Veverbridge[™]

Self-Service Risk Events Guide

Everbridge Suite May 2024



Everbridge Suite 2024

Printed in the USA

Copyright © 2024. Everbridge, Inc, Confidential & Proprietary. All rights are reserved. All Everbridge products, as well as NC4, xMatters, Techwan, Previstar, one2many, SnapComms, Nixle, RedSky, and Connexient, are trademarks of Everbridge, Inc. in the USA and other countries. All other product or company names mentioned are the property of their respective owners. No part of this publication may be reproduced, transcribed, or transmitted, in any form or by any means, and may not be translated into any language without the express written permission of Everbridge.

Limit of Liability/Disclaimer of Warranty: Everbridge makes no representations or warranties of any kind with respect to this manual and the contents hereof and specifically disclaims any warranties, either expressed or implied, including merchantability or fitness for any particular purpose. In no event shall Everbridge or its subsidiaries be held liable for errors contained herein or any damages whatsoever in connection with or arising from the use of the product, the accompanying manual, or any related materials. Further, Everbridge reserves the right to change both this publication and the software programs to which it relates and to make changes from time to time to the content hereof with no obligation to notify any person or organization of such revisions or changes.

This document and all Everbridge technical publications and computer programs contain the proprietary confidential information of Everbridge and their possession and use are subject to the confidentiality and other restrictions set forth in the license agreement entered into between Everbridge and its licensees. No title or ownership of Everbridge software is transferred, and any use of the product and its related materials beyond the terms on the applicable license, without the express written authorization of Everbridge, is prohibited.

If you are not an Everbridge licensee and the intended recipient of this document, return to Everbridge, Inc., 155 N. Lake Avenue, Pasadena, CA 91101.

Export Restrictions: The recipient agrees to comply in all respects with any governmental laws, orders, other restrictions ("Export Restrictions") on the export or re-export of the software or related documentation imposed by the government of the United States and the country in which the authorized unit is located. The recipient shall not commit any act of omission that will result in a breach of any such export restrictions.

Everbridge, Inc.

155 N. Lake Avenue, 9th Floor Pasadena, California 91101 USA Toll-Free (USA/Canada) +1.888.366.4911

Visit us at www.everbridge.com

Everbridge software is covered by US Patent Nos. 6,937,147; 7,148,795; 7,567,262; 7,623,027; 7,664,233; 7,895,263; 8,068,020; 8,149,995; 8,175,224; 8,280,012; 8,417,553; 8,660,240; 8,880,583; 9,391,855. Other patents pending.



Overview	5
Enablement	5
Use Case	
Prerequisites	5
What's Next?	
New Feed Configuration	
Self-Service Risk Events Interface	
Authentication	
Payload	
Response	
Rate Limit	
Bulk Self-Service Risk Events Interface	
Payload	
Response	
Historical Data	14
Header	14
Partial Acceptance	14
Response	15
Rate Limit	15
Everbridge Risk Data Fields	15
Polygon Examples	20
Polygon	20
Polygon with Multiple Rings	
Multi-polygon with Multiple Rings	
General Categories and Subcategories	
General Categories	22
General Subcategories	22
Local Disaster	
Terrorism/Suspicious Activity	
Transportation	
Health/Disease	
Conflict/War	
Utility/Infrastructure	
Weather	
Natural Disaster	
Civil Unrest	
Crime	
Other Security	26
Weather Categories and Subcategories	27
Weather Categories	
Weather Subcategories	
Air Quality	
Flood	
Frost & Freeze	
Heat	28



Marine & Coastal	28
Wind	29
Winter Weather	29
Thunderstorm	29
Tornado	29
Tropical Storm	29
Weather	
Wildfire Categories and Subcategories	30
Supported Categories	30
Supported Subcategories	
Troubleshooting	
Troubleshooting Historical	



Overview

In addition to the many risk feeds that Everbridge offers, **Self-Service Risk Events** allows you to send your exclusive risk data or data from a third party to your Everbridge Organization using a RESTful API.

Enablement

To use Self-Service Risk Events, ask your Everbridge representative to enable:

- 1. **Risk Events** for your Account.
- 2. Risk Events and Self-Service Risk Events for your Organization.

Use Case

This capability will allow you to visualize third-party risk data and your proprietary Risk Events in CEM and Visual Command Center. Additionally, these events can trigger alerts based on your configurable rules.

