



Configure Notification Endpoints

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About Notification Endpoints

During policy creation, you can configure multiple endpoints to receive alarm notifications when a rule inside a policy is violated.

The following notification endpoint types are available:

- Email
- Google Storage
- Amazon S3
- SMS
- Slack
- WebEx
- Microsoft Teams
- PagerDuty

Endpoint Notification Content

Content and delivery of alarm notification information vary depending on the endpoint notification type. The types of information contained in the notification message are categorized as Raw Data or Summarized Data.

Raw Data

For Amazon S3 and Google Storage notification endpoints, the information is delivered in raw form as a series of JSON (JavaScript Object Notation) objects. A JSON object represents an alarm notification event as it appears in the system. These events are written into the configured S3 and Cloud Storage bucket as an object that corresponds to the current window of time (for example, the current minute). If there are no events

delivered during a given window, a JSON object is not written. For examples, see [Amazon S3 and Google Storage Endpoint Notification Examples by Alarm Type](#), on page 8.

Summarized Data


The message contains a summary of events that occurred during a window of time. Typically, the message includes the total number of alarm transition events, specific alarm details from the first few events, and a link to view more events. The exact format and alarm details displayed depends on the endpoint type and corresponding constraints on message size (for example: SMS endpoints do not contain any specific alarm details since there is only enough room to display the total count).


Error Handling

If an endpoint fails to receive a notification, Crosswork Cloud attempts to deliver the notification until it succeeds or the notification no longer exists in the system. The latter case results in the notification endpoint not being delivered.

Configure Notification Endpoints

When a policy rule is violated, an alarm appears in the Alarms page. However, you may want Crosswork Cloud to also notify you or a group of users when an alarm occurs. You can configure an endpoint to receive alarm notifications.

You configure endpoint notifications within a policy or by clicking the Settings icon  > **Global** > **Notifications**. Follow these steps to create an endpoint notification:

Step 1 In the main window, click  > **Global** > **Notifications**.

Step 2 Choose the notification type for the endpoint you want to create:

- Email
- [Configure Google Storage Endpoints](#)
- Amazon S3
- Slack
- SMS
- [Configure Webex Endpoints](#)
- [Configure Microsoft Team Endpoints](#)
- PagerDuty

Note See also [Notification Message Examples](#), on page 6.

Step 3 Click **Add *type* Endpoint**.

Step 4 Enter a name for the endpoint.

Step 5 Choose whether the endpoint is **Enabled** (default) or **Disabled**.

Step 6 Enter the required information for the endpoint type you chose in Step 2.

Step 7 (Optional) Enter any notes.

Step 8 Click **Save**.

Step 9 After you receive a confirmation code from Crosswork Cloud, enter the code in the **Verification Code** field, then click **Verify**.


If you select **Skip for Now**, Crosswork Cloud creates the endpoint but will not send any notifications to the endpoint until you verify the endpoint by entering the verification code.

Configure Google Storage Endpoints

You can configure Crosswork Cloud to send notification logs to Google Cloud Storage.

Before you begin

- You must have a Google Cloud Storage account and have an existing [Cloud Storage Bucket](#) where you want all alarm notification information sent to.
 - You must create a [service account key](#) file (in JSON format) to allow Crosswork Cloud access to the Google Cloud Storage Bucket. You will need to upload this file as part of the Google Storage notification endpoint configuration.
-

Step 1 In Crosswork Cloud, click  > **Global** > **Notifications** > **Google Storage** tab and click **Add Google Storage Endpoint**.

Step 2 Do the following:

- a) Enter a name for the notification.
- b) Toggle the option to **ENABLED**.
- c) Enter the name of the Google Cloud Storage Bucket.
- d) If there is a particular folder within the bucket you want notification logs to go to, enter the path.
- e) Upload the JSON key file that provides access to the Google Cloud Storage.

Step 3 Click **Save**.

Example of file location and properties in Google Cloud Storage Bucket:

Buckets > gcp-stor-staging > notifications_bdd92688-659b-462e-8ce0-ee31df2b49fa_

[LIVE OBJECT](#) [VERSION HISTORY](#)

[DOWNLOAD](#) [EDIT METADATA](#) [EDIT ACCESS](#) [DELETE](#)

Overview

Type	text/plain; charset=utf-8
Size	73 KB
Created	Jun 30, 2023, 12:32:15 PM
Last modified	Jun 30, 2023, 12:32:15 PM
Storage class	Standard
Custom time	—
Public URL	Not applicable
Authenticated URL	https://storage.cloud.google.com/gcp-stor-staging/notifications_bdd92688-659b-462e-8ce0-ee31df2b49fa_
gsutil URI	gs://gcp-stor-staging/notifications_bdd92688-659b-462e-8ce0-ee31df2b49fa_

Permissions

Public access	Not public
---------------	------------

Protection

Version history	—
Retention policy	None
Hold status	None
Encryption type	Google-managed


Note To see an example of the log file contents, see [Amazon S3 and Google Storage Endpoint Notification Examples by Alarm Type](#), on page 8.

Configure Webex Endpoints

You can configure Crosswork Cloud to send notifications to a Webex space. This procedure describes how to create a webhook and configure the notification endpoint in the UI.

Before you begin


You must have an apphub.webex.com account and be a member of a Webex space (room) you are creating the webhook for.

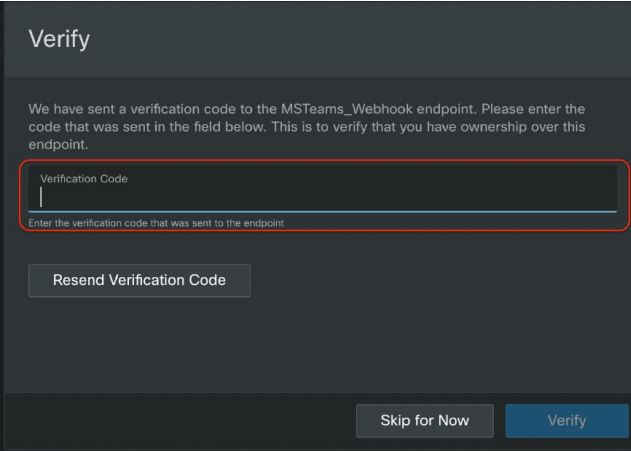
- Step 1** Log into <https://apphub.webex.com>.
- Step 2** Search for **Incoming Webhooks**. The Incoming Webhooks application is listed.
- Step 3** Click on the **Incoming Webhooks** application.
- Step 4** On the **Incoming Webhooks** page, click **Connect**.
- Step 5** If a window appears requesting permission to a number of items and you agree, click **Accept**.
- Step 6** Scroll down the page and in the space provided, enter a new Webhook name and select the Webex space from the drop-down list.
- Step 7** Click **Add**. The Webhook URL field is populated.
- Step 8** Copy the newly created Webhook URL to use later.
- Step 9** In Crosswork Cloud, click  > **Global** > **Notifications**.

- Step 10** Select **Webex**, then click **Create Webex Endpoint**.
- Step 11** Enter a name for the endpoint.
- Step 12** In the **Webhook URL** field, paste the Webhook URL you copied earlier.
`https://webexapis.com/v1/webhooks/incoming/<new_webhook_ID>`
- Step 13** Click **Save**.
You will receive a notification in the Webex space indicating you have configured a new endpoint.
- Step 14** Confirm the endpoint, and then the endpoint changes to *active* state and processes new notifications.
-

Configure Microsoft Team Endpoints

Follow these steps to configure Microsoft Team endpoints in Crosswork Cloud. Steps that require actions in Microsoft Teams include help links to the Microsoft support site. However, it is always best practice to search the Microsoft Teams online documentation for the latest instructions.

- Step 1** In Microsoft Teams, [create a team](#) to receive the Crosswork Cloud alarm notifications.
- Step 2** [Create an incoming webhook](#) and copy the unique webhook URL to use later in Crosswork Cloud.
- Step 3** In [Crosswork Cloud](#), click  > **Global** > **Notifications**.
- Step 4** Select **Microsoft Teams**, then click **Add Microsoft Teams Endpoint**.
- Step 5** Enter a name for the endpoint.
- Step 6** In the **Webhook URL** field, paste the webhook URL you copied earlier.
- Step 7** Click **Save**. A verification code is sent as a message to Microsoft Teams.
- Step 8** Copy the verification code from Microsoft Teams, and paste it into the Verify dialog box in Crosswork Cloud.



The image shows a 'Verify' dialog box with a dark background. At the top, it says 'Verify'. Below that, a message reads: 'We have sent a verification code to the MSTEams_Webhook endpoint. Please enter the code that was sent in the field below. This is to verify that you have ownership over this endpoint.' There is a text input field with a red border and a red underline, containing the text 'Verification Code' and a cursor. Below the input field, it says 'Enter the verification code that was sent to the endpoint.' There is a 'Resend Verification Code' button. At the bottom, there are two buttons: 'Skip for Now' and 'Verify'.

- Step 9** Confirm the endpoint, and the endpoint changes to *active* state and processes new notifications.
-

Resend Confirmation Code for Endpoints

After you configure an endpoint to receive notifications from Crosswork Cloud Network Insights, you must first confirm the endpoint by entering a verification code. You can resend a verification code by following these steps:

-
- Step 1** In the main window, click **External Routing Analytics > Configure > Notification Endpoints**.
 - Step 2** Click on the name of the endpoint you previously entered.
 - Step 3** Click **Verify**.
Crosswork Cloud Network Insights resends the verification code.
 - Step 4** After you receive the verification code from Crosswork Cloud Network Insights, enter the code in the **Verification Code** field, then click **Verify**.
-

Notification Message Examples

After you configure notification endpoints, Crosswork Cloud Network Insights sends notification messages to the endpoint you specified. The following examples show sample messages for each endpoint type.

Email Endpoint Notification Example

After you configure a notification endpoint and specify the type **Email**, when the alarm conditions are met, Crosswork Cloud Network Insights sends an email message similar to the following example:

You are subscribed to alarm notifications for crosswork.cisco.com.

There is 1 alarm transition event for AutomationOnly8 organization.

=====

08 - AS Path Length Violation

Rule: AS Path Length Violation

Alarm Details: <https://crosswork.cisco.com/#/extRoute/alarm/00db6966-9bf2-441b-b940-8259b7f8131a>

Expected Prefix: 84.205.80.0/24

Priority: High

Condition: Active

State: ACTIVE

Last Activated: 2021-09-30 23:18:35 UTC

Last Deactivated: 2021-09-30 23:15:20 UTC

Expected Minimum Path Length: 1

Expected Maximum Path Length: 2

Activate Peer Threshold Count: 2

Observed Min AS-PATH: 3

Observed Max AS-PATH: 8

Reporting Peers Count: 21

Tags: common tag | prefix policy | 08 - AS Path Length Violation

=====

To change your notification settings, please log in to <https://crosswork.cisco.com>.

Slack Endpoint Notification Example

After you configure a notification endpoint and specify the type **Slack**, when the alarm conditions are met, Crosswork Cloud Network Insights sends a Slack message similar to the following example:

You are subscribed to alarm notifications for crosswork.cisco.com.

There is 1 alarm transition event for AutomationOnly8 organization.

=====

Policy: 08 - AS Path Length Violation, Rule: AS Path Length Violation, Alarm

Details: <https://crosswork.cisco.com/#/extRoute/alarm/00db6966-9bf2-441b-b940-8259b7f8131a>, Expected Prefix: 84.205.80.0/24,

Priority: High, Condition: Active, State: ACTIVE, Last Activated: 2021-09-30 23:18:35 UTC, Last Deactivated: 2021-09-30 23:15:20 UTC

Expected Minimum Path Length: 1, Expected Maximum Path Length: 2, Activate Peer Threshold Count: 2, Observed Min AS-PATH:

Observed Max AS-PATH: 8, Reporting Peers Count: 21

Tags: common tag | prefix policy | 08 - AS Path Length Violation

=====

To change your notification settings, please log in to <https://crosswork.cisco.com>.

Microsoft Teams Endpoint Notification Example

After you configure a notification endpoint and specify the type **Microsoft Teams**, when the alarm conditions are met, Crosswork Cloud Network Insights sends a message similar to the following example:

You are subscribed to alarm notifications for crosswork.cisco.com.
There is 1 alarm transition event for AutomationOnly8 organization.

Policy: 08 - AS Path Length Violation, Rule: AS Path Length Violation, Alarm
Details: <https://crosswork.cisco.com/#/extRoute/alarm/00db6966-9bf2-441b-b940-8259b7f8131a>, Expected Prefix: 84.205.80.0/24,
Priority: High, Condition: Active, State: ACTIVE, Last Activated: 2021-09-30 23:18:35 UTC, Last Deactivated: 2021-09-30 23:15:20 UTC,
Expected Minimum Path Length: 1, Expected Maximum Path Length: 2, Activate Peer Threshold Count: 2, Observed Min AS-PATH: 3,
Observed Max AS-PATH: 8, Reporting Peers Count: 21
Tags: common tag | prefix policy | 08 - AS Path Length Violation

=====

To change your notification settings, please log in to <https://crosswork.cisco.com>.

Cisco Webex Endpoint Notification Example

After you configure a notification endpoint and specify the type **Webex**, when the alarm conditions are met, Crosswork Cloud sends a Webex message similar to the following example:

You are subscribed to alarm notifications for crosswork.cisco.com.
There is 1 alarm transition event for AutomationOnly8 organization.

