bundle (Etrack 4078688)
NetBackup 10.1	NetBackup 10.1 - MSDP Preferred EEB Bundle (Etrack 4091734) Contact Veritas Support for NetBackup 10.1 MSDP Direct Cloud Tiering EEB bundle with latest fixes.	NetBackup 10.1 - MSDP Preferred EEB Bundle (Etrack 4091734) Contact Veritas Support for NetBackup 10.1 MSDP Direct Cloud Tiering EEB bundle with latest fixes.
NetBackup 10.1.1	NetBackup 10.1.1 / 5.1.1 Hotfix - MSDP Direct Cloud Tiering EEB bundle with the latest fixes (Etrack 4115990) NetBackup 10.1.1 / 5.1.1 - MSDP Preferred EEB Bundle (Etrack 4102406)	NetBackup 10.1.1 / 5.1.1 Hotfix - MSDP Direct Cloud Tiering EEB bundle with the latest fixes (Etrack 4115990) NetBackup 10.1.1 / 5.1.1 - MSDP Preferred EEB Bundle (Etrack 4102406)
NetBackup 10.2	NetBackup 10.2 - MSDP Preferred EEB Bundle (Etrack 4114001) Contact Veritas Support for NetBackup 10.2 MSDP Direct Cloud Tiering EEB bundle with latest fixes.	NetBackup 10.2 - MSDP Preferred EEB Bundle (Etrack 4114001) Contact Veritas Support for NetBackup 10.2 MSDP Direct Cloud Tiering EEB bundle with latest fixes.
NetBackup 10.2.0.1	NetBackup 10.2.0.1 - MSDP Preferred EEB Bundle (Etrack 4122719) NetBackup 10.2.0.1 Hotfix - MSDP Direct Cloud Tiering EEB bundle with the latest fixes (Etrack 4124797)	NetBackup 10.2.0.1 - MSDP Preferred EEB Bundle (Etrack 4122719) NetBackup 10.2.0.1 Hotfix - MSDP Direct Cloud Tiering EEB bundle with the latest fixes (Etrack 4124797)
NetBackup 10.3	NetBackup 10.3 / 5.3 - MSDP Preferred EEB Bundle (Etrack 4136538) Contact Veritas Support for NetBackup 10.3 MSDP Direct Cloud Tiering EEB bundle with latest fixes.	NetBackup 10.3 / 5.3 - MSDP Preferred EEB Bundle (Etrack 4136538) Contact Veritas Support for NetBackup 10.3 MSDP Direct Cloud Tiering EEB bundle with latest fixes.
NetBackup 10.3.0.1	NetBackup 10.3.0.1 / 5.3.0.1 - MSDP Preferred EEB Bundle (Etrack 4145974) NetBackup 10.3.0.1 Hotfix - MSDP Direct Cloud Tiering EEB bundle with the latest fixes (Etrack 4140863)	NetBackup 10.3.0.1 / 5.3.0.1 - MSDP Preferred EEB Bundle (Etrack 4145974) NetBackup 10.3.0.1 Hotfix - MSDP Direct Cloud Tiering EEB bundle with the latest fixes (Etrack 4140863)
NetBackup 10.4	Contact Veritas Support for NetBackup 10.4 MSDP Preferred EEB Bundle Contact Veritas Support for NetBackup 10.4 MSDP Direct Cloud Tiering EEB bundle with latest fixes.	Contact Veritas Support for NetBackup 10.4 MSDP Preferred EEB Bundle Contact Veritas Support for NetBackup 10.4 MSDP Direct Cloud Tiering EEB bundle with latest fixes.

d. Run the following commands to determine what EEBs are currently on your Primary and Media servers.

UNIX / Linux:

Note: See https://www.veritas.com/support/en_US/article.100023246 for more information.

The versioninfo command is in the /usr/openv/netbackup/bin/goodies/support directory.

```
versioninfo -d /usr/openv/lib

versioninfo -d /usr/openv/netbackup/bin

versioninfo -d /usr/openv/netbackup/bin/admincmd

versioninfo -d /usr/openv/volmgr/bin
```

    e. Run the command /usr/openv/netbackup/bin/admincmd/csconfig r after installing the EEBs.