Prerequisites

Triggering alerts and visualization of these events are available in Visual Command Center 7.1 and later.

What's Next?

Perform the steps outlined in <u>New Feed Configuration</u>. Once a new feed is configured, start sending risk data using the Custom Feeds REST API.



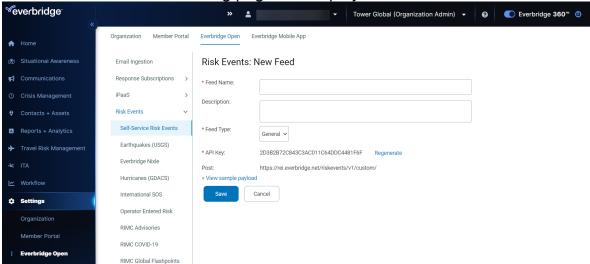
New Feed Configuration

You must configure a new feed before you can begin to send custom risk data to your Organization. During configuration, you will receive an **API key** that will be used to authenticate the data for your Organization.

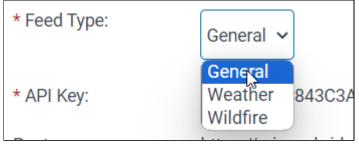
At the Organization level, you can configure a new feed from **Settings** > **Everbridge Open** > **Risk Events** > **Self-Service Risk Events**.

To add a new feed:

1. Click New Feed. The following page will display:



- 2. Set/note the following fields:
 - Feed Name A required field used to identify the feed.
 - Feed Description An optional field use to further identify the source of the data.
 - Feed Type Choose the type of feed you would like to create. It can be General (default), Weather, or Wildfire. Feed type will determine which categories and subcategories can be used. RIMC Powered by NC4 is an example of a General feed. The Feed Type can't be changed after the feed has been created; instead, a new feed must be created.





- API Key A code used by Everbridge to identify the source of the data. This will be automatically generated when creating a new feed and can be regenerated at any time.
- Post The endpoint used to send your custom risk feed data.
- 3. Click Save.

NOTE: It may take up to 30 minutes for a new or modified custom feed to be reflected in VCC.



Self-Service Risk Events Interface

The **Self-Service Risk Events Interface** is a RESTful API that allows you to post Risk Event data to your Everbridge Organization.

```
POST https://rei.everbridge.net/riskevents/v1/custom/
```

Authentication

The API Key (generated when the feed was created) is required to be passed in the API call. The API key can be copied from the Self-Service Risk Events UI. Each call must contain the following:

Header Name	Header Value
Content-Type	Application/json or Application/xml
Authentication	<api events<br="" from="" key="" risk="" self-service="">UI></api>

Payload

The following is an example of the minimal required payload:

```
"identifier": "Example123",
"status": "Actual",
"msgType": "Alert",
"scope": "Public",
"sent": "2022-07-18T13:00:00.000+00:00",
"info": [{
       "urgency": "Immediate",
       "severity": "Minor",
       "certainty": "Observed",
       "headline": "Sample Headline",
       "description": "Sample Description",
       "effective": "2022-07-18T13:00:00.000+00:00",
       "expires": "2022-07-19T15:00:00.000+00:00",
       "category": ["Transportation"],
       "area": [{
              "areaDesc": "25 Corporate Drive Burlington, MA",
              "polygon": [
                 "-71.07593,42.50798 -71.20801,42.59766
                     G -71.30529,42.55079 - 71.31828, 42.52278 -
                     4 71.07593, 42.50798 " ]
```



```
} ]
```

An example of the minimal payload with the addition of a subcategory:

```
"identifier": "Example123",
"status": "Actual",
"msgType": "Alert",
"scope": "Public",
"sent": "2022-07-18T13:00:00.000+00:00",
"info": [{
       "urgency": "Immediate",
       "severity": "Minor",
       "certainty": "Observed",
       "headline": "Sample Headline",
       "description": "Sample Description",
       "effective": "2022-07-18T13:00:00.000+00:00",
       "expires": "2022-07-19T15:00:00.000+00:00",
       "category": ["Transportation"],
       "parameter": [{
          "valueName": "subCategory",
          "value": "Flight Disruption"
       }],
       "area": [{
              "areaDesc": "25 Corporate Drive Burlington, MA",
              "polygon": [
                  "-71.07593,42.50798 -71.20801,42.59766
                       G -71.30529,42.55079 - 71.31828, 42.52278 -
                       5 71.07593, 42.50798 " ]
              } ]
       } ]
```