Policy: 08 - AS Path Length Violation, Rule: AS Path Length Violation, Alarm
Details: <https://crosswork.cisco.com/#/extRoute/alarm/00db6966-9bf2-441b-b940-8259b7f8131a>, Expected Prefix: 84.205.80.0/24,
Priority: High, Condition: Active, State: ACTIVE, Last Activated: 2021-09-30 23:18:35 UTC, Last Deactivated: 2021-09-30 23:15:20 UTC,
Expected Minimum Path Length: 1, Expected Maximum Path Length: 2, Activate Peer Threshold Count: 2, Observed Min AS-PATH: 3,
Observed Max AS-PATH: 8, Reporting Peers Count: 21
Tags: common tag | prefix policy | 08 - AS Path Length Violation

=====

To change your notification settings, please log in to <https://crosswork.cisco.com>.

Amazon S3 and Google Storage Endpoint Notification Examples by Alarm Type

The following sections contain log message examples of Amazon S3 and Google Storage notifications for each alarm type.

AS Origin Violation Example

The following is an Amazon S3 and Google Storage notification log message example for an **AS Origin Violation** alarm.

```
{
  "activatedAt": "2023-02-04T03:02:19Z",
  "alarmId": "04aa5831-7e62-45cb-a123-3d5e9c019330",
  "clearedAt": "2023-02-04T03:01:41Z",
  "expected": {
    "numPeersToClear": 1,
    "numPeersToTrigger": 2,
    "originAsns": [
      1523
    ]
  },
  "monitoredPrefix": "31.1.1.0/24",
  "observed": {
```



```
"allViolationPeers": [
  {
    "asn": 6008,
    "at": "2023-02-04T03:00:58Z",
    "peerId": 21
  },
  {
    "asn": 6009,
    "at": "2023-02-04T03:00:58Z",
    "peerId": 22
  },
  {
    "asn": 6005,
    "at": "2023-02-04T03:00:58Z",
    "peerId": 1,
    "peerIp": "10.11.12.1"
  },
  {
    "asn": 6007,
    "at": "2023-02-04T03:00:58Z",
    "peerId": 20
  },
  {
    "asn": 6002,
    "at": "2023-02-04T03:00:58Z",
    "peerId": 4,
    "peerIp": "10.11.12.4"
  },
  {
    "asn": 6004,
    "at": "2023-02-04T03:00:58Z",
    "peerId": 2,
    "peerIp": "10.11.12.2"
  },
  {
    "asn": 6001,
    "at": "2023-02-04T03:00:58Z",
    "peerId": 5,
    "peerIp": "10.11.12.5"
  },
  {
    "asn": 6000,
    "at": "2023-02-04T03:00:58Z",
    "peerId": 7,
    "peerIp": "10.31.32.1"
  },
  {
    "asn": 6006,
    "at": "2023-02-04T03:00:58Z",
    "peerId": 19
  },
  {
    "asn": 6003,
    "at": "2023-02-04T03:00:58Z",
    "peerId": 3,
    "peerIp": "10.11.12.3"
  }
],
  "allViolationPeersCount": 10
},
"orgName": "AutomationOnly5",
"policyId": "963b86db-329d-4cba-a38a-3fc19ddd330d",
"policyName": "02 - AS Origin Violation",
"rule": "ALARM_RULE_AS_ORIGIN_VIOLATION",
```

```

"severity": "ALARM_SEVERITY_RED",
"state": "ALARM_STATE_ACTIVE",
"tags": [
  "common tag",
  "prefix policy",
  "02 - AS Origin Violation"
],
"transitionedAt": "2023-02-04T03:02:19Z"
}
{
"activatedAt": "2023-02-04T03:02:19Z",
"alarmId": "9ea271fb-1976-450f-b653-d3d188426b6e",
"clearedAt": "2023-02-04T03:01:42Z",
"expected": {
  "numPeersToClear": 1,
  "numPeersToTrigger": 2,
  "originAsns": [
    1523
  ]
},
"monitoredPrefix": "2002:1f01:100::/48",
"observed": {
  "allViolationPeers": [
    {
      "asn": 6009,
      "at": "2023-02-04T03:00:58Z",
      "peerId": 30
    },
    {
      "asn": 6004,
      "at": "2023-02-04T03:00:58Z",
      "peerId": 25
    },
    {
      "asn": 6001,
      "at": "2023-02-04T03:00:58Z",
      "peerId": 23
    },
    {
      "asn": 6006,
      "at": "2023-02-04T03:00:58Z",
      "peerId": 27
    },
    {
      "asn": 6000,
      "at": "2023-02-04T03:00:58Z",
      "peerId": 8,
      "peerIp": "2000::30:100:10"
    },
    {
      "asn": 6003,
      "at": "2023-02-04T03:00:58Z",
      "peerId": 24
    },
    {
      "asn": 6005,
      "at": "2023-02-04T03:00:58Z",
      "peerId": 26
    },
    {
      "asn": 6008,
      "at": "2023-02-04T03:00:58Z",
      "peerId": 29
    },
  ],
}

```

```

    {
      "asn": 6007,
      "at": "2023-02-04T03:00:58Z",
      "peerId": 28
    },
    {
      "asn": 6011,
      "at": "2023-02-04T03:00:58Z",
      "peerId": 32
    },
    {
      "asn": 6002,
      "at": "2023-02-04T03:00:58Z",
      "peerId": 6,
      "peerIp": "2000::20:100:10"
    },
    {
      "asn": 6010,
      "at": "2023-02-04T03:00:58Z",
      "peerId": 31
    }
  ],
  "allViolationPeersCount": 12
},
"orgName": "AutomationOnly5",
"policyId": "963b86db-329d-4cba-a38a-3fc19ddd330d",
"policyName": "02 - AS Origin Violation",
"rule": "ALARM_RULE_AS_ORIGIN_VIOLATION",
"severity": "ALARM_SEVERITY_RED",
"state": "ALARM_STATE_ACTIVE",
"tags": [
  "common tag",
  "prefix policy",
  "02 - AS Origin Violation"
],
"transitionedAt": "2023-02-04T03:02:19Z"
}

```

AS Path Length Violation Example

The following is an Amazon S3 and Google Storage notification log message example for an **AS Path Length Violation** alarm.

```

{
  "activatedAt": "2023-02-04T03:09:32Z",
  "alarmId": "38a07db7-776e-4b4a-a186-b7d4bd9b045c",
  "clearedAt": "2023-02-04T03:08:53Z",
  "expected": {
    "maxAsPathLength": 2,
    "minAsPathLength": 1,
    "numPeersToClear": 1,
    "numPeersToTrigger": 2
  },
  "monitoredPrefix": "145.25.0.0/16",
  "observed": {
    "allViolationPeers": [
      {
        "asPath": [
          902,
          602,
          22
        ],
        "asPathLength": 3,
        "asn": 22,

```

```

    "at": "2023-02-04T03:06:32Z",
    "peerId": 1,
    "peerIp": "10.11.12.1"
  },
  {
    "asPath": [
      902,
      602,
      22
    ],
    "asPathLength": 3,
    "asn": 22,
    "at": "2023-02-04T03:06:32Z",
    "peerId": 19
  },
  {
    "asPath": [
      902,
      602,
      22
    ],
    "asPathLength": 3,
    "asn": 22,
    "at": "2023-02-04T03:06:32Z",
    "peerId": 2,
    "peerIp": "10.11.12.2"
  },
  {
    "asPath": [
      902,
      602,
      22
    ],
    "asPathLength": 3,
    "asn": 22,
    "at": "2023-02-04T03:06:32Z",
    "peerId": 20
  },
  {
    "asPath": [
      902,
      602,
      22
    ],
    "asPathLength": 3,
    "asn": 22,
    "at": "2023-02-04T03:06:32Z",
    "peerId": 21
  },
  {
    "asPath": [
      902,
      602,
      22
    ],
    "asPathLength": 3,
    "asn": 22,
    "at": "2023-02-04T03:06:32Z",
    "peerId": 22
  },
  {
    "asPath": [
      902,
      602,

```

```

        22
      ],
      "asPathLength": 3,
      "asn": 22,
      "at": "2023-02-04T03:06:32Z",
      "peerId": 3,
      "peerIp": "10.11.12.3"
    },
    {
      "asPath": [
        902,
        602,
        22
      ],
      "asPathLength": 3,
      "asn": 22,
      "at": "2023-02-04T03:06:32Z",
      "peerId": 4,
      "peerIp": "10.11.12.4"
    },
    {
      "asPath": [
        902,
        602,
        22
      ],
      "asPathLength": 3,
      "asn": 22,
      "at": "2023-02-04T03:06:32Z",
      "peerId": 5,
      "peerIp": "10.11.12.5"
    },
    {
      "asPath": [
        902,
        602,
        22
      ],
      "asPathLength": 3,
      "asn": 22,
      "at": "2023-02-04T03:06:32Z",
      "peerId": 7,
      "peerIp": "10.31.32.1"
    }
  ],
  "allViolationPeersCount": 10
},
"orgName": "AutomationOnly5",
"policyId": "bc4298d2-1a52-4339-83e8-1d8932e1fe61",
"policyName": "03 - AS Path Length Violation",
"rule": "ALARM_RULE_AS_PATH_LENGTH_VIOLATION",
"severity": "ALARM_SEVERITY_RED",
"state": "ALARM_STATE_ACTIVE",
"tags": [
  "common tag",
  "prefix policy",
  "03 - AS Path Length Violation"
],
"transitionedAt": "2023-02-04T03:09:32Z"
}
{
  "activatedAt": "2023-02-04T03:09:32Z",
  "alarmId": "e44e6834-7877-435c-9068-169e56cae5aa",
  "clearedAt": "2023-02-04T03:08:53Z",

```

```

"expected": {
  "maxAsPathLength": 2,
  "minAsPathLength": 1,
  "numPeersToClear": 1,
  "numPeersToTrigger": 2
},
"monitoredPrefix": "2002:9119::/48",
"observed": {
  "allViolationPeers": [
    {
      "asPath": [
        902,
        602,
        22
      ],
      "asPathLength": 3,
      "asn": 22,
      "at": "2023-02-04T03:06:32Z",
      "peerId": 23
    },
    {
      "asPath": [
        902,
        602,
        22
      ],
      "asPathLength": 3,
      "asn": 22,
      "at": "2023-02-04T03:06:32Z",
      "peerId": 24
    },
    {
      "asPath": [
        902,
        602,
        22
      ],
      "asPathLength": 3,
      "asn": 22,
      "at": "2023-02-04T03:06:32Z",
      "peerId": 25
    },
    {
      "asPath": [
        902,
        602,
        22
      ],
      "asPathLength": 3,
      "asn": 22,
      "at": "2023-02-04T03:06:32Z",
      "peerId": 26
    },
    {
      "asPath": [
        902,
        602,
        22
      ],
      "asPathLength": 3,
      "asn": 22,
      "at": "2023-02-04T03:06:32Z",
      "peerId": 27
    }
  ]
}

```

```
{
  "asPath": [
    902,
    602,
    22
  ],
  "asPathLength": 3,
  "asn": 22,
  "at": "2023-02-04T03:06:32Z",
  "peerId": 28
},
{
  "asPath": [
    902,
    602,
    22
  ],
  "asPathLength": 3,
  "asn": 22,
  "at": "2023-02-04T03:06:32Z",
  "peerId": 29
},
{
  "asPath": [
    902,
    602,
    22
  ],
  "asPathLength": 3,
  "asn": 22,
  "at": "2023-02-04T03:06:32Z",
  "peerId": 30
},
{
  "asPath": [
    902,
    602,
    22
  ],
  "asPathLength": 3,
  "asn": 22,
  "at": "2023-02-04T03:06:32Z",
  "peerId": 31
},
{
  "asPath": [
    902,
    602,
    22
  ],
  "asPathLength": 3,
  "asn": 22,
  "at": "2023-02-04T03:06:32Z",
  "peerId": 32
},
{
  "asPath": [
    902,
    602,
    22
  ],
  "asPathLength": 3,
  "asn": 22,
  "at": "2023-02-04T03:06:32Z",
```

```

        "peerId": 6,
        "peerIp": "2000::20:100:10"
    },
    {
        "asPath": [
            902,
            602,
            22
        ],
        "asPathLength": 3,
        "asn": 22,
        "at": "2023-02-04T03:06:32Z",
        "peerId": 8,
        "peerIp": "2000::30:100:10"
    }
],
    "allViolationPeersCount": 12
},
    "orgName": "AutomationOnly5",
    "policyId": "bc4298d2-1a52-4339-83e8-1d8932e1fe61",
    "policyName": "03 - AS Path Length Violation",
    "rule": "ALARM_RULE_AS_PATH_LENGTH_VIOLATION",
    "severity": "ALARM_SEVERITY_RED",
    "state": "ALARM_STATE_ACTIVE",
    "tags": [
        "common tag",
        "prefix policy",
        "03 - AS Path Length Violation"
    ],
    "transitionedAt": "2023-02-04T03:09:32Z"
}

