

System health and events

Cloud Volumes ONTAP

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System health and events

Verify AutoSupport setup

AutoSupport proactively monitors the health of your system and sends messages to NetApp technical support. By default, AutoSupport is enabled on each node to send messages to technical support using the HTTPS transport protocol. It's best to verify that AutoSupport can send these messages.

The only required configuration step is to ensure that Cloud Volumes ONTAP has outbound internet connectivity. For details, refer to the networking requirements for your cloud provider.

AutoSupport requirements

Cloud Volumes ONTAP nodes require outbound internet access for NetApp AutoSupport, which proactively monitors the health of your system and sends messages to NetApp technical support.

Routing and firewall policies must allow HTTP/HTTPS traffic to the following endpoints so Cloud Volumes ONTAP can send AutoSupport messages:

- https://support.netapp.com/aods/asupmessage
- https://support.netapp.com/asupprod/post/1.0/postAsup

If an outbound internet connection isn't available to send AutoSupport messages, BlueXP automatically configures your Cloud Volumes ONTAP systems to use the Connector as a proxy server. The only requirement is to ensure that the Connector's security group allows *inbound* connections over port 3128. You'll need to open this port after you deploy the Connector.

If you defined strict outbound rules for Cloud Volumes ONTAP, then you'll also need to ensure that the Cloud Volumes ONTAP security group allows *outbound* connections over port 3128.

After you've verified that outbound internet access is available, you can test AutoSupport to ensure that it can send messages. For instructions, refer to ONTAP docs: Set up AutoSupport.

Troubleshoot your AutoSupport configuration

If an outbound connection isn't available and BlueXP can't configure your Cloud Volumes ONTAP system to use the Connector as a proxy server, you'll receive a notification from BlueXP titled "<working environment name> is unable to send AutoSupport messages."

You're most likely receiving this message because of networking issues.

Follow these steps to address this problem.

Steps

1. SSH to the Cloud Volumes ONTAP system so that you can administer the system from the CLI.

Learn how to SSH to Cloud Volumes ONTAP.

2. Display the detailed status of the AutoSupport subsystem:

autosupport check show-details

The response should be similar to the following:

```
Category: smtp
          Component: mail-server
             Status: failed
             Detail: SMTP connectivity check failed for destination:
                     mailhost. Error: Could not resolve host -
'mailhost'
            Corrective Action: Check the hostname of the SMTP server
    Category: http-https
        Component: http-put-destination
            Status: ok
            Detail: Successfully connected to:
                    <https://support.netapp.com/put/AsupPut/>.
          Component: http-post-destination
             Status: ok
             Detail: Successfully connected to:
https://support.netapp.com/asupprod/post/1.0/postAsup.
    Category: on-demand
          Component: ondemand-server
             Status: ok
             Detail: Successfully connected to:
                     https://support.netapp.com/aods/asupmessage.
    Category: configuration
            Component: configuration
                Status: ok
                Detail: No configuration issues found.
    5 entries were displayed.
```

If the status of the http-https category is "ok" then it means AutoSupport is configured properly and messages can be sent.

3. If the status is not ok, verify the proxy URL for each Cloud Volumes ONTAP node:

```
autosupport show -fields proxy-url
```

4. If the proxy URL parameter is empty, configure Cloud Volumes ONTAP to use the Connector as a proxy:

```
autosupport modify -proxy-url http://<connector private ip>:3128
```

5. Verify AutoSupport status again:

```
autosupport check show-details
```

- 6. If the status is still is failed, validate that there is connectivity between Cloud Volumes ONTAP and the Connector over port 3128.
- 7. If the status ID is still failed after verifying that there is connectivity, SSH to the Connector.

Learn more about Connecting to the Linux VM for the Connector

- 8. Go to /opt/application/netapp/cloudmanager/docker occm/data/
- 9. Open the proxy configuration file squid.conf

The basic structure of the file is as follows:

```
http_port 3128
acl localnet src 172.31.0.0/16
acl azure_aws_metadata dst 169.254.169.254

http_access allow localnet
http_access deny azure_aws_metadata
http_access allow localhost
http_access deny all
```

The localnet src value is the CIDR of the Cloud Volumes ONTAP system.

10. If the CIDR block of the Cloud Volumes ONTAP system isn't in the range that's specified in the file, either update the value or add a new entry as follows:

```
acl cvonet src <cidr>
```

If you add this new entry, don't forget to also add an allow entry:

```
http_access allow cvonet
```

Here's an example:

```
http_port 3128
acl localnet src 172.31.0.0/16
acl cvonet src 172.33.0.0/16
acl azure_aws_metadata dst 169.254.169.254

http_access allow localnet
http_access allow cvonet
http_access deny azure_aws_metadata
http_access allow localhost
http_access deny all
```

11. After editing the config file, restart the proxy container as sudo:

docker restart squid

12. Go back to the Cloud Volumes ONTAP CLI and verify that Cloud Volumes ONTAP can send AutoSupport messages:

autosupport check show-details

Configure EMS

The Event Management System (EMS) collects and displays information about events that occur on ONTAP systems. To receive event notifications, you can set event destinations (email addresses, SNMP trap hosts, or syslog servers) and event routes for a particular event severity.

You can configure EMS using the CLI. For instructions, refer to ONTAP docs: EMS configuration overview.

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