Response

A successful response will return the message. For example, a response for the sample payload above would look like this:

```
"identifier": "Example123",
    "sender": "CUSTOM",
    "sent": "2019-08-23T13:49:09.000+0000",
    "status": "Actual",
    "msgType": "Alert",
    "source": null,
    "scope": "Public",
    "restriction": null,
    "addresses": null,
    "code": [],
```



```
"note": null,
 "references": null,
 "incidents": null,
 "info": [{
     "language": null,
     "category": [ "Transportation"],
     "parameter": [{
        "valueName": "subCategory",
        "value": "Flight Disruption"
     }],
     "event": null,
     "responseType": [],
     "urgency": "Immediate",
     "severity": "Minor",
     "certainty": "Observed",
     "audience": null,
     "eventCode": [],
     "effective": null,
     "onset": null,
     "expires": null,
     "senderName": null,
     "headline": "Sample Headline",
     "description": null,
     "instruction": null,
     "web": null,
     "contact": null,
     "parameter": [],
     "resource": [],
     "area": [{
     "areaDesc": "25 Corporate Drive Burlington, MA",
     "polygon": [
               "-71.07593,42.50798 -71.20801,42.59766
                   G -71.30529,42.55079 -71.31828,42.52278
                    -71.07593,42.50798"
            ],
     "circle": [],
     "geocode": [],
     "altitude": null,
     "ceiling": null
   } ]
}],
"any": []
```

Rate Limit

There is a rate limit of 500 events per every 20 minutes. If the rate limit is exceeded, you will receive a **429 Too Many Requests** response.

Invalid messages will be returned when there are missing or invalid fields.



Bulk Self-Service Risk Events Interface

The **Bulk Self-Service Risk Events Interface** is a RESTful API that allows you to post multiple Risk Event data to your Everbridge Organization in a single request. Concurrent calls will be rejected by the API. Duplicate IDs in the List are not supported and will result in error response code **422 Unprocessable Entity**.

Events are not processed if validation of any event in the list fails.

```
POST https://rei.everbridge.net/riskevents/v1/custom/bulk
```

Payload

Bulk endpoint request payload accepts a list of events. A maximum of 1,000 events can be passed in a request. The maximum allowed payload size is 10,000,000 bytes (10MB). The following is an example of the required payload:

```
[ {
    "identifier": "ExampleBulk1",
    "status": "Actual",
    "msgType": "Alert",
    "scope": "Public",
    "sent": "2019-08-23T13:49:09+0000",
    "info": [{
    "urgency": "Immediate",
    "severity": "Major",
    "certainty": "Observed",
    "headline": "Sample Headline",
    "description": "Sample Description",
    "category": ["Transportation"],
    "area": [{
       "areaDesc": "25 Corporate Drive Burlington, MA",
       "polygon": [
          "-71.07593,42.50798 -71.20801,42.59766 -71.30529,42.55079
              } ]
  } ]
},
  "identifier": "ExampleBulk2",
  "status": "Actual",
  "msgType": "Alert",
  "scope": "Public",
  "sent": "2019-08-23T13:49:09+0000",
  "info": [{
     "urgency": "Future",
```



```
"severity": "Major",
     "certainty": "Observed",
     "headline": "Another Headline",
     "description": "Another Description",
     "category": ["Health/Disease"],
     "area": [{
            "areaDesc": "Boston Area, Not Boston and RI",
            "polygon": [
               "-70.893,42.526 -71.061,42.521 -71.104,42.502
                   G -71.224,42.474 -71.258,42.436 -71.272,42.361
                   G -71.061,42.335 -71.040,42.357 -71.001,42.395
                   G -70.894,42.514 -70.893,42.526",
               "-71.068,42.365 -71.058,42.367 -71.051,42.367
                   G -71.049,42.359 -71.050,42.355 -71.053,42.352
                   G -71.062,42.353 -71.069,42.356 -71.069,42.363
                   -71.068,42.365"
         },
            "polygon": [
               "-71.797,41.362 -71.798,41.350 -71.469,41.368
                   G -71.325,41.466 -71.292,41.501 -71.227,41.664
                   G -71.841,41.411 -71.839,41.395 -71.801,41.387
                   G -71.797,41.362"
            ]
   ]
 }]
},
  "identifier": "ExampleBulk3",
  "status": "Actual",
  "msgType": "Alert",
  "scope": "Public",
  "sent": "2019-08-23T13:49:09+0000",
  "info": [{
     "urgency": "Immediate",
     "severity": "Extreme",
     "certainty": "Possible",
     "headline": "More Headlines",
     "description": "A different Description",
     "category": ["Civil Unrest"],
  "polygon": [
    "-70.893,42.526 -71.061,42.521 -71.104,42.502 -71.224,42.474
        G -71.258,42.436 -71.272,42.361 -71.061,42.335
        G -71.040,42.357 -71.001,42.395 -70.894,42.514
        G -70.893,42.526",
    "-71.068,42.365 -71.058,42.367 -71.051,42.367 -71.049,42.359
        G -71.050,42.355 -71.053,42.352 -71.062,42.353
        G -71.069,42.356 -71.069,42.363 -71.068,42.365"
    ]
  }]
```



```
}
1
```