```

DNS Root Server Withdrawal Example

The following is an Amazon S3 and Google Storage notification log message example for a **DNS Root Server Withdrawal** alarm.

```

{
    "activatedAt": "2023-02-04T06:16:17Z",
    "alarmId": "5161f679-8e4e-4b95-a979-1788b3444136",
    "monitoredPeer": {
        "peerIp": "2000::30:100:10",
        "peerName": "Root DNS IPv6",
        "sessionId": "9b3f0207-a484-465b-886b-0c8bbcefb8bc"
    },
    "observed": {
        "withdrawnPrefix": "2001:503:ba3e::/48"
    },
    "orgName": "AutomationOnly5",
    "policyId": "3fb1473d-a1cb-43f2-b232-6a3cb470051b",
    "policyName": "20 - DNS Root Server Withdrawal",
    "rule": "ALARM_RULE_DNS_ROOT_SERVER_WITHDRAWAL",
    "severity": "ALARM_SEVERITY_RED",
    "state": "ALARM_STATE_ACTIVE",
    "transitionedAt": "2023-02-04T06:16:17Z"
}
{
    "activatedAt": "2023-02-04T06:16:17Z",
    "alarmId": "b87dc535-7151-4728-90f2-0b24b979d4b8",
    "monitoredPeer": {
        "peerIp": "10.31.32.1",
        "peerName": "Root DNS IPv4",
        "sessionId": "c5dcf2d2-99b7-4565-8b29-9b30f20ed2f7"
    },
}

```



```

"observed": {
  "withdrawnPrefix": "198.41.0.0/24"
},
"orgName": "AutomationOnly5",
"policyId": "3fb1473d-a1cb-43f2-b232-6a3cb470051b",
"policyName": "20 - DNS Root Server Withdrawal",
"rule": "ALARM_RULE_DNS_ROOT_SERVER_WITHDRAWAL",
"severity": "ALARM_SEVERITY_RED",
"state": "ALARM_STATE_ACTIVE",
"transitionedAt": "2023-02-04T06:16:17Z"
}

```

New AS Path Edge Example

The following is an Amazon S3 notification and Google Storage log message example for a **New AS Path Edge** alarm.

```

{
  "activatedAt": "2023-02-04T03:11:17Z",
  "alarmId": "4b9eb669-774d-4a6d-bed5-d559248953e8",
  "expected": {
    "numPeersToTrigger": 1
  },
  "monitoredPrefix": "88.88.109.0/24",
  "observed": {
    "allViolationPeers": [
      {
        "asPath": [
          916,
          700,
          620,
          36
        ],
        "asn": 36,
        "at": "2023-02-04T01:34:59Z",
        "peerId": 1,
        "peerIp": "10.11.12.1",
        "suspiciousEdges": [
          {
            "edgeId": {
              "fromAs": 36,
              "toAs": 620
            },
            "firstSeen": "2023-02-04T01:34:59Z",
            "lastSeen": "2023-02-04T01:34:59Z",
            "peerCount": 2,
            "prefixCount": 2,
            "prefixList": [
              "2002:5858:6d00::/48",
              "88.88.109.0/24"
            ]
          },
          {
            "edgeId": {
              "fromAs": 620,
              "toAs": 700
            },
            "firstSeen": "2023-02-04T01:34:59Z",
            "lastSeen": "2023-02-04T01:34:59Z",
            "peerCount": 2,
            "prefixCount": 2,
            "prefixList": [
              "88.88.109.0/24",
              "2002:5858:6d00::/48"
            ]
          }
        ]
      }
    ]
  }
}

```

```

    ]
  }
]
},
{
  "asPath": [
    916,
    700,
    621,
    36
  ],
  "asn": 36,
  "at": "2023-02-04T01:34:59Z",
  "peerId": 19,
  "suspiciousEdges": [
    {
      "edgeId": {
        "fromAs": 36,
        "toAs": 621
      },
      "firstSeen": "2023-02-04T01:34:59Z",
      "lastSeen": "2023-02-04T01:34:59Z",
      "peerCount": 2,
      "prefixCount": 2,
      "prefixList": [
        "88.88.109.0/24",
        "2002:5858:6d00::/48"
      ]
    },
    {
      "edgeId": {
        "fromAs": 621,
        "toAs": 700
      },
      "firstSeen": "2023-02-04T01:34:59Z",
      "lastSeen": "2023-02-04T01:34:59Z",
      "peerCount": 2,
      "prefixCount": 2,
      "prefixList": [
        "88.88.109.0/24",
        "2002:5858:6d00::/48"
      ]
    }
  ]
},
{
  "asPath": [
    916,
    700,
    619,
    36
  ],
  "asn": 36,
  "at": "2023-02-04T01:34:59Z",
  "peerId": 2,
  "peerIp": "10.11.12.2",
  "suspiciousEdges": [
    {
      "edgeId": {
        "fromAs": 36,
        "toAs": 619
      },
      "firstSeen": "2023-02-04T01:34:59Z",
      "lastSeen": "2023-02-04T01:34:59Z",

```

```

        "peerCount": 2,
        "prefixCount": 2,
        "prefixList": [
            "2002:5858:6d00::/48",
            "88.88.109.0/24"
        ]
    },
    {
        "edgeId": {
            "fromAs": 619,
            "toAs": 700
        },
        "firstSeen": "2023-02-04T01:34:59Z",
        "lastSeen": "2023-02-04T01:34:59Z",
        "peerCount": 2,
        "prefixCount": 2,
        "prefixList": [
            "88.88.109.0/24",
            "2002:5858:6d00::/48"
        ]
    }
]
},
{
    "asPath": [
        916,
        700,
        622,
        36
    ],
    "asn": 36,
    "at": "2023-02-04T01:34:59Z",
    "peerId": 20,
    "suspiciousEdges": [
        {
            "edgeId": {
                "fromAs": 36,
                "toAs": 622
            },
            "firstSeen": "2023-02-04T01:34:59Z",
            "lastSeen": "2023-02-04T01:34:59Z",
            "peerCount": 2,
            "prefixCount": 2,
            "prefixList": [
                "88.88.109.0/24",
                "2002:5858:6d00::/48"
            ]
        },
        {
            "edgeId": {
                "fromAs": 622,
                "toAs": 700
            },
            "firstSeen": "2023-02-04T01:34:59Z",
            "lastSeen": "2023-02-04T01:34:59Z",
            "peerCount": 2,
            "prefixCount": 2,
            "prefixList": [
                "88.88.109.0/24",
                "2002:5858:6d00::/48"
            ]
        }
    ]
}
],
},

```

```

{
  "asPath": [
    916,
    700,
    623,
    36
  ],
  "asn": 36,
  "at": "2023-02-04T01:34:59Z",
  "peerId": 21,
  "suspiciousEdges": [
    {
      "edgeId": {
        "fromAs": 36,
        "toAs": 623
      },
      "firstSeen": "2023-02-04T01:34:59Z",
      "lastSeen": "2023-02-04T01:34:59Z",
      "peerCount": 2,
      "prefixCount": 2,
      "prefixList": [
        "2002:5858:6d00::/48",
        "88.88.109.0/24"
      ]
    }
  ],
  {
    "edgeId": {
      "fromAs": 623,
      "toAs": 700
    },
    "firstSeen": "2023-02-04T01:34:59Z",
    "lastSeen": "2023-02-04T01:34:59Z",
    "peerCount": 2,
    "prefixCount": 2,
    "prefixList": [
      "88.88.109.0/24",
      "2002:5858:6d00::/48"
    ]
  }
]
},
{
  "asPath": [
    916,
    700,
    624,
    36
  ],
  "asn": 36,
  "at": "2023-02-04T01:34:59Z",
  "peerId": 22,
  "suspiciousEdges": [
    {
      "edgeId": {
        "fromAs": 36,
        "toAs": 624
      },
      "firstSeen": "2023-02-04T01:34:59Z",
      "lastSeen": "2023-02-04T01:34:59Z",
      "peerCount": 2,
      "prefixCount": 2,
      "prefixList": [
        "88.88.109.0/24",
        "2002:5858:6d00::/48"
      ]
    }
  ]
}

```

```

    ]
  },
  {
    "edgeId": {
      "fromAs": 624,
      "toAs": 700
    },
    "firstSeen": "2023-02-04T01:34:59Z",
    "lastSeen": "2023-02-04T01:34:59Z",
    "peerCount": 2,
    "prefixCount": 2,
    "prefixList": [
      "88.88.109.0/24",
      "2002:5858:6d00::/48"
    ]
  }
]
},
{
  "asPath": [
    916,
    700,
    618,
    36
  ],
  "asn": 36,
  "at": "2023-02-04T01:34:59Z",
  "peerId": 3,
  "peerIp": "10.11.12.3",
  "suspiciousEdges": [
    {
      "edgeId": {
        "fromAs": 36,
        "toAs": 618
      },
      "firstSeen": "2023-02-04T01:34:59Z",
      "lastSeen": "2023-02-04T01:34:59Z",
      "peerCount": 2,
      "prefixCount": 2,
      "prefixList": [
        "88.88.109.0/24",
        "2002:5858:6d00::/48"
      ]
    },
    {
      "edgeId": {
        "fromAs": 618,
        "toAs": 700
      },
      "firstSeen": "2023-02-04T01:34:59Z",
      "lastSeen": "2023-02-04T01:34:59Z",
      "peerCount": 2,
      "prefixCount": 2,
      "prefixList": [
        "88.88.109.0/24",
        "2002:5858:6d00::/48"
      ]
    }
  ]
}
],
{
  "asPath": [
    916,
    700,

```

```

        617,
        36
    ],
    "asn": 36,
    "at": "2023-02-04T01:34:59Z",
    "peerId": 4,
    "peerIp": "10.11.12.4",
    "suspiciousEdges": [
        {
            "edgeId": {
                "fromAs": 36,
                "toAs": 617
            },
            "firstSeen": "2023-02-04T01:34:59Z",
            "lastSeen": "2023-02-04T01:34:59Z",
            "peerCount": 2,
            "prefixCount": 2,
            "prefixList": [
                "88.88.109.0/24",
                "2002:5858:6d00::/48"
            ]
        },
        {
            "edgeId": {
                "fromAs": 617,
                "toAs": 700
            },
            "firstSeen": "2023-02-04T01:34:59Z",
            "lastSeen": "2023-02-04T01:34:59Z",
            "peerCount": 2,
            "prefixCount": 2,
            "prefixList": [
                "88.88.109.0/24",
                "2002:5858:6d00::/48"
            ]
        }
    ]
},
{
    "asPath": [
        916,
        700,
        616,
        36
    ],
    "asn": 36,
    "at": "2023-02-04T01:34:59Z",
    "peerId": 5,
    "peerIp": "10.11.12.5",
    "suspiciousEdges": [
        {
            "edgeId": {
                "fromAs": 36,
                "toAs": 616
            },
            "firstSeen": "2023-02-04T01:34:59Z",
            "lastSeen": "2023-02-04T01:34:59Z",
            "peerCount": 2,
            "prefixCount": 2,
            "prefixList": [
                "88.88.109.0/24",
                "2002:5858:6d00::/48"
            ]
        }
    ],
},

```

```

    {
      "edgeId": {
        "fromAs": 616,
        "toAs": 700
      },
      "firstSeen": "2023-02-04T01:34:59Z",
      "lastSeen": "2023-02-04T01:34:59Z",
      "peerCount": 2,
      "prefixCount": 2,
      "prefixList": [
        "2002:5858:6d00::/48",
        "88.88.109.0/24"
      ]
    }
  ],
  {
    "asPath": [
      916,
      700,
      615,
      36
    ],
    "asn": 36,
    "at": "2023-02-04T01:34:59Z",
    "peerId": 7,
    "peerIp": "10.31.32.1",
    "suspiciousEdges": [
      {
        "edgeId": {
          "fromAs": 36,
          "toAs": 615
        },
        "firstSeen": "2023-02-04T01:34:59Z",
        "lastSeen": "2023-02-04T01:34:59Z",
        "peerCount": 2,
        "prefixCount": 2,
        "prefixList": [
          "88.88.109.0/24",
          "2002:5858:6d00::/48"
        ]
      },
      {
        "edgeId": {
          "fromAs": 615,
          "toAs": 700
        },
        "firstSeen": "2023-02-04T01:34:59Z",
        "lastSeen": "2023-02-04T01:34:59Z",
        "peerCount": 2,
        "prefixCount": 2,
        "prefixList": [
          "88.88.109.0/24",
          "2002:5858:6d00::/48"
        ]
      }
    ]
  }
],
  "allViolationPeersCount": 10
},
"orgName": "AutomationOnly5",
"policyId": "3755ed13-6498-4cc6-9798-a1264d03b402",
"policyName": "04 - New AS Path Edge",

```

```

"rule": "ALARM_RULE_NEW_AS_PATH_EDGE",
"severity": "ALARM_SEVERITY_RED",
"state": "ALARM_STATE_ACTIVE",
"tags": [
  "common tag",
  "prefix policy",
  "04 - New AS Path Edge"
],
"transitionedAt": "2023-02-04T03:11:17Z"
}
{
"activatedAt": "2023-02-04T03:11:17Z",
"alarmId": "9alab970-144b-4256-a864-4eb26e698844",
"expected": {
  "numPeersToTrigger": 1
},
"monitoredPrefix": "2002:5858:6d00::/48",
"observed": {
  "allViolationPeers": [
    {
      "asPath": [
        916,
        700,
        616,
        36
      ],
      "asn": 36,
      "at": "2023-02-04T01:34:59Z",
      "peerId": 23,
      "suspiciousEdges": [
        {
          "edgeId": {
            "fromAs": 36,
            "toAs": 616
          },
          "firstSeen": "2023-02-04T01:34:59Z",
          "lastSeen": "2023-02-04T01:34:59Z",
          "peerCount": 2,
          "prefixCount": 2,
          "prefixList": [
            "88.88.109.0/24",
            "2002:5858:6d00::/48"
          ]
        },
        {
          "edgeId": {
            "fromAs": 616,
            "toAs": 700
          },
          "firstSeen": "2023-02-04T01:34:59Z",
          "lastSeen": "2023-02-04T01:34:59Z",
          "peerCount": 2,
          "prefixCount": 2,
          "prefixList": [
            "2002:5858:6d00::/48",
            "88.88.109.0/24"
          ]
        }
      ]
    }
  ],
  "asPath": [
    916,
    700,