4. Are you using a version that supports tokens?

    a. The minimum version for Azure short lived tokens is NetBackup 10.2

    b. The minimum version for AWS short lived tokens is NetBackup 10.4

    c. Tokens are single use only. If you have created a credential with your token, do not try to delete and re-create the token, this will invalidate it and it will need to be re-generated and sent to you.

    d. How long has it been since you received your token and creating your credential in NetBackup?

        i. Tokens are good for 30 days from creation and can only be used once.

    e. A token will not expire once it has been applied unless:

        i. The Primary has been offline for >30 days. A new token will need to be created.

        ii. Lose the Primary due to a disaster recovery situation. A new token will need to be created.

NetBackup 10.2 and above for Azure and NetBackup 10.4 and above for AWS:

1. Have you opened port 443 outbound on the Primary and Media servers?

2. Have you opened port 80 outbound on the Media servers? (Needed for CRL)

3. Does running this command on your Primary server connect?

    Note: A "Connected" message will indicate that the port is open outbound, and that the Primary / Media can connect to Azure or AWS.

    Note: A "Connect refused" or "Connection refused" indicates there is a block between your server and the storage endpoint.

    Azure

```
curl -v https://rvltapi.nr1.archivecloud.net/api/servicestatus/info
```

    AWS

```
curl -v https://rvltapi.nr1.archivecloud.net/api/servicestatus/info
```

4. Does running these commands on your Media server connect?

   Azure

   ```
   curl -v https://<storage_bucket>.blob.core.windows.net
   nc -v https://<storage_bucket>.blob.core.windows.net
   ```

   AWS

   ```
   curl -v https://<storage_bucket>.s3.dualstack.us-east-1.amazonaws.com
   nc -v https://<storage_bucket>.s3.dualstack.us-east-1.amazonaws.com
   ```

NetBackup 10.1.x and below for Azure and NetBackup 10.3 and below for AWS:

1. Have you opened port 443 outbound on the Media servers?

2. Have you opened port 80 outbound on the Media servers? (Needed for CRL)

3. Does running this command on your Media server connect?

   Note: A "Connected" message will indicate that the port is open outbound, and that the Primary / Media can connect to Azure or AWS.

   Note: A "Connect refused" or "Connection refused" indicates there is a block between your server and the storage endpoint.

   Azure

   ```
   curl -v https://<storage_bucket>.blob.core.windows.net
   nc -v https://<storage_bucket>.blob.core.windows.net
   ```

   AWS

   ```
   curl -v https://<storage_bucket>.s3.dualstack.us-east-1.amazonaws.com
   nc -v https://<storage_bucket>.s3.dualstack.us-east-1.amazonaws.com
   ```

4. If you're not using outbound HTTPS and Port 443/80 are you using?

   i. Azure ExpressRoute – Please review the following guide.
      https://www.veritas.com/content/dam/www/en_us/documents/white-papers/WP_recovery_vault_expressroute_overview_guide_V1925.pdf

   ii. AWS Direct Connect – Please review the following guide.
       https://www.veritas.com/content/dam/www/en_us/documents/white-papers/WP_veritas_alta_recovery_vault_aws_direct_connect_overview_guide_V1984.pdf

   iii. Proxy – Have you followed the steps in the NetBackup Deduplication Guide?

Azure – 10.2

1. Check the Veritas Alta Recovery Vault Deployment Guide, Connecting to Your New Storage Account in Azure – NetBackup 10.2 for full steps.