Response

Response includes the list of IDs received and their processing status (**OK** and **BAD**). BAD messages contain the validation messages as to why it was not accepted. For example, a response for the sample payload above would look as below:

```
[
    "requestId": "ExampleBulk1",
    "processingStatus": "OK",
    "errorCode": "",
    "requestId": "ExampleBulk2",
    "processingStatus": "OK",
    "errorCode": "",
    "errorMsg": ""
},
{
    "requestId": "ExampleBulk3",
    "processingStatus": "OK",
    "errorCode": "",
    "errorCode": "",
    "errorCode": "",
    "errorCode": "",
    "errorMsg": ""
}
```

An example of the response for a request with invalid events looks as below:



Historical Data

Both the single-event and bulk API allow historical and non-historical events.

A **non-historical event** is a current event that is displayed in VCC and processed by alerting rules. These events are submitted as outlined previously in this document.

Historical events' primary purpose is for reporting and analytical usage in the Historical Risk Visualization tool. These Risk Events are not processed as current Risk Events and do not go through the CEM pipeline processing. Historical events do not support updates.

IMPORTANT: A historical Risk Event that has the same ID as a prior Risk Event will REPLACE that Risk Event. It will not create a duplicate or an update.

Header

An additional header is added to the standard (single or bulk) request to denote historical events.

Header Name	Header Value
X-HISTORICAL	true or false

The default value of **X-HISTORICAL** is **false**. To mark data as historical the additional X-HISTORICAL must be set to true.

Partial Acceptance

Partial processing of events is allowed only for historical events requests. If a single event fails, other events will be processed. This only applies to historical data.



Response

Response includes the list of IDs received and their processing status (**OK** or **BAD**). BAD messages contain the validation messages as to why it was not accepted. For example, a response for a request with invalid events in the payload would look as below:

```
[
    "requestId": "ExampleBulk1",
    "processingStatus": "OK",
    "errorMsg": ""
    },
    {
        "requestId": "ExampleBulk2",
        "processingStatus": "ERROR",
        "errorCode": "80020",
        "errorMsg": "A description OR headline are required"
    },
    {
        "requestId": "ExampleBulk3",
        "processingStatus": "OK",
        "errorCode": "",
        "errorCode": "",
        "errorMsg": ""
}
```

Two messages would be accepted, and one message would be rejected and not processed.

Rate Limit

For historical events requests a maximum of 1000 events per 20 minutes. If the rate limit is exceeded, you will receive a **429 Too Many Requests** response.

Everbridge Risk Data Fields

Everbridge uses a model based on the **Common Alerting Protocol** (CAP) format but does not strictly adhere to this format. The following table outlines the fields that can be passed in the payload.