```



```

        618,
        36
    ],
    "asn": 36,
    "at": "2023-02-04T01:34:59Z",
    "peerId": 24,
    "suspiciousEdges": [
        {
            "edgeId": {
                "fromAs": 36,
                "toAs": 618
            },
            "firstSeen": "2023-02-04T01:34:59Z",
            "lastSeen": "2023-02-04T01:34:59Z",
            "peerCount": 2,
            "prefixCount": 2,
            "prefixList": [
                "88.88.109.0/24",
                "2002:5858:6d00::/48"
            ]
        },
        {
            "edgeId": {
                "fromAs": 618,
                "toAs": 700
            },
            "firstSeen": "2023-02-04T01:34:59Z",
            "lastSeen": "2023-02-04T01:34:59Z",
            "peerCount": 2,
            "prefixCount": 2,
            "prefixList": [
                "88.88.109.0/24",
                "2002:5858:6d00::/48"
            ]
        }
    ]
},
{
    "asPath": [
        916,
        700,
        619,
        36
    ],
    "asn": 36,
    "at": "2023-02-04T01:34:59Z",
    "peerId": 25,
    "suspiciousEdges": [
        {
            "edgeId": {
                "fromAs": 36,
                "toAs": 619
            },
            "firstSeen": "2023-02-04T01:34:59Z",
            "lastSeen": "2023-02-04T01:34:59Z",
            "peerCount": 2,
            "prefixCount": 2,
            "prefixList": [
                "2002:5858:6d00::/48",
                "88.88.109.0/24"
            ]
        },
        {
            "edgeId": {

```

```

        "fromAs": 619,
        "toAs": 700
    },
    "firstSeen": "2023-02-04T01:34:59Z",
    "lastSeen": "2023-02-04T01:34:59Z",
    "peerCount": 2,
    "prefixCount": 2,
    "prefixList": [
        "88.88.109.0/24",
        "2002:5858:6d00::/48"
    ]
}
]
},
{
    "asPath": [
        916,
        700,
        620,
        36
    ],
    "asn": 36,
    "at": "2023-02-04T01:34:59Z",
    "peerId": 26,
    "suspiciousEdges": [
        {
            "edgeId": {
                "fromAs": 36,
                "toAs": 620
            },
            "firstSeen": "2023-02-04T01:34:59Z",
            "lastSeen": "2023-02-04T01:34:59Z",
            "peerCount": 2,
            "prefixCount": 2,
            "prefixList": [
                "2002:5858:6d00::/48",
                "88.88.109.0/24"
            ]
        },
        {
            "edgeId": {
                "fromAs": 620,
                "toAs": 700
            },
            "firstSeen": "2023-02-04T01:34:59Z",
            "lastSeen": "2023-02-04T01:34:59Z",
            "peerCount": 2,
            "prefixCount": 2,
            "prefixList": [
                "88.88.109.0/24",
                "2002:5858:6d00::/48"
            ]
        }
    ]
},
{
    "asPath": [
        916,
        700,
        621,
        36
    ],
    "asn": 36,
    "at": "2023-02-04T01:34:59Z",

```

```
"peerId": 27,
"suspiciousEdges": [
  {
    "edgeId": {
      "fromAs": 36,
      "toAs": 621
    },
    "firstSeen": "2023-02-04T01:34:59Z",
    "lastSeen": "2023-02-04T01:34:59Z",
    "peerCount": 2,
    "prefixCount": 2,
    "prefixList": [
      "88.88.109.0/24",
      "2002:5858:6d00::/48"
    ]
  },
  {
    "edgeId": {
      "fromAs": 621,
      "toAs": 700
    },
    "firstSeen": "2023-02-04T01:34:59Z",
    "lastSeen": "2023-02-04T01:34:59Z",
    "peerCount": 2,
    "prefixCount": 2,
    "prefixList": [
      "88.88.109.0/24",
      "2002:5858:6d00::/48"
    ]
  }
]
},
{
  "asPath": [
    916,
    700,
    622,
    36
  ],
  "asn": 36,
  "at": "2023-02-04T01:34:59Z",
  "peerId": 28,
  "suspiciousEdges": [
    {
      "edgeId": {
        "fromAs": 36,
        "toAs": 622
      },
      "firstSeen": "2023-02-04T01:34:59Z",
      "lastSeen": "2023-02-04T01:34:59Z",
      "peerCount": 2,
      "prefixCount": 2,
      "prefixList": [
        "88.88.109.0/24",
        "2002:5858:6d00::/48"
      ]
    },
    {
      "edgeId": {
        "fromAs": 622,
        "toAs": 700
      },
      "firstSeen": "2023-02-04T01:34:59Z",
      "lastSeen": "2023-02-04T01:34:59Z",
    }
  ]
}
```

```

        "peerCount": 2,
        "prefixCount": 2,
        "prefixList": [
            "88.88.109.0/24",
            "2002:5858:6d00::/48"
        ]
    }
]
},
{
    "asPath": [
        916,
        700,
        623,
        36
    ],
    "asn": 36,
    "at": "2023-02-04T01:34:59Z",
    "peerId": 29,
    "suspiciousEdges": [
        {
            "edgeId": {
                "fromAs": 36,
                "toAs": 623
            },
            "firstSeen": "2023-02-04T01:34:59Z",
            "lastSeen": "2023-02-04T01:34:59Z",
            "peerCount": 2,
            "prefixCount": 2,
            "prefixList": [
                "2002:5858:6d00::/48",
                "88.88.109.0/24"
            ]
        },
        {
            "edgeId": {
                "fromAs": 623,
                "toAs": 700
            },
            "firstSeen": "2023-02-04T01:34:59Z",
            "lastSeen": "2023-02-04T01:34:59Z",
            "peerCount": 2,
            "prefixCount": 2,
            "prefixList": [
                "88.88.109.0/24",
                "2002:5858:6d00::/48"
            ]
        }
    ]
},
{
    "asPath": [
        916,
        700,
        624,
        36
    ],
    "asn": 36,
    "at": "2023-02-04T01:34:59Z",
    "peerId": 30,
    "suspiciousEdges": [
        {
            "edgeId": {
                "fromAs": 36,

```

```

        "toAs": 624
      },
      "firstSeen": "2023-02-04T01:34:59Z",
      "lastSeen": "2023-02-04T01:34:59Z",
      "peerCount": 2,
      "prefixCount": 2,
      "prefixList": [
        "88.88.109.0/24",
        "2002:5858:6d00::/48"
      ]
    },
    {
      "edgeId": {
        "fromAs": 624,
        "toAs": 700
      },
      "firstSeen": "2023-02-04T01:34:59Z",
      "lastSeen": "2023-02-04T01:34:59Z",
      "peerCount": 2,
      "prefixCount": 2,
      "prefixList": [
        "88.88.109.0/24",
        "2002:5858:6d00::/48"
      ]
    }
  ]
},
{
  "asPath": [
    916,
    700,
    625,
    36
  ],
  "asn": 36,
  "at": "2023-02-04T01:34:59Z",
  "peerId": 31,
  "suspiciousEdges": [
    {
      "edgeId": {
        "fromAs": 36,
        "toAs": 625
      },
      "firstSeen": "2023-02-04T01:34:59Z",
      "lastSeen": "2023-02-04T01:34:59Z",
      "peerCount": 1,
      "prefixCount": 1,
      "prefixList": [
        "2002:5858:6d00::/48"
      ]
    },
    {
      "edgeId": {
        "fromAs": 625,
        "toAs": 700
      },
      "firstSeen": "2023-02-04T01:34:59Z",
      "lastSeen": "2023-02-04T01:34:59Z",
      "peerCount": 1,
      "prefixCount": 1,
      "prefixList": [
        "2002:5858:6d00::/48"
      ]
    }
  ]
}

```

```

    ]
  },
  {
    "asPath": [
      916,
      700,
      626,
      36
    ],
    "asn": 36,
    "at": "2023-02-04T01:34:59Z",
    "peerId": 32,
    "suspiciousEdges": [
      {
        "edgeId": {
          "fromAs": 36,
          "toAs": 626
        },
        "firstSeen": "2023-02-04T01:34:59Z",
        "lastSeen": "2023-02-04T01:34:59Z",
        "peerCount": 1,
        "prefixCount": 1,
        "prefixList": [
          "2002:5858:6d00::/48"
        ]
      },
      {
        "edgeId": {
          "fromAs": 626,
          "toAs": 700
        },
        "firstSeen": "2023-02-04T01:34:59Z",
        "lastSeen": "2023-02-04T01:34:59Z",
        "peerCount": 1,
        "prefixCount": 1,
        "prefixList": [
          "2002:5858:6d00::/48"
        ]
      }
    ]
  },
  {
    "asPath": [
      916,
      700,
      617,
      36
    ],
    "asn": 36,
    "at": "2023-02-04T01:34:59Z",
    "peerId": 6,
    "peerIp": "2000::20:100:10",
    "suspiciousEdges": [
      {
        "edgeId": {
          "fromAs": 36,
          "toAs": 617
        },
        "firstSeen": "2023-02-04T01:34:59Z",
        "lastSeen": "2023-02-04T01:34:59Z",
        "peerCount": 2,
        "prefixCount": 2,
        "prefixList": [
          "88.88.109.0/24",

```

```

        "2002:5858:6d00::/48"
      ]
    },
    {
      "edgeId": {
        "fromAs": 617,
        "toAs": 700
      },
      "firstSeen": "2023-02-04T01:34:59Z",
      "lastSeen": "2023-02-04T01:34:59Z",
      "peerCount": 2,
      "prefixCount": 2,
      "prefixList": [
        "88.88.109.0/24",
        "2002:5858:6d00::/48"
      ]
    }
  ]
},
{
  "asPath": [
    916,
    700,
    615,
    36
  ],
  "asn": 36,
  "at": "2023-02-04T01:34:59Z",
  "peerId": 8,
  "peerIp": "2000::30:100:10",
  "suspiciousEdges": [
    {
      "edgeId": {
        "fromAs": 36,
        "toAs": 615
      },
      "firstSeen": "2023-02-04T01:34:59Z",
      "lastSeen": "2023-02-04T01:34:59Z",
      "peerCount": 2,
      "prefixCount": 2,
      "prefixList": [
        "88.88.109.0/24",
        "2002:5858:6d00::/48"
      ]
    },
    {
      "edgeId": {
        "fromAs": 615,
        "toAs": 700
      },
      "firstSeen": "2023-02-04T01:34:59Z",
      "lastSeen": "2023-02-04T01:34:59Z",
      "peerCount": 2,
      "prefixCount": 2,
      "prefixList": [
        "88.88.109.0/24",
        "2002:5858:6d00::/48"
      ]
    }
  ]
}
],
"allViolationPeersCount": 12
},

```

```

"orgName": "AutomationOnly5",
"policyId": "3755ed13-6498-4cc6-9798-a1264d03b402",
"policyName": "04 - New AS Path Edge",
"rule": "ALARM_RULE_NEW_AS_PATH_EDGE",
"severity": "ALARM_SEVERITY_RED",
"state": "ALARM_STATE_ACTIVE",
"tags": [
  "common tag",
  "prefix policy",
  "04 - New AS Path Edge"
],
"transitionedAt": "2023-02-04T03:11:17Z"
}

```

Parent Aggregate Change Example

The following is an Amazon S3 notification and Google Storage notification log message example for a **Parent Aggregate Change** alarm.

```

{
  "activatedAt": "2023-02-04T05:23:55Z",
  "alarmId": "928315c2-c804-47dc-bc52-e2282e605753",
  "expected": {
    "allowedAggregates": [
      "2002::/16",
      "2002::/17",
      "2002:57e8::/36"
    ],
    "numPeersToClear": 1,
    "numPeersToTrigger": 2,
    "originAsns": [
      1000
    ],
    "originAsnsUsage": "ALARM_USAGE_EXCLUDE"
  },
  "monitoredPrefix": "2002:57e8::/48",
  "observed": {
    "allViolationPeers": [
      {
        "peerId": 23
      },
      {
        "peerId": 24
      },
      {
        "peerId": 25
      },
      {
        "peerId": 26
      },
      {
        "peerId": 27
      },
      {
        "peerId": 28
      },
      {
        "peerId": 29
      },
      {
        "peerId": 30
      },
      {
        "peerId": 31
      }
    ]
  }
}