2. Have you created the Volume and Volume Container at the CLI before attempting to create it in the WebUI?

3. Have you set your MSDP environment variables?

4. Have you run the msdpcldutil commands at the CLI before attempting to create anything in the WebUI?

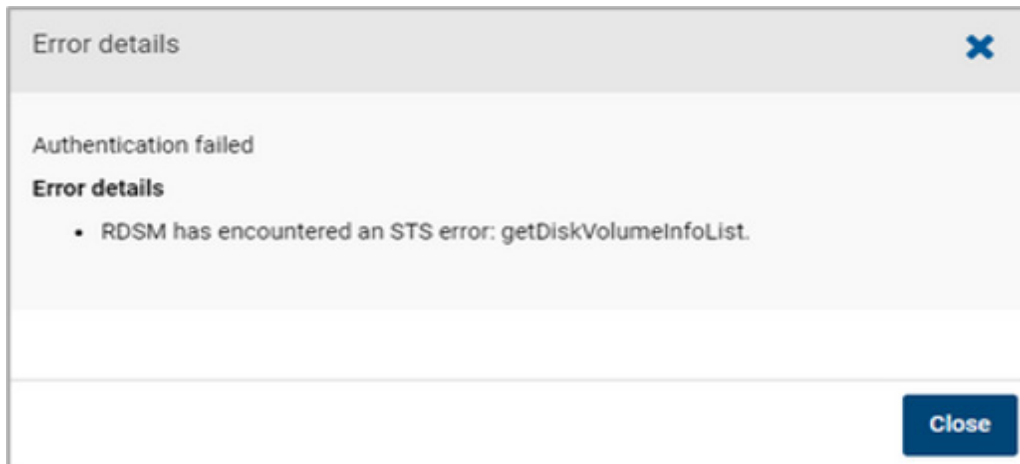5. Check the Alta Recovery Vault Deployment Guide for more information.

Azure – 10.1.1 or Below

1. Check the Veritas Alta Recovery Vault Deployment Guide, Connecting to Your New Storage Account in Azure – NetBackup 10.1.1 for full steps.

2. Have you set your MSDP environment variables?

3. Have you run the msdpcldutil commands at the CLI before attempting to create anything in the WebUI?

4. Check the Alta Recovery Vault Deployment Guide for more information.

AWS – 10.2 or Below

1. Check the Veritas Alta Recovery Vault Deployment Guide, Connecting to Your New Storage Account in AWS – NetBackup 10.2 or Below for full steps.

2. Have you set your MSDP environment variables?

3. Have you run the msdpcldutil commands at the CLI before attempting to create anything in the WebUI?

4. Check the Alta Recovery Vault Deployment Guide for more information.

Common Errors

Error details   ✖

Authentication failed
Error details
- RDSM has encountered an STS error: getDiskVolumeInfoList.

Close

1. While creating a diskpool using the webUI, if you see a system call failed, the first place you need to look is: /usr/openv/logs/ nbwebservice on the primary server.

    a. In this log, look for a message like: "Failed to cache RVLT credential" or search for the CMS credential name that you used.

    b. If you're not seeing the logs, ensure that you increase verbosity in /usr/openv/netbackup/nblog.conf, DebugLevel=6 and retry the operation.

    c. If you see RVLT API returning 400 responses, it's an issue with tokens or fetching response for the Alta Recovery Vault server. Contact your account team for further assistance.

2. Check clock skew on Media server.

    ```
    /usr/openv/netbackup/bin/nbcertcmd -checkClockSkew -server primary_server_name
    ```

    a. Run "timedatectl" on Primary and MSDP servers.

    b. If they are out of sync this could cause the connectivity as well.

3. Check the OCSD logs for errors.

    a. /MSDP_Storage_Path>/msdp/etc/pdregistry.cfg should have loglevel = 3 and logs are located at /<MSDP_Storage_Path>/ log/ocsd_storage

4. Check SPAD logs for errors.

    a. /<MSDP_Storage_Path>/log/spad

5. Check SPOOLD log for errors.

    a. /<MSDP_Storage_Path>/log/spood

6. Check NBRMMS logs located in MSDP Directory for errors.

    a. /msdp/data/dp1/pdvol/log/spad/<media server name hosting dp>/nbrmms/spad

Conclusion

Veritas Alta Recovery Vault not only simplifies the process of provisioning new storage in the cloud, it reduces risk, allows for limitless scalability, lowers TCO and automates resiliency. Through seamless integration with NetBackup together with an easy-to-use UI, management and monitoring of cloud storage resources and retention policies, provisioning storage, and protecting your data has never been easier.

About Veritas

Veritas Technologies is the leader in secure multi-cloud data management. Over 80,000 customers—including 91% of the Fortune 100—rely on Veritas to help ensure the protection, recoverability and compliance of their data. Veritas has a reputation for reliability at scale, which delivers the resilience its customers need against the disruptions threatened by cyberattacks, like ransomware. No other vendor is able to match the ability of Veritas to execute, with support for 800+ data sources, 100+ operating systems and 1,400+ storage targets through a single, unified approach. Powered by Cloud Scale Technology, Veritas is delivering today on its strategy for Autonomous Data Management that reduces operational overhead while delivering greater value. Learn more at www.veritas.com. Follow us on X at @veritastechllc.

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