Name	Type	Description
		Required . Not to exceed 1000 characters.
identifier		A globally unique ID in the namespace of your feed for this message. The ID is used



		across the lifecycle of the message, so updates should use the same ID.
		Example: 293c13e4-73e2-4ea6-808c-1952f9da8203
		The time/date that the message was sent. This is likely the current time.
sent	Date	Example: 2019-05-28T13:49:09+0000
status	Enum	Required . Actual for all messages. Additional types may be supported in the future.
		Values: • Actual
		Required . Alert for new messages. Update if updating a previously sent message.
msgType	Enum	Values: • Alert • Update
scope	Enum	Only Public is currently supported. Additional types may be supported in the future.
		Values: • Public
		RFC-3066 language code.
language	String	Example: en-us
		Required.
category	Enum	Values: See <u>General Categories</u>



		Example:
parameter	Key/Value	Additional parameters associated with the message. Subcategories are the main usage of this field. Subcategories are associated with specific parent categories as defined in the Category sections of this document. Subcategories are a child of the parameter field and follow a different structure outlined in the examples. Values: See General Subcategories Example:
		{ "valueName": "subCategory", "value": "Flight Disruption" }
event	String	Long-form name describing the category. Example: Breaking and entering with property stolen.
urgency	Enum	 Values: Immediate: Responsive action SHOULD be taken immediately Expected: Responsive action SHOULD be taken soon (within next hour) Future: Responsive action SHOULD be taken in the near future Past: Responsive action is no longer required Unknown: Urgency not known
severity	Enum	Values: • Extreme: Extraordinary threat to life or property



		 Severe: Significant threat to life or property Moderate: Possible threat to life or property Minor: Minimal to no known threat to life or property Unknown: Severity not known
certainty	Enum	 Values: Observed: Determined to have occurred or to be ongoing Likely: Likely to occur; greater than 50% likelihood Possible: Possible, but not likely; less than 50% likelihood Unlikely: Not expected to occur Unknown: Certainty not known
effective	Date	The time/date that the actual event warning is in effect. Example: 2019-05-28T13:49:09+0000
expires	Date	The time/date that the event will end. Often this is omitted but may be passed when updating an event to mark the end of the event. Example: 2019-05-28T13:49:09+0000
headline	String	Required . Not to exceed 10000 characters. This is a brief description of the event.
description	String	Required. Not to exceed 50000 characters. This is a longer and more detailed version of the event. It likely contains multiple sentences and more detail.



web	URL	Reference URL to a primary associated web resource (website, image, etc.) associated with this event. Example: http://www.everbridge.com
resourceDesc	String	Reference URL to a primary associated web resource (website, image, etc.) associated with this event. Example: The Everbridge Website
uri	String	Reference URL to a primary associated web resource (website, image, etc.) associated with this event. Example: http://www.everbridge.com
areaDesc	String	Text description of the area impacted by the event. Use a full name (not an abbreviation) if, for example, a country, state, etc.
polygon	Array	Required (circle OR polygon). The geographic polygon is represented by a whitespace-delimited list of coordinate pairs. A minimum of 4 coordinate pairs MUST be present and the first and last pairs of coordinates MUST be the same. We recommend limiting polygon complexity to 100 points or less a precision of not more than 6 decimal places. See section: Polygon Examples Rules: • Must be topologically valid • Coordinates use an X,Y notation. Longitude is followed by latitude.



		 Polygons must follow the right-hand rule. Outer rings must be counterclockwise and inner rings must be clockwise. A polygon must populate at least the first element of the array. This is the outer ring of the polygon. Additional polygons in the array are inner rings; these are cut-outs of the parent exterior ring. Inner rings cannot intersect each other or the outer ring. Multi-polygons can be passed by using multiple areas. Elements of the multi-polygon cannot intersect with each other.
circle	Array	Required (circle OR polygon) The circular area is represented by longitude and latitude coordinates followed by a space character and a radius value in kilometers. Use a circle with a radius of 0 to specify a point. Example: ["circle": [

Polygon Examples

Polygon

A standard polygon covers a single area with a single ring. The ring coordinates must flow counter-clockwise.



Polygon with Multiple Rings

When a polygon contains multiple rings, the first ring is the outer ring, which represents the outer edge of the defined area. Each additional ring is a 'donut hole' within the polygon. The first (outer) ring coordinates must flow counter-clockwise. Each additional (inner) ring must flow clockwise.