```



```
    },
    {
      "peerId": 32
    },
    {
      "peerId": 6
    },
    {
      "peerId": 8
    }
  ],
  "allViolationPeersCount": 12,
  "lastViolationPeers": [
    {
      "asn": 6002,
      "at": "2023-02-04T05:03:37Z",
      "peerId": 6,
      "peerIp": "2000::20:100:10"
    },
    {
      "asn": 6010,
      "at": "2023-02-04T05:03:37Z",
      "peerId": 31
    },
    {
      "asn": 6009,
      "at": "2023-02-04T05:03:37Z",
      "peerId": 30
    },
    {
      "asn": 6003,
      "at": "2023-02-04T05:03:37Z",
      "peerId": 24
    },
    {
      "asn": 6011,
      "at": "2023-02-04T05:03:37Z",
      "peerId": 32
    },
    {
      "asn": 6005,
      "at": "2023-02-04T05:03:37Z",
      "peerId": 26
    },
    {
      "asn": 6007,
      "at": "2023-02-04T05:03:37Z",
      "peerId": 28
    },
    {
      "asn": 6004,
      "at": "2023-02-04T05:03:37Z",
      "peerId": 25
    },
    {
      "asn": 6006,
      "at": "2023-02-04T05:03:37Z",
      "peerId": 27
    },
    {
      "asn": 6000,
      "at": "2023-02-04T05:03:37Z",
      "peerId": 8,
      "peerIp": "2000::30:100:10"
    }
  ]
}
```

```

    },
    {
      "asn": 6001,
      "at": "2023-02-04T05:03:37Z",
      "peerId": 23
    },
    {
      "asn": 6008,
      "at": "2023-02-04T05:03:37Z",
      "peerId": 29
    }
  ],
  "lastViolationPeersCount": 12,
  "lastViolationPrefix": "2002:57e8::/36",
  "violationPrefixesCount": 3
},
"orgName": "AutomationOnly5",
"policyId": "3dd434f4-92fe-447f-b7e8-129b09cff9da",
"policyName": "17 - Parent Aggregate Change - Test 3",
"rule": "ALARM_RULE_PARENT_AGGREGATE_CHANGE",
"severity": "ALARM_SEVERITY_RED",
"state": "ALARM_STATE_ACTIVE",
"tags": [
  "common tag",
  "prefix policy",
  "17 - Parent Aggregate Change"
],
"transitionedAt": "2023-02-04T05:23:55Z"
}
{
  "activatedAt": "2023-02-04T05:23:55Z",
  "alarmId": "c3d24f64-5814-463e-855f-da56545a621f",
  "expected": {
    "allowedAggregates": [
      "87.232.0.0/22"
    ],
    "numPeersToClear": 1,
    "numPeersToTrigger": 2,
    "originAsns": [
      1000
    ],
    "originAsnsUsage": "ALARM_USAGE_EXCLUDE"
  },
  "monitoredPrefix": "87.232.0.0/24",
  "observed": {
    "allViolationPeers": [
      {
        "peerId": 1
      },
      {
        "peerId": 19
      },
      {
        "peerId": 2
      },
      {
        "peerId": 20
      },
      {
        "peerId": 21
      },
      {
        "peerId": 22
      }
    ],

```

```
{
  "peerId": 3
},
{
  "peerId": 4
},
{
  "peerId": 5
},
{
  "peerId": 7
}
],
"allViolationPeersCount": 10,
"lastViolationPeers": [
  {
    "asn": 6004,
    "at": "2023-02-04T05:03:37Z",
    "peerId": 2,
    "peerIp": "10.11.12.2"
  },
  {
    "asn": 6008,
    "at": "2023-02-04T05:03:37Z",
    "peerId": 21
  },
  {
    "asn": 6009,
    "at": "2023-02-04T05:03:37Z",
    "peerId": 22
  },
  {
    "asn": 6002,
    "at": "2023-02-04T05:03:37Z",
    "peerId": 4,
    "peerIp": "10.11.12.4"
  },
  {
    "asn": 6003,
    "at": "2023-02-04T05:03:37Z",
    "peerId": 3,
    "peerIp": "10.11.12.3"
  },
  {
    "asn": 6005,
    "at": "2023-02-04T05:03:37Z",
    "peerId": 1,
    "peerIp": "10.11.12.1"
  },
  {
    "asn": 6006,
    "at": "2023-02-04T05:03:37Z",
    "peerId": 19
  },
  {
    "asn": 6001,
    "at": "2023-02-04T05:03:37Z",
    "peerId": 5,
    "peerIp": "10.11.12.5"
  },
  {
    "asn": 6000,
    "at": "2023-02-04T05:03:37Z",
    "peerId": 7,
```

```

        "peerIp": "10.31.32.1"
      },
      {
        "asn": 6007,
        "at": "2023-02-04T05:03:37Z",
        "peerId": 20
      }
    ],
    "lastViolationPeersCount": 10,
    "lastViolationPrefix": "87.232.0.0/22",
    "violationPrefixesCount": 1
  },
  "orgName": "AutomationOnly5",
  "policyId": "3dd434f4-92fe-447f-b7e8-129b09cff9da",
  "policyName": "17 - Parent Aggregate Change - Test 3",
  "rule": "ALARM_RULE_PARENT_AGGREGATE_CHANGE",
  "severity": "ALARM_SEVERITY_RED",
  "state": "ALARM_STATE_ACTIVE",
  "tags": [
    "common tag",
    "prefix policy",
    "17 - Parent Aggregate Change"
  ],
  "transitionedAt": "2023-02-04T05:23:55Z"
}

```

Peer Advertised Prefix Count Example

The following is an Amazon S3 notification and Google Storage notification log message example for a **Peer Advertised Prefix Count** alarm.

```

{
  "activatedAt": "2023-02-04T06:18:37Z",
  "alarmId": "139a7983-36ba-4d17-8371-2480290f3799",
  "expected": {
    "prefixCounts": [
      {
        "addressFamily": "ALARM_BGP_AF_IPV4",
        "maxPrefixes": 100,
        "minPrefixes": 10
      }
    ]
  },
  "monitoredPeer": {
    "ciscoPeerIp": "104.236.154.30",
    "ciscoPeerName": "RS06",
    "peerIp": "10.11.12.1",
    "peerName": "BGP-1",
    "sessionId": "de26c09c-15f6-435f-9044-c9a89fdc7bed"
  },
  "observed": {
    "prefixCounts": [
      {
        "addressFamily": "ALARM_BGP_AF_IPV4",
        "prefixCount": 2000
      }
    ]
  },
  "orgName": "AutomationOnly5",
  "policyId": "482de3d2-8550-4b84-a0ab-3b3e36f5869a",
  "policyName": "22 - Peer Advertised Prefix Count",
  "rule": "ALARM_RULE_ADVERTISED_PREFIX_COUNT",
  "severity": "ALARM_SEVERITY_RED",
  "state": "ALARM_STATE_ACTIVE",
}

```

```

    "transitionedAt": "2023-02-04T06:18:37Z"
  }

```

Peer Down Example

The following is an Amazon S3 notification and Google Storage notification log message example for a **Peer Down** alarm.

```

{
  "activatedAt": "2023-02-04T06:17:05Z",
  "alarmId": "b654ced0-5357-4eb7-b3c9-27cbd24a8f65",
  "monitoredPeer": {
    "ciscoPeerIp": "3.21.42.66",
    "ciscoPeerName": "RS95",
    "peerIp": "10.11.12.2",
    "peerName": "BGP-2",
    "sessionId": "29651423-e603-4a11-89b7-37500e40e562"
  },
  "observed": {
    "lastUpdatedAt": "2019-10-03T22:30:00Z"
  },
  "orgName": "AutomationOnly5",
  "policyId": "ff3b620d-33a9-49c0-9e33-b99b53c55b1d",
  "policyName": "21 - Peer Down",
  "rule": "ALARM_RULE_PEER_DOWN",
  "severity": "ALARM_SEVERITY_YELLOW",
  "state": "ALARM_STATE_ACTIVE",
  "transitionedAt": "2023-02-04T06:17:05Z"
}

```

Prefix Advertisement Example

The following is an Amazon S3 notification and Google Storage notification log message example for a **Prefix Advertisement** alarm.

```

{
  "activatedAt": "2023-02-04T03:16:25Z",
  "alarmId": "79222047-4954-4b6e-a339-9d01bfb06434",
  "clearedAt": "2023-02-04T03:15:47Z",
  "expected": {
    "numPeersToClear": 1,
    "numPeersToTrigger": 2
  },
  "monitoredPrefix": "218.56.100.0/28",
  "observed": {
    "allViolationPeers": [
      {
        "asn": 20,
        "at": "2023-02-04T03:15:04Z",
        "peerId": 1,
        "peerIp": "10.11.12.1"
      },
      {
        "asn": 20,
        "at": "2023-02-04T03:15:04Z",
        "peerId": 19
      },
      {
        "asn": 20,
        "at": "2023-02-04T03:15:04Z",
        "peerId": 2,
        "peerIp": "10.11.12.2"
      }
    ]
  }
}

```

```

    {
      "asn": 20,
      "at": "2023-02-04T03:15:04Z",
      "peerId": 20
    },
    {
      "asn": 20,
      "at": "2023-02-04T03:15:04Z",
      "peerId": 21
    },
    {
      "asn": 20,
      "at": "2023-02-04T03:15:04Z",
      "peerId": 22
    },
    {
      "asn": 20,
      "at": "2023-02-04T03:15:04Z",
      "peerId": 3,
      "peerIp": "10.11.12.3"
    },
    {
      "asn": 20,
      "at": "2023-02-04T03:15:04Z",
      "peerId": 4,
      "peerIp": "10.11.12.4"
    },
    {
      "asn": 20,
      "at": "2023-02-04T03:15:04Z",
      "peerId": 5,
      "peerIp": "10.11.12.5"
    },
    {
      "asn": 20,
      "at": "2023-02-04T03:15:04Z",
      "peerId": 7,
      "peerIp": "10.31.32.1"
    }
  ],
  "allViolationPeersCount": 10
},
"orgName": "AutomationOnly5",
"policyId": "4d4816b9-e579-4209-a907-8d909aaf1f0",
"policyName": "05 - Prefix Advertisement",
"rule": "ALARM_RULE_PREFIX_ADVERTISEMENT",
"severity": "ALARM_SEVERITY_RED",
"state": "ALARM_STATE_ACTIVE",
"tags": [
  "common tag",
  "prefix policy",
  "05 - Prefix Advertisement"
],
"transitionedAt": "2023-02-04T03:16:25Z"
}
{
  "activatedAt": "2023-02-04T03:16:25Z",
  "alarmId": "ba974865-7e94-4623-ad8f-d660acf7d69f",
  "clearedAt": "2023-02-04T03:15:47Z",
  "expected": {
    "numPeersToClear": 1,
    "numPeersToTrigger": 2
  },
  "monitoredPrefix": "2002:da38:6400::/48",

```

```
"observed": {
  "allViolationPeers": [
    {
      "asn": 20,
      "at": "2023-02-04T03:15:04Z",
      "peerId": 23
    },
    {
      "asn": 20,
      "at": "2023-02-04T03:15:04Z",
      "peerId": 24
    },
    {
      "asn": 20,
      "at": "2023-02-04T03:15:04Z",
      "peerId": 25
    },
    {
      "asn": 20,
      "at": "2023-02-04T03:15:04Z",
      "peerId": 26
    },
    {
      "asn": 20,
      "at": "2023-02-04T03:15:04Z",
      "peerId": 27
    },
    {
      "asn": 20,
      "at": "2023-02-04T03:15:04Z",
      "peerId": 28
    },
    {
      "asn": 20,
      "at": "2023-02-04T03:15:04Z",
      "peerId": 29
    },
    {
      "asn": 20,
      "at": "2023-02-04T03:15:04Z",
      "peerId": 30
    },
    {
      "asn": 20,
      "at": "2023-02-04T03:15:04Z",
      "peerId": 31
    },
    {
      "asn": 20,
      "at": "2023-02-04T03:15:04Z",
      "peerId": 32
    },
    {
      "asn": 20,
      "at": "2023-02-04T03:15:04Z",
      "peerId": 6,
      "peerIp": "2000::20:100:10"
    },
    {
      "asn": 20,
      "at": "2023-02-04T03:15:04Z",
      "peerId": 8,
      "peerIp": "2000::30:100:10"
    }
  ]
}
```

```

    ],
    "allViolationPeersCount": 12
  },
  "orgName": "AutomationOnly5",
  "policyId": "4d4816b9-e579-4209-a907-8d909aafa1f0",
  "policyName": "05 - Prefix Advertisement",
  "rule": "ALARM_RULE_PREFIX_ADVERTISEMENT",
  "severity": "ALARM_SEVERITY_RED",
  "state": "ALARM_STATE_ACTIVE",
  "tags": [
    "common tag",
    "prefix policy",
    "05 - Prefix Advertisement"
  ],
  "transitionedAt": "2023-02-04T03:16:25Z"
}

```

Prefix Withdrawal Example

The following is an Amazon S3 notification and Google Storage notification log message example for a **Prefix Withdrawal** alarm.

```

{
  "activatedAt": "2023-02-04T03:20:36Z",
  "alarmId": "2e12713b-4ecf-4d59-868a-00f07aba47ae",
  "clearedAt": "2023-02-04T03:19:55Z",
  "expected": {
    "numPeersToClear": 1,
    "numPeersToTrigger": 2
  },
  "monitoredPrefix": "100.200.1.0/24",
  "observed": {
    "allViolationPeers": [
      {
        "at": "2023-02-04T03:19:13Z",
        "peerId": 1,
        "peerIp": "10.11.12.1"
      },
      {
        "at": "2023-02-04T03:19:13Z",
        "peerId": 19
      },
      {
        "at": "2023-02-04T03:19:13Z",
        "peerId": 20
      },
      {
        "at": "2023-02-04T03:19:13Z",
        "peerId": 21
      },
      {
        "at": "2023-02-04T03:19:13Z",
        "peerId": 22
      },
      {
        "at": "2023-02-04T03:19:13Z",
        "peerId": 3,
        "peerIp": "10.11.12.3"
      },
      {
        "at": "2023-02-04T03:19:13Z",
        "peerId": 4,
        "peerIp": "10.11.12.4"
      },
    ]
  }
}

