



Ports

Setup and administration

NetApp
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Ports

Security group rules in AWS

The AWS security group for the Connector requires both inbound and outbound rules. BlueXP automatically creates this security group when you create a Connector from BlueXP. You need to set up this security group for all other installation options.

Inbound rules

| Protocol | Port | Purpose |
|----------|------------|--|
| SSH | 22 | Provides SSH access to the Connector host |
| HTTP | 80 | Provides HTTP access from client web browsers to the local user interface |
| HTTPS | 443 | Provides HTTPS access from client web browsers to the local user interface, and connections from the BlueXP classification instance |
| TCP | 3128 | Provides Cloud Volumes ONTAP with internet access to send AutoSupport messages to NetApp Support. You must manually open this port after deployment. Learn how the Connector is used as a proxy for AutoSupport messages |
| TCP | 9060, 9061 | Provides the ability to enable and use BlueXP classification and BlueXP backup and recovery in Government regions. |

Outbound rules

The predefined security group for the Connector opens all outbound traffic. If that is acceptable, follow the basic outbound rules. If you need more rigid rules, use the advanced outbound rules.

Basic outbound rules

The predefined security group for the Connector includes the following outbound rules.

| Protocol | Port | Purpose |
|----------|------|----------------------|
| All TCP | All | All outbound traffic |
| All UDP | All | All outbound traffic |

Advanced outbound rules

If you need rigid rules for outbound traffic, you can use the following information to open only those ports that are required for outbound communication by the Connector.



The source IP address is the Connector host.

| Service | Protocol | Port | Destination | Purpose |
|---------------------------|----------|------|--|---|
| API calls and AutoSupport | HTTPS | 443 | Outbound internet and ONTAP cluster management LIF | API calls to AWS, to ONTAP, to BlueXP classification, to BlueXP ransomware protection, and sending AutoSupport messages to NetApp |
| API calls | TCP | 3000 | ONTAP HA mediator | Communication with the ONTAP HA mediator |
| | TCP | 8080 | BlueXP classification | Probe to BlueXP classification instance during deployment |
| DNS | UDP | 53 | DNS | Used for DNS resolve by BlueXP |

Security group rules in Azure

The Azure security group for the Connector requires both inbound and outbound rules. BlueXP automatically creates this security group when you create a Connector from BlueXP. You need to set up this security group for all other installation options.

Inbound rules

| Protocol | Port | Purpose |
|----------|------------|--|
| SSH | 22 | Provides SSH access to the Connector host |
| HTTP | 80 | Provides HTTP access from client web browsers to the local user interface |
| HTTPS | 443 | Provides HTTPS access from client web browsers to the local user interface, and connections from the BlueXP classification instance |
| TCP | 3128 | Provides Cloud Volumes ONTAP with internet access to send AutoSupport messages to NetApp Support. You must manually open this port after deployment. Learn how the Connector is used as a proxy for AutoSupport messages |
| TCP | 9060, 9061 | Provides the ability to enable and use BlueXP classification and BlueXP backup and recovery in Government regions. |

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| Protocol | Port | Purpose |
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| All TCP | All | All outbound traffic |
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Advanced outbound rules

If you need rigid rules for outbound traffic, you can use the following information to open only those ports that are required for outbound communication by the Connector.



The source IP address is the Connector host.

| Service | Protocol | Port | Destination | Purpose |
|---------------------------|----------|------|--|---|
| API calls and AutoSupport | HTTP | 443 | Outbound internet and ONTAP cluster management LIF | API calls to Azure, to ONTAP, to BlueXP classification, to BlueXP ransomware protection, and sending AutoSupport messages to NetApp |
| API calls | TCP | 80 | BlueXP classification | Probe to BlueXP classification instance during deployment |
| DNS | UDP | 53 | DNS | Used for DNS resolve by BlueXP |

Firewall rules in Google Cloud

The Google Cloud firewall rules for the Connector requires both inbound and outbound rules. BlueXP automatically creates this security group when you create a Connector from BlueXP. You need to set up this security group for all other installation options.

Inbound rules

| Protocol | Port | Purpose |
|----------|------|--|
| SSH | 22 | Provides SSH access to the Connector host |
| HTTP | 80 | Provides HTTP access from client web browsers to the local user interface |
| HTTPS | 443 | Provides HTTPS access from client web browsers to the local user interface |
| TCP | 3128 | Provides Cloud Volumes ONTAP with internet access to send AutoSupport messages to NetApp Support. You must manually open this port after deployment. Learn how the Connector is used as a proxy for AutoSupport messages |

Outbound rules

The predefined firewall rules for the Connector opens all outbound traffic. If that is acceptable, follow the basic outbound rules. If you need more rigid rules, use the advanced outbound rules.

Basic outbound rules

The predefined firewall rules for the Connector includes the following outbound rules.

| Protocol | Port | Purpose |
|----------|------|----------------------|
| All TCP | All | All outbound traffic |
| All UDP | All | All outbound traffic |

Advanced outbound rules

If you need rigid rules for outbound traffic, you can use the following information to open only those ports that are required for outbound communication by the Connector.



The source IP address is the Connector host.

| Service | Protocol | Port | Destination | Purpose |
|---------------------------|----------|------|--|--|
| API calls and AutoSupport | HTTPS | 443 | Outbound internet and ONTAP cluster management LIF | API calls to Google Cloud, to ONTAP, to BlueXP classification, to BlueXP ransomware protection, and sending AutoSupport messages to NetApp |
| API calls | TCP | 8080 | BlueXP classification | Probe to BlueXP classification instance during deployment |
| DNS | UDP | 53 | DNS | Used for DNS resolve by BlueXP |

Ports for the on-prem Connector

The Connector uses *inbound* ports when installed manually on an on-premises Linux host. You might need to refer to these ports for planning purposes.

These inbound rules apply to all BlueXP deployment models.

| Protocol | Port | Purpose |
|----------|------|--|
| HTTP | 80 | Provides HTTP access from client web browsers to the local user interface |
| HTTPS | 443 | Provides HTTPS access from client web browsers to the local user interface |

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