Multi-polygon with Multiple Rings

A multi-polygon is a collection of multiple polygons (with or without rings). The collection of polygons, however, may not overlap or intersect at any point. If the source input contains overlapping polygons, the data should be unioned before submitting to the API. A multi-polygon is defined by populating multiple area sections with each polygon. Only the description of the first area section is used.

```
"area": [{
"areaDesc": "Boston Area, Not Boston and RI",
 "polygon": [
  "-70.893,42.526 -71.061,42.521 -71.104,42.502 -71.224,42.474
      G -71.258,42.436 -71.272,42.361 -71.061,42.335 -71.040,42.357
      G -71.001,42.395 -70.894,42.514 -70.893,42.526",
    "-71.068,42.365 -71.058,42.367 -71.051,42.367 -71.049,42.359
        -71.050,42.355 -71.053,42.352 -71.062,42.353 -71.069,42.356
        G -71.069,42.363 -71.068,42.365"
  ]
},
"polygon": [
"-71.797,41.362 -71.798,41.350 -71.469,41.368 -71.325,41.466
    G -71.292,41.501 -71.227,41.664 -71.841,41.411 -71.839,41.395
    1
```



General Categories and Subcategories

General Categories

The following general parent categories are supported:

- Local Disaster
- Terrorism/Suspicious Activity
- Transportation
- · Health/Disease
- Conflict/War
- Utility/Infrastructure
- HAZMAT/Fire
- Weather
- Natural Disaster
- Civil Unrest
- Crime
- · Other Security

Categories as specified in the category field:

```
"category": ["Transportation"]
```

IMPORTANT: A valid category is required.

General Subcategories

Subcategories are associated with specific parent categories. Only the subcategories under their parent category will be accepted. An invalid and omitted subcategory will default to a "General" subcategory.

Subcategories are specified as a parameter in the following format:

```
"parameter": [{ "valueName": "subCategory", "value": "Flight Disruption" }]
```

The example payload shows the usage of category and subcategory in the overall request.



Local Disaster

- Avalanche
- Landslide
- Subsidence
- General Local Disasters
- Building Collapse
- Dam Collapse
- Mine Incident
- Partial Collapse
- Structure Collapse
- Tunnel Collapse
- Unsafe Structure
- State of Emergency
- Evacuation

Terrorism/Suspicious Activity

- · Bomb Detected
- Bomb Explosion
- Suspicious Activity
- Suspicious Object
- General Terrorism
- Bomb Threat
- Insurgent Attack
- Terrorist Attack
- Bioterrorism
- Chemical Terrorism
- Radiological
- Nuclear Device
- Terrorism Advisory

Transportation

- Air Accident
- Flight Disruption
- Marine Disruption
- Rail Accident
- Vehicle Accident
- General Transportation
- Bridge Collapse
- Travel Advisory
- Border Closure
- Port Closure



- Public Transportation Disruption
- Roadway Closure
- Train Derailment
- Waterway Closure
- Air Travel Delay
- Aircraft Fire
- Aircraft Incident
- Airport Closure
- Airspace Restriction
- Emergency Landing
- Helicopter Crash
- Plane Crash
- Airliner Crash
- Supply Chain Disruption

Health/Disease

- · Disease Outbreak
- General Health/Disease
- Air Quality
- Quarantine
- · Public Health Advisory
- Food Advisory

Conflict/War

- General Armed Conflict
- · General Conflict/War
- Coup
- Military Operation

Utility/Infrastructure

- Drinking Water
- · Gas Outage
- · Power Outage
- Sewage
- Telecommunications
- General Utility/Infrastructure
- Boil Water Advisory
- Fuel Disruption
- Network Outage
- Production Stoppage
- · Rolling Blackout



· Water Main Break

HAZMAT/Fire

- Chemical Agent
- Radioactive Agent
- Non Residential Fire
- Wildfire
- General HAZMAT/Fires
- Natural Gas Leak
- Fumes
- Chemical Spill
- Oil Spill
- Fuel Spill
- Explosive Materials
- Structure Fire
- Industrial Fire
- Maritime Fire
- Train Fire
- Vehicle Fire
- Electrical Fire
- Brush Fire
- Biohazard
- Unknown Substance
- Emergency Response

Weather

- Flood
- Tornado
- Winter
- Storm

Natural Disaster

- Earthquake
- Tropical Cyclone/Hurricane
- Tsunami
- Volcano
- General Natural Disaster
- Atmospheric/Space



Civil Unrest

- Civil Demonstration
- Civil Rioting
- · General Civil Unrest
- · Aviation Worker Strike
- Cargo Transportation Strike
- · Civil Service Strike
- Energy Sector Strike
- General Strike
- Industrial Strike
- Medical Services Strike
- Mine Workers Strike
- Port Strike
- Public Transportation Strike
- Planned Strike
- Armed Clash