```



```

    {
      "at": "2023-02-04T03:19:13Z",
      "peerId": 5,
      "peerIp": "10.11.12.5"
    },
    {
      "at": "2023-02-04T03:19:13Z",
      "peerId": 7,
      "peerIp": "10.31.32.1"
    }
  ],
  "allViolationPeersCount": 9
},
"orgName": "AutomationOnly5",
"policyId": "16105783-75c8-4c98-be71-b0a758645f41",
"policyName": "06 - Prefix Withdrawal",
"rule": "ALARM_RULE_PREFIX_WITHDRAWAL",
"severity": "ALARM_SEVERITY_RED",
"state": "ALARM_STATE_ACTIVE",
"tags": [
  "common tag",
  "prefix policy",
  "06 - Prefix Withdrawal"
],
"transitionedAt": "2023-02-04T03:20:36Z"
}
{
"activatedAt": "2023-02-04T03:20:36Z",
"alarmId": "3c4cf6e0-e6f2-475d-9030-4bc51a7e0550",
"clearedAt": "2023-02-04T03:19:55Z",
"expected": {
  "numPeersToClear": 1,
  "numPeersToTrigger": 2
},
"monitoredPrefix": "2002:64c8:100::/48",
"observed": {
  "allViolationPeers": [
    {
      "at": "2023-02-04T03:19:13Z",
      "peerId": 23
    },
    {
      "at": "2023-02-04T03:19:13Z",
      "peerId": 24
    },
    {
      "at": "2023-02-04T03:19:13Z",
      "peerId": 25
    },
    {
      "at": "2023-02-04T03:19:13Z",
      "peerId": 26
    },
    {
      "at": "2023-02-04T03:19:13Z",
      "peerId": 27
    },
    {
      "at": "2023-02-04T03:19:13Z",
      "peerId": 28
    },
    {
      "at": "2023-02-04T03:19:13Z",
      "peerId": 29
    }
  ]
}

```

```

    },
    {
      "at": "2023-02-04T03:19:13Z",
      "peerId": 30
    },
    {
      "at": "2023-02-04T03:19:13Z",
      "peerId": 31
    },
    {
      "at": "2023-02-04T03:19:13Z",
      "peerId": 32
    },
    {
      "at": "2023-02-04T03:19:13Z",
      "peerId": 6,
      "peerIp": "2000::20:100:10"
    },
    {
      "at": "2023-02-04T03:19:13Z",
      "peerId": 8,
      "peerIp": "2000::30:100:10"
    }
  ],
  "allViolationPeersCount": 12
},
"orgName": "AutomationOnly5",
"policyId": "16105783-75c8-4c98-be71-b0a758645f41",
"policyName": "06 - Prefix Withdrawal",
"rule": "ALARM_RULE_PREFIX_WITHDRAWAL",
"severity": "ALARM_SEVERITY_RED",
"state": "ALARM_STATE_ACTIVE",
"tags": [
  "common tag",
  "prefix policy",
  "06 - Prefix Withdrawal"
],
"transitionedAt": "2023-02-04T03:20:36Z"
}

```

Prohibited IP Prefix Example

The following is an S3 and Google Storage notification log message example for a **Prohibited IP Prefix** (Full Bogon) alarm.

```

{
  "activatedAt": "2023-02-04T06:11:31Z",
  "alarmId": "a077c6cd-5a74-4378-8d60-e8acb39ae2c7",
  "clearedAt": "2023-02-04T06:09:26Z",
  "monitoredPeer": {
    "ciscoPeerIp": "104.236.154.30",
    "ciscoPeerName": "RS06",
    "peerIp": "10.11.12.5",
    "peerName": "FullBogon-1",
    "sessionId": "f5327ffb-221f-49d6-b8a2-2b812d02d35e"
  },
  "observed": {
    "lastViolationPeerPrefix": {
      "at": "2023-02-04T06:07:33Z",
      "bogonDetails": {
        "bogonType": "ALARM_BOGON_TYPE_FULL_BOGON",
        "prohibitedPrefixBlock": "5.44.248.0/21"
      },
      "prefix": "5.44.248.0/21"
    }
  }
}

```

```

    },
    "violationPrefixesCount": 1
  },
  "orgName": "AutomationOnly5",
  "policyId": "d011c5e4-54a1-41bb-8c7f-963d9caab208",
  "policyName": "19 - Prohibited IP Prefix - FullBogon",
  "rule": "ALARM_RULE_PROHIBITED_IP_PREFIX",
  "severity": "ALARM_SEVERITY_YELLOW",
  "state": "ALARM_STATE_ACTIVE",
  "transitionedAt": "2023-02-04T06:11:31Z"
}
{
  "activatedAt": "2023-02-04T06:11:31Z",
  "alarmId": "142659ed-15f1-4d60-b2d6-3d0da5c75b17",
  "clearedAt": "2023-02-04T06:09:26Z",
  "monitoredPeer": {
    "ciscoPeerIp": "2604:a880:1:20::2de:1001",
    "ciscoPeerName": "RS06",
    "peerIp": "2000::20:100:10",
    "peerName": "FullBogon-2",
    "sessionId": "639f069d-9ccd-46d0-b8b2-77054a199ce8"
  },
  "observed": {
    "lastViolationPeerPrefix": {
      "at": "2023-02-04T06:07:33Z",
      "bogonDetails": {
        "bogonType": "ALARM_BOGON_TYPE_FULL_BOGON",
        "prohibitedPrefixBlock": "2001:506:101::/48"
      },
      "prefix": "2001:506:101::/48"
    },
    "violationPrefixesCount": 1
  },
  "orgName": "AutomationOnly5",
  "policyId": "d011c5e4-54a1-41bb-8c7f-963d9caab208",
  "policyName": "19 - Prohibited IP Prefix - FullBogon",
  "rule": "ALARM_RULE_PROHIBITED_IP_PREFIX",
  "severity": "ALARM_SEVERITY_YELLOW",
  "state": "ALARM_STATE_ACTIVE",
  "transitionedAt": "2023-02-04T06:11:31Z"
}

```

ROA Expiry Example

The following is an Amazon S3 notification and Google Storage notification log message example for a **ROA Expiry** alarm.

```

{
  "activatedAt": "2023-02-04T03:27:02Z",
  "alarmId": "9f8eb76a-3eff-4e8b-809e-53bf0fd56ebe",
  "clearedAt": "2023-02-04T03:26:20Z",
  "expected": {
    "numPeersToTrigger": 1
  },
  "monitoredPrefix": "2002:101:7700::/48",
  "observed": {
    "allViolationPeers": [
      {
        "asn": 33,
        "at": "2023-02-04T03:25:38Z",
        "peerId": 23
      },
      {
        "asn": 33,

```

```

    "at": "2023-02-04T03:25:38Z",
    "peerId": 24
  },
  {
    "asn": 33,
    "at": "2023-02-04T03:25:38Z",
    "peerId": 25
  },
  {
    "asn": 33,
    "at": "2023-02-04T03:25:38Z",
    "peerId": 26
  },
  {
    "asn": 33,
    "at": "2023-02-04T03:25:38Z",
    "peerId": 27
  },
  {
    "asn": 33,
    "at": "2023-02-04T03:25:38Z",
    "peerId": 28
  },
  {
    "asn": 33,
    "at": "2023-02-04T03:25:38Z",
    "peerId": 29
  },
  {
    "asn": 33,
    "at": "2023-02-04T03:25:38Z",
    "peerId": 30
  },
  {
    "asn": 33,
    "at": "2023-02-04T03:25:38Z",
    "peerId": 31
  },
  {
    "asn": 33,
    "at": "2023-02-04T03:25:38Z",
    "peerId": 32
  },
  {
    "asn": 33,
    "at": "2023-02-04T03:25:38Z",
    "peerId": 6,
    "peerIp": "2000::20:100:10"
  },
  {
    "asn": 33,
    "at": "2023-02-04T03:25:38Z",
    "peerId": 8,
    "peerIp": "2000::30:100:10"
  }
],
"allViolationPeersCount": 12,
"roas": [
  {
    "asn": 33,
    "maxLength": 48,
    "notAfter": "2023-02-17T03:49:38Z",
    "notBefore": "2022-02-03T03:49:38Z",
    "prefix": "2002:101:7700::/48",
  }
]

```

```

        "rpkiStatus": "ALARM_ROA_VALID",
        "trustAnchor": "ALARM_AFRINIC"
    },
    {
        "asn": 33,
        "maxLength": 48,
        "notAfter": "2023-02-17T19:24:49Z",
        "notBefore": "2022-02-03T19:24:49Z",
        "prefix": "2002:101:7700::/48",
        "rpkiStatus": "ALARM_ROA_VALID",
        "trustAnchor": "ALARM_AFRINIC"
    },
    {
        "asn": 33,
        "maxLength": 48,
        "notAfter": "2023-02-18T01:34:59Z",
        "notBefore": "2022-02-04T01:34:58Z",
        "prefix": "2002:101:7700::/48",
        "rpkiStatus": "ALARM_ROA_VALID",
        "trustAnchor": "ALARM_AFRINIC"
    }
]
},
"orgName": "AutomationOnly5",
"policyId": "d3d47d8c-fee7-45ab-baee-3a860128aa65",
"policyName": "08 - ROA Expiry",
"rule": "ALARM_RULE_ROA_EXPIRY",
"severity": "ALARM_SEVERITY_RED",
"state": "ALARM_STATE_ACTIVE",
"tags": [
    "common tag",
    "prefix policy",
    "08 - ROA Expiry"
],
"transitionedAt": "2023-02-04T03:27:02Z"
}
{
"activatedAt": "2023-02-04T03:27:02Z",
"alarmId": "e85e68ad-e16d-4892-9fb9-c71bd92f9caf",
"clearedAt": "2023-02-04T03:26:20Z",
"expected": {
    "numPeersToTrigger": 1
},
"monitoredPrefix": "210.176.151.0/24",
"observed": {
    "allViolationPeers": [
        {
            "asn": 33,
            "at": "2023-02-04T03:25:38Z",
            "peerId": 1,
            "peerIp": "10.11.12.1"
        },
        {
            "asn": 33,
            "at": "2023-02-04T03:25:38Z",
            "peerId": 19
        },
        {
            "asn": 33,
            "at": "2023-02-04T03:25:38Z",
            "peerId": 2,
            "peerIp": "10.11.12.2"
        }
    ]
}
}

```

```

    "asn": 33,
    "at": "2023-02-04T03:25:38Z",
    "peerId": 20
  },
  {
    "asn": 33,
    "at": "2023-02-04T03:25:38Z",
    "peerId": 21
  },
  {
    "asn": 33,
    "at": "2023-02-04T03:25:38Z",
    "peerId": 22
  },
  {
    "asn": 33,
    "at": "2023-02-04T03:25:38Z",
    "peerId": 3,
    "peerIp": "10.11.12.3"
  },
  {
    "asn": 33,
    "at": "2023-02-04T03:25:38Z",
    "peerId": 4,
    "peerIp": "10.11.12.4"
  },
  {
    "asn": 33,
    "at": "2023-02-04T03:25:38Z",
    "peerId": 5,
    "peerIp": "10.11.12.5"
  },
  {
    "asn": 33,
    "at": "2023-02-04T03:25:38Z",
    "peerId": 7,
    "peerIp": "10.31.32.1"
  }
],
"allViolationPeersCount": 10,
"roas": [
  {
    "asn": 33,
    "maxLength": 24,
    "notAfter": "2023-02-17T03:49:38Z",
    "notBefore": "2022-02-03T03:49:38Z",
    "prefix": "210.176.151.0/24",
    "rpkiStatus": "ALARM_ROA_VALID",
    "trustAnchor": "ALARM_AFRINIC"
  },
  {
    "asn": 33,
    "maxLength": 24,
    "notAfter": "2023-02-17T19:24:49Z",
    "notBefore": "2022-02-03T19:24:49Z",
    "prefix": "210.176.151.0/24",
    "rpkiStatus": "ALARM_ROA_VALID",
    "trustAnchor": "ALARM_AFRINIC"
  },
  {
    "asn": 33,
    "maxLength": 24,
    "notAfter": "2023-02-18T01:34:58Z",
    "notBefore": "2022-02-04T01:34:58Z",

```

```

        "prefix": "210.176.151.0/24",
        "rpkiStatus": "ALARM_ROA_VALID",
        "trustAnchor": "ALARM_AFRINIC"
    }
]
},
"orgName": "AutomationOnly5",
"policyId": "d3d47d8c-fee7-45ab-baee-3a860128aa65",
"policyName": "08 - ROA Expiry",
"rule": "ALARM_RULE_ROA_EXPIRY",
"severity": "ALARM_SEVERITY_RED",
"state": "ALARM_STATE_ACTIVE",
"tags": [
    "common tag",
    "prefix policy",
    "08 - ROA Expiry"
],
"transitionedAt": "2023-02-04T03:27:02Z"
}

```

ROA Not Found Example

The following is an Amazon S3 notification and Google Storage notification log message example for a **ROA Not Found** alarm.

```

{
  "activatedAt": "2023-02-04T03:22:07Z",
  "alarmId": "992266a8-bc34-4e6f-b396-6f0c956886ae",
  "monitoredPrefix": "2.2.2.2/32",
  "observed": {
    "allViolationPeers": [
      {
        "asn": 31,
        "at": "2023-02-04T01:34:58Z",
        "peerId": 1,
        "peerIp": "10.11.12.1"
      },
      {
        "asn": 31,
        "at": "2023-02-04T01:34:58Z",
        "peerId": 19
      },
      {
        "asn": 31,
        "at": "2023-02-04T01:34:58Z",
        "peerId": 2,
        "peerIp": "10.11.12.2"
      },
      {
        "asn": 31,
        "at": "2023-02-04T01:34:58Z",
        "peerId": 20
      },
      {
        "asn": 31,
        "at": "2023-02-04T01:34:58Z",
        "peerId": 21
      },
      {
        "asn": 31,
        "at": "2023-02-04T01:34:58Z",
        "peerId": 22
      },
      {

```

```

        "asn": 31,
        "at": "2023-02-04T01:34:58Z",
        "peerId": 3,
        "peerIp": "10.11.12.3"
    },
    {
        "asn": 31,
        "at": "2023-02-04T01:34:58Z",
        "peerId": 4,
        "peerIp": "10.11.12.4"
    },
    {
        "asn": 31,
        "at": "2023-02-04T01:34:58Z",
        "peerId": 5,
        "peerIp": "10.11.12.5"
    },
    {
        "asn": 31,
        "at": "2023-02-04T01:34:58Z",
        "peerId": 7,
        "peerIp": "10.31.32.1"
    }
],
    "allViolationPeersCount": 10
},
    "orgName": "AutomationOnly5",
    "policyId": "588687b4-4e2c-44d6-8f93-56957139b4f4",
    "policyName": "07 - ROA Not Found",
    "rule": "ALARM_RULE_ROA_NOT_FOUND",
    "severity": "ALARM_SEVERITY_RED",
    "state": "ALARM_STATE_ACTIVE",
    "tags": [
        "common tag",
        "prefix policy",
        "07 - ROA Not Found"
    ],
    "transitionedAt": "2023-02-04T03:22:07Z"
}
{
    "activatedAt": "2023-02-04T03:22:07Z",
    "alarmId": "c7ff225d-f4e0-49d7-b607-f9d4f98b346f",
    "monitoredPrefix": "2002:202:202::/48",
    "observed": {
        "allViolationPeers": [
            {
                "asn": 31,
                "at": "2023-02-04T01:34:58Z",
                "peerId": 23
            },
            {
                "asn": 31,
                "at": "2023-02-04T01:34:58Z",
                "peerId": 24
            },
            {
                "asn": 31,
                "at": "2023-02-04T01:34:58Z",
                "peerId": 25
            },
            {
                "asn": 31,
                "at": "2023-02-04T01:34:58Z",
                "peerId": 26
            }
        ]
    }
}

```



```
    },
    {
      "asn": 31,
      "at": "2023-02-04T01:34:58Z",
      "peerId": 27
    },
    {
      "asn": 31,
      "at": "2023-02-04T01:34:58Z",
      "peerId": 28
    },
    {
      "asn": 31,
      "at": "2023-02-04T01:34:58Z",
      "peerId": 29
    },
    {
      "asn": 31,
      "at": "2023-02-04T01:34:58Z",
      "peerId": 30
    },
    {
      "asn": 31,
      "at": "2023-02-04T01:34:58Z",
      "peerId": 31
    },
    {
      "asn": 31,
      "at": "2023-02-04T01:34:58Z",
      "peerId": 32
    },
    {
      "asn": 31,
      "at": "2023-02-04T01:34:58Z",
      "peerId": 6,
      "peerIp": "2000::20:100:10"
    },
    {
      "asn": 31,
      "at": "2023-02-04T01:34:58Z",
      "peerId": 8,
      "peerIp": "2000::30:100:10"
    }
  ],
  "allViolationPeersCount": 12
},
"orgName": "AutomationOnly5",
"policyId": "588687b4-4e2c-44d6-8f93-56957139b4f4",
"policyName": "07 - ROA Not Found",
"rule": "ALARM_RULE_ROA_NOT_FOUND",
"severity": "ALARM_SEVERITY_RED",
"state": "ALARM_STATE_ACTIVE",
"tags": [
  "common tag",
  "prefix policy",
  "07 - ROA Not Found"
],
"transitionedAt": "2023-02-04T03:22:07Z"
}
```

ROA Failure Example

The following is an Amazon S3 notification and Google Storage notification log message example for an **ROA Failure** alarm.

```
{
  "activatedAt": "2023-02-04T03:31:32Z",
  "alarmId": "358c3f57-80b8-4685-baec-7d913f39988e",
  "clearedAt": "2023-02-04T03:30:51Z",
  "expected": {
    "numPeersToTrigger": 1,
    "originAsns": [
      24,
      1136
    ]
  },
  "monitoredPrefix": "194.45.8.0/22",
  "observed": {
    "allViolationPeers": [
      {
        "asn": 23,
        "at": "2023-02-04T03:30:09Z",
        "peerId": 1,
        "peerIp": "10.11.12.1"
      },
      {
        "asn": 23,
        "at": "2023-02-04T03:30:09Z",
        "peerId": 19
      },
      {
        "asn": 23,
        "at": "2023-02-04T03:30:09Z",
        "peerId": 2,
        "peerIp": "10.11.12.2"
      },
      {
        "asn": 23,
        "at": "2023-02-04T03:30:09Z",
        "peerId": 20
      },
      {
        "asn": 23,
        "at": "2023-02-04T03:30:09Z",
        "peerId": 21
      },
      {
        "asn": 23,
        "at": "2023-02-04T03:30:09Z",
        "peerId": 22
      },
      {
        "asn": 23,
        "at": "2023-02-04T03:30:09Z",
        "peerId": 3,
        "peerIp": "10.11.12.3"
      },
      {
        "asn": 23,
        "at": "2023-02-04T03:30:09Z",
        "peerId": 4,
        "peerIp": "10.11.12.4"
      },
      {

```

```

        "asn": 23,
        "at": "2023-02-04T03:30:09Z",
        "peerId": 5,
        "peerIp": "10.11.12.5"
      },
      {
        "asn": 23,
        "at": "2023-02-04T03:30:09Z",
        "peerId": 7,
        "peerIp": "10.31.32.1"
      }
    ],
    "allViolationPeersCount": 10
  },
  "orgName": "AutomationOnly5",
  "policyId": "0510e174-1553-4c12-ac9e-be68118c8bd2",
  "policyName": "09 - ROA Failure",
  "rule": "ALARM_RULE_ROA_FAILURE",
  "severity": "ALARM_SEVERITY_RED",
  "state": "ALARM_STATE_ACTIVE",
  "tags": [
    "common tag",
    "prefix policy",
    "09 - ROA Failure"
  ],
  "transitionedAt": "2023-02-04T03:31:32Z"
}
{
  "activatedAt": "2023-02-04T03:31:32Z",
  "alarmId": "4e0b7398-ae54-408e-95fc-e7bb17a7d952",
  "clearedAt": "2023-02-04T03:30:51Z",
  "expected": {
    "numPeersToTrigger": 1,
    "originAsns": [
      24
    ]
  },
  "monitoredPrefix": "2002:c22d:800::/48",
  "observed": {
    "allViolationPeers": [
      {
        "asn": 23,
        "at": "2023-02-04T03:30:09Z",
        "peerId": 23
      },
      {
        "asn": 23,
        "at": "2023-02-04T03:30:09Z",
        "peerId": 24
      },
      {
        "asn": 23,
        "at": "2023-02-04T03:30:09Z",
        "peerId": 25
      },
      {
        "asn": 23,
        "at": "2023-02-04T03:30:09Z",
        "peerId": 26
      },
      {
        "asn": 23,
        "at": "2023-02-04T03:30:09Z",
        "peerId": 27
      }
    ]
  }
}

```

```

    },
    {
      "asn": 23,
      "at": "2023-02-04T03:30:09Z",
      "peerId": 28
    },
    {
      "asn": 23,
      "at": "2023-02-04T03:30:09Z",
      "peerId": 29
    },
    {
      "asn": 23,
      "at": "2023-02-04T03:30:09Z",
      "peerId": 30
    },
    {
      "asn": 23,
      "at": "2023-02-04T03:30:09Z",
      "peerId": 31
    },
    {
      "asn": 23,
      "at": "2023-02-04T03:30:09Z",
      "peerId": 32
    },
    {
      "asn": 23,
      "at": "2023-02-04T03:30:09Z",
      "peerId": 6,
      "peerIp": "2000::20:100:10"
    },
    {
      "asn": 23,
      "at": "2023-02-04T03:30:09Z",
      "peerId": 8,
      "peerIp": "2000::30:100:10"
    }
  ],
  "allViolationPeersCount": 12
},
"orgName": "AutomationOnly5",
"policyId": "0510e174-1553-4c12-ac9e-be68118c8bd2",
"policyName": "09 - ROA Failure",
"rule": "ALARM_RULE_ROA_FAILURE",
"severity": "ALARM_SEVERITY_RED",
"state": "ALARM_STATE_ACTIVE",
"tags": [
  "common tag",
  "prefix policy",
  "09 - ROA Failure"
],
"transitionedAt": "2023-02-04T03:31:32Z"
}

```

SubPrefix Advertisement Example

The following is an Amazon S3 notification and Google Storage log message example for a **SubPrefix Advertisement** alarm.

```

{
  "activatedAt": "2023-02-04T03:48:07Z",
  "alarmId": "4f90ba05-d16e-4cb1-8bfe-f9bb54fc96dd",
  "clearedAt": "2023-02-04T03:47:26Z",

```

```

"expected": {
  "numPeersToClear": 1,
  "numPeersToTrigger": 2,
  "originAsns": [
    754,
    755,
    1000,
    6000,
    6001,
    6002,
    6003,
    6004,
    6005,
    6006,
    6007,
    6008,
    6009,
    6010,
    6011,
    9541,
    9542,
    9543,
    12654,
    12655,
    28642,
    30175,
    45031,
    49622
  ],
  "originAsnsUsage": "ALARM_USAGE_IGNORE"
},
"monitoredPrefix": "2002:1764:100::/48",
"observed": {
  "allViolationPeers": [
    {
      "peerId": 28
    },
    {
      "peerId": 29
    }
  ],
  "allViolationPeersCount": 2,
  "lastViolationPeers": [
    {
      "asn": 6000,
      "at": "2023-02-04T03:45:01Z",
      "peerId": 28
    },
    {
      "asn": 6001,
      "at": "2023-02-04T03:45:02Z",
      "peerId": 29
    }
  ],
  "lastViolationPeersCount": 2,
  "lastViolationPrefix": "2002:1764:100::/49",
  "violationPrefixesCount": 10
},
"orgName": "AutomationOnly5",
"policyId": "634cc992-80f5-488e-bd42-bcb61217be9f",
"policyName": "12 - Subprefix Advertisement - Default",
"rule": "ALARM_RULE_SUBPREFIX_ADVERTISEMENT",
"severity": "ALARM_SEVERITY_GRAY",
"state": "ALARM_STATE_ACTIVE",

```

```

    "tags": [
      "common tag",
      "prefix policy",
      "12 - Subprefix Advertisement"
    ],
    "transitionedAt": "2023-02-04T03:48:07Z"
  }
}
{
  "activatedAt": "2023-02-04T03:48:07Z",
  "alarmId": "6ele50ff-e57f-4a2b-9814-7c5a71b01b1d",
  "clearedAt": "2023-02-04T03:47:26Z",
  "expected": {
    "numPeersToClear": 1,
    "numPeersToTrigger": 2,
    "originAsns": [
      754,
      755,
      1000,
      6000,
      6001,
      6002,
      6003,
      6004,
      6005,
      6006,
      6007,
      6008,
      6009,
      6010,
      6011,
      9541,
      9542,
      9543,
      12654,
      12655,
      28642,
      30175,
      45031,
      49622
    ],
    "originAsnsUsage": "ALARM_USAGE_IGNORE"
  },
  "monitoredPrefix": "23.100.1.0/24",
  "observed": {
    "allViolationPeers": [
      {
        "peerId": 1
      },
      {
        "peerId": 19
      }
    ],
    "allViolationPeersCount": 2,
    "lastViolationPeers": [
      {
        "asn": 6000,
        "at": "2023-02-04T03:45:01Z",
        "peerId": 1,
        "peerIp": "10.11.12.1"
      },
      {
        "asn": 6001,
        "at": "2023-02-04T03:45:01Z",
        "peerId": 19
      }
    ]
  }
}

```

```

    }
  ],
  "lastViolationPeersCount": 2,
  "lastViolationPrefix": "23.100.1.0/25",
  "violationPrefixesCount": 8
},
"orgName": "AutomationOnly5",
"policyId": "634cc992-80f5-488e-bd42-bcb61217be9f",
"policyName": "12 - Subprefix Advertisement - Default",
"rule": "ALARM_RULE_SUBPREFIX_ADVERTISEMENT",
"severity": "ALARM_SEVERITY_GRAY",
"state": "ALARM_STATE_ACTIVE",
"tags": [
  "common tag",
  "prefix policy",
  "12 - Subprefix Advertisement"
],
"transitionedAt": "2023-02-04T03:48:07Z"
}

```

Unexpected AS Prefix Example

The following is an Amazon S3 notification and Google Storage notification log message example for an **Unexpected AS Prefix** alarm.

```

{
  "activatedAt": "2023-02-04T02:58:11Z",
  "alarmId": "6a6be977-ecf3-423c-bf4e-fc9118659a69",
  "clearedAt": "2023-02-04T02:57:43Z",
  "expected": {
    "numPeersToClear": 1,
    "numPeersToTrigger": 2
  },
  "monitoredAsn": 601,
  "observed": {
    "allViolationPeers": [
      {
        "peerId": 1
      },
      {
        "peerId": 2
      },
      {
        "peerId": 3
      },
      {
        "peerId": 4
      },
      {
        "peerId": 5
      },
      {
        "peerId": 7
      },
      {
        "peerId": 19
      },
      {
        "peerId": 20
      },
      {
        "peerId": 21
      },
      {

```

```

        "peerId": 22
    }
  ],
  "allViolationPeersCount": 10,
  "lastViolationPeers": [
    {
      "asn": 601,
      "at": "2023-02-04T02:55:11Z",
      "peerId": 1,
      "peerIp": "10.11.12.1"
    },
    {
      "asn": 601,
      "at": "2023-02-04T02:55:11Z",
      "peerId": 19
    },
    {
      "asn": 601,
      "at": "2023-02-04T02:55:11Z",
      "peerId": 2,
      "peerIp": "10.11.12.2"
    },
    {
      "asn": 601,
      "at": "2023-02-04T02:55:11Z",
      "peerId": 20
    },
    {
      "asn": 601,
      "at": "2023-02-04T02:55:11Z",
      "peerId": 21
    },
    {
      "asn": 601,
      "at": "2023-02-04T02:55:11Z",
      "peerId": 22
    },
    {
      "asn": 601,
      "at": "2023-02-04T02:55:11Z",
      "peerId": 3,
      "peerIp": "10.11.12.3"
    },
    {
      "asn": 601,
      "at": "2023-02-04T02:55:11Z",
      "peerId": 4,
      "peerIp": "10.11.12.4"
    },
    {
      "asn": 601,
      "at": "2023-02-04T02:55:11Z",
      "peerId": 5,
      "peerIp": "10.11.12.5"
    },
    {
      "asn": 601,
      "at": "2023-02-04T02:55:11Z",
      "peerId": 7,
      "peerIp": "10.31.32.1"
    }
  ],
  "lastViolationPeersCount": 10,
  "lastViolationPrefix": "101.1.1.0/24",

```



```

    "violationPrefixesCount": 1
  },
  "orgName": "AutomationOnly5",
  "policyId": "5e3288f9-6e6d-4df7-a862-b638e2d17b9f",
  "policyName": "01 - Unexpected AS Prefix",
  "rule": "ALARM_RULE_UNEXPECTED_AS_PREFIX",
  "severity": "ALARM_SEVERITY_RED",
  "state": "ALARM_STATE_ACTIVE",
  "tags": [
    "common tag",
    "asn policy",
    "01 - Unexpected AS Prefix"
  ],
  "transitionedAt": "2023-02-04T02:58:11Z"
}

```

Upstream AS Change Example

The following is an Amazon S3 notification and Google Storage notification log message example for an **Upstream AS Change** alarm.

```

{
  "activatedAt": "2023-02-04T03:36:49Z",
  "alarmId": "82f76592-14ca-42ef-b446-149c1d4be731",
  "clearedAt": "2023-02-04T03:36:09Z",
  "expected": {
    "numPeersToClear": 1,
    "numPeersToTrigger": 2,
    "upstreamAsns": [
      12345
    ]
  },
  "monitoredPrefix": "2002:ab64:1100::/48",
  "observed": {
    "allViolationPeers": [
      {
        "asn": 6504,
        "at": "2023-02-04T03:33:54Z",
        "peerId": 6,
        "peerIp": "2000::20:100:10"
      },
      {
        "asn": 6503,
        "at": "2023-02-04T03:33:54Z",
        "peerId": 23
      },
      {
        "asn": 6508,
        "at": "2023-02-04T03:33:54Z",
        "peerId": 27
      },
      {
        "asn": 6502,
        "at": "2023-02-04T03:33:54Z",
        "peerId": 8,
        "peerIp": "2000::30:100:10"
      },
      {
        "asn": 6509,
        "at": "2023-02-04T03:33:54Z",
        "peerId": 28
      },
      {
        "asn": 6505,

```

```

        "at": "2023-02-04T03:33:54Z",
        "peerId": 24
    },
    {
        "asn": 6510,
        "at": "2023-02-04T03:33:54Z",
        "peerId": 29
    },
    {
        "asn": 6507,
        "at": "2023-02-04T03:33:54Z",
        "peerId": 26
    },
    {
        "asn": 6512,
        "at": "2023-02-04T03:33:54Z",
        "peerId": 31
    },
    {
        "asn": 6513,
        "at": "2023-02-04T03:33:54Z",
        "peerId": 32
    },
    {
        "asn": 6506,
        "at": "2023-02-04T03:33:54Z",
        "peerId": 25
    },
    {
        "asn": 6511,
        "at": "2023-02-04T03:33:54Z",
        "peerId": 30
    }
    ],
    "allViolationPeersCount": 12
},
"orgName": "AutomationOnly5",
"policyId": "c37b83be-0213-4bb2-b391-7f02b3cec061",
"policyName": "10 - Upstream AS Change",
"rule": "ALARM_RULE_UPSTREAM_AS_CHANGE",
"severity": "ALARM_SEVERITY_RED",
"state": "ALARM_STATE_ACTIVE",
"tags": [
    "common tag",
    "prefix policy",
    "10 - Upstream AS Change"
],
"transitionedAt": "2023-02-04T03:36:49Z"
}
{
    "activatedAt": "2023-02-04T03:36:49Z",
    "alarmId": "a778b4be-e23f-42d8-8880-5402f59c1495",
    "clearedAt": "2023-02-04T03:36:09Z",
    "expected": {
        "numPeersToClear": 1,
        "numPeersToTrigger": 2,
        "upstreamAsns": [
            12345
        ]
    },
    "monitoredPrefix": "171.100.17.0/24",
    "observed": {
        "allViolationPeers": [
            {

```

```
        "asn": 6505,
        "at": "2023-02-04T03:33:54Z",
        "peerId": 3,
        "peerIp": "10.11.12.3"
    },
    {
        "asn": 6503,
        "at": "2023-02-04T03:33:54Z",
        "peerId": 5,
        "peerIp": "10.11.12.5"
    },
    {
        "asn": 6504,
        "at": "2023-02-04T03:33:54Z",
        "peerId": 4,
        "peerIp": "10.11.12.4"
    },
    {
        "asn": 6509,
        "at": "2023-02-04T03:33:54Z",
        "peerId": 20
    },
    {
        "asn": 6508,
        "at": "2023-02-04T03:33:54Z",
        "peerId": 19
    },
    {
        "asn": 6507,
        "at": "2023-02-04T03:33:54Z",
        "peerId": 1,
        "peerIp": "10.11.12.1"
    },
    {
        "asn": 6511,
        "at": "2023-02-04T03:33:54Z",
        "peerId": 22
    },
    {
        "asn": 6502,
        "at": "2023-02-04T03:33:54Z",
        "peerId": 7,
        "peerIp": "10.31.32.1"
    },
    {
        "asn": 6510,
        "at": "2023-02-04T03:33:54Z",
        "peerId": 21
    },
    {
        "asn": 6506,
        "at": "2023-02-04T03:33:54Z",
        "peerId": 2,
        "peerIp": "10.11.12.2"
    }
],
    "allViolationPeersCount": 10
},
    "orgName": "AutomationOnly5",
    "policyId": "c37b83be-0213-4bb2-b391-7f02b3cec061",
    "policyName": "10 - Upstream AS Change",
    "rule": "ALARM_RULE_UPSTREAM_AS_CHANGE",
    "severity": "ALARM_SEVERITY_RED",
    "state": "ALARM_STATE_ACTIVE",
```

```

    "tags": [
      "common tag",
      "prefix policy",
      "10 - Upstream AS Change"
    ],
    "transitionedAt": "2023-02-04T03:36:49Z"
  }
}

```

Valid AS Path Example

The following is an Amazon S3 notification and Google Storage notification log message example for a **Valid AS Path** alarm.

```

{
  "activatedAt": "2023-02-04T03:42:08Z",
  "alarmId": "7cc0e8d0-cef5-422f-a9b9-e6dd227e2bfc",
  "clearedAt": "2023-02-04T03:41:08Z",
  "expected": {
    "numPeersToClear": 1,
    "numPeersToTrigger": 2,
    "validAsPathPattern": "108 (999|400) 705"
  },
  "monitoredPrefix": "2002:dc45:500::/48",
  "observed": {
    "allViolationPeers": [
      {
        "asPath": [
          108,
          500,
          755
        ],
        "asn": 755,
        "at": "2023-02-04T03:39:27Z",
        "peerId": 23
      },
      {
        "asPath": [
          108,
          500,
          755
        ],
        "asn": 755,
        "at": "2023-02-04T03:39:27Z",
        "peerId": 24
      },
      {
        "asPath": [
          108,
          500,
          755
        ],
        "asn": 755,
        "at": "2023-02-04T03:39:27Z",
        "peerId": 25
      },
      {
        "asPath": [
          108,
          500,
          755
        ],
        "asn": 755,
        "at": "2023-02-04T03:39:27Z",
        "peerId": 26
      }
    ]
  }
}

```

```
    },
    {
      "asPath": [
        108,
        500,
        755
      ],
      "asn": 755,
      "at": "2023-02-04T03:39:27Z",
      "peerId": 27
    },
    {
      "asPath": [
        108,
        500,
        755
      ],
      "asn": 755,
      "at": "2023-02-04T03:39:27Z",
      "peerId": 28
    },
    {
      "asPath": [
        108,
        500,
        755
      ],
      "asn": 755,
      "at": "2023-02-04T03:39:27Z",
      "peerId": 29
    },
    {
      "asPath": [
        108,
        500,
        755
      ],
      "asn": 755,
      "at": "2023-02-04T03:39:27Z",
      "peerId": 30
    },
    {
      "asPath": [
        108,
        500,
        755
      ],
      "asn": 755,
      "at": "2023-02-04T03:39:27Z",
      "peerId": 31
    },
    {
      "asPath": [
        108,
        500,
        755
      ],
      "asn": 755,
      "at": "2023-02-04T03:39:27Z",
      "peerId": 32
    },
    {
      "asPath": [
        108,
```

```

        500,
        755
    ],
    "asn": 755,
    "at": "2023-02-04T03:39:27Z",
    "peerId": 6,
    "peerIp": "2000::20:100:10"
  },
  {
    "asPath": [
      108,
      500,
      755
    ],
    "asn": 755,
    "at": "2023-02-04T03:39:27Z",
    "peerId": 8,
    "peerIp": "2000::30:100:10"
  }
],
"allViolationPeersCount": 12
},
"orgName": "AutomationOnly5",
"policyId": "1b1d7a95-1104-4434-8f72-33ba216a7e7f",
"policyName": "11 - Valid AS Path",
"rule": "ALARM_RULE_VALID_AS_PATH_VIOLATION",
"severity": "ALARM_SEVERITY_YELLOW",
"state": "ALARM_STATE_ACTIVE",
"tags": [
  "common tag",
  "prefix policy",
  "11 - Valid AS Path"
],
"transitionedAt": "2023-02-04T03:42:08Z"
}
{
  "activatedAt": "2023-02-04T03:42:08Z",
  "alarmId": "86304e9c-50ce-4ec2-89a2-2c84ab10658b",
  "clearedAt": "2023-02-04T03:41:08Z",
  "expected": {
    "numPeersToClear": 1,
    "numPeersToTrigger": 2,
    "validAsPathPattern": "108 (999|400) 705"
  },
  "monitoredPrefix": "220.69.5.0/24",
  "observed": {
    "allViolationPeers": [
      {
        "asPath": [
          108,
          500,
          755
        ],
        "asn": 755,
        "at": "2023-02-04T03:39:27Z",
        "peerId": 1,
        "peerIp": "10.11.12.1"
      },
      {
        "asPath": [
          108,
          500,
          755
        ],

```

```
    "asn": 755,
    "at": "2023-02-04T03:39:27Z",
    "peerId": 19
  },
  {
    "asPath": [
      108,
      500,
      755
    ],
    "asn": 755,
    "at": "2023-02-04T03:39:27Z",
    "peerId": 2,
    "peerIp": "10.11.12.2"
  },
  {
    "asPath": [
      108,
      500,
      755
    ],
    "asn": 755,
    "at": "2023-02-04T03:39:27Z",
    "peerId": 20
  },
  {
    "asPath": [
      108,
      500,
      755
    ],
    "asn": 755,
    "at": "2023-02-04T03:39:27Z",
    "peerId": 21
  },
  {
    "asPath": [
      108,
      500,
      755
    ],
    "asn": 755,
    "at": "2023-02-04T03:39:27Z",
    "peerId": 22
  },
  {
    "asPath": [
      108,
      500,
      755
    ],
    "asn": 755,
    "at": "2023-02-04T03:39:27Z",
    "peerId": 3,
    "peerIp": "10.11.12.3"
  },
  {
    "asPath": [
      108,
      500,
      755
    ],
    "asn": 755,
    "at": "2023-02-04T03:39:27Z",
```

```

        "peerId": 4,
        "peerIp": "10.11.12.4"
    },
    {
        "asPath": [
            108,
            500,
            755
        ],
        "asn": 755,
        "at": "2023-02-04T03:39:27Z",
        "peerId": 5,
        "peerIp": "10.11.12.5"
    },
    {
        "asPath": [
            108,
            500,
            755
        ],
        "asn": 755,
        "at": "2023-02-04T03:39:27Z",
        "peerId": 7,
        "peerIp": "10.31.32.1"
    }
],
    "allViolationPeersCount": 10
},
    "orgName": "AutomationOnly5",
    "policyId": "1b1d7a95-1104-4434-8f72-33ba216a7e7f",
    "policyName": "11 - Valid AS Path",
    "rule": "ALARM_RULE_VALID_AS_PATH_VIOLATION",
    "severity": "ALARM_SEVERITY_YELLOW",
    "state": "ALARM_STATE_ACTIVE",
    "tags": [
        "common tag",
        "prefix policy",
        "11 - Valid AS Path"
    ],
    "transitionedAt": "2023-02-04T03:42:08Z"
}

```