Crime

- Hostage
- Police/Security Forces Response
- Robbery
- Shooting
- General Violent Crime
- Bank Robbery
- Stabbing
- · Officer-Involved Shooting
- Disturbance
- School Lockdown

Other Security

- General Security
- Stampede
- Homeland Security Advisory
- Public Safety Advisory
- Cyberattack
- Curfew



Weather Categories and Subcategories

Weather Categories

The following Weather parent categories are supported:

- Air Quality
- Flood
- Frost & Freeze
- Heat
- Marine & Coastal
- Wind
- · Winter Weather
- Thunderstorm
- Tornado
- Tropical Storm
- Weather

Categories as specified in the category field:

```
"category": ["Transportation"]
```

The example payload shows the usage of category and subcategory in the overall request.

IMPORTANT: A valid category is required.

Weather Subcategories

Subcategories are associated with specific parent categories. Only the subcategories under their parent category will be accepted. An invalid and omitted subcategory will default to a general subcategory.

Subcategories as specified as a parameter in the following format:

```
"parameter": [{ "valueName": "subCategory", "value": "Hurricane" }]
```

The example payload shows the usage of category and subcategory in the overall request.



Air Quality

- Ashfall
- Dust Storm
- Dense Fog/Smoke
- Blowing Dust
- Other Air Quality Alert

Flood

- Areal Floods
- Coastal Floods
- Flash Floods
- Hydrologic Outlook
- Lakeshore Floods
- Flood
- Tsunami
- Tsunamis
- Storm Surges

Frost & Freeze

- Extreme Cold
- Frost
- Freeze
- Freezing Fog
- Hard Freeze

Heat

- Heat
- Fire Weather
- Excessive Heat

Marine & Coastal

- Debris Flow
- Freezing Spray
- Low Water
- Marine Hazards
- Coastal Floods
- · Hazardous Seas And High Surf
- Hazardous Winds And Gales
- · Small Craft Hazards



Winter Storm

Wind

- Wind
- High Wind
- Destructive Wind
- Extreme Wind
- Lake Wind

Winter Weather

- · Winter Weather
- Avalanche
- Blizzard
- Extreme Cold
- Freezing Rain
- Ice Storm
- Lake Effect Snow
- Snow Squall
- Wind Chill
- Winter Storm

Thunderstorm

- Severe Thunderstorm
- Flash Floods

Tornado

Tornado

Tropical Storm

- Hurricane
- Hurricane/Typhoon
- Tropical Storm

Weather

General



Wildfire Categories and Subcategories

Supported Categories

Wildfires

Categories as specified in the category field:

```
"category": ["Wildfires"]
```

The example payload shows the usage of the category in the overall request.

IMPORTANT: A valid category is required.

Supported Subcategories

There are no supported subcategories for this feed type.



Troubleshooting

Issue	Explanation
My message was accepted but appears in the wrong location on the map.	Coordinates are outside of valid latitude and longitude. Coordinates are passed in X/Y format; longitude, followed by latitude.
Polygon validation failed.	Usually associated with a specific polygon message; a general failure that a polygon is not valid.
Interior or exterior ring has invalid coordinates.	Coordinates are outside of valid latitude and longitude. Coordinates are passed in X/Y format; longitude, followed by latitude.
Interior ring is not contained by an exterior ring.	Interior polygon rings are not permitted to cross or intersect with the outer ring.
Exterior ring is not CCW.	Polygons must follow the right-hand rule (RHR); exterior rings must be counterclockwise.
Interior ring is not CW.	Polygons must follow RHR; interior rings must be clockwise.
Invalid multipolygon.	Multipolygons must not intersect or overlap each other. Polygons should be unioned and consolidated or sent at separate events.
Multipolygon contains invalid geometry.	A member of the multipolygon is not a valid polygon.
Invalid multipolygon.	A member of the multipolygon is not a valid polygon.
No polygon rings are defined.	The format of the polygon is invalid.
Invalid "Field" is defined.	A value does not conform to the enumerated values allowed for that field. The error message and this document outline valid values.
"Field" exceeds the specified maximum characters.	The referenced text field in the error exceeds the maximum size of that field. It must be truncated before being sent.



The info section of the message is required as the child elements of this section contain required fields, including geometry information.
The area section of the message is required as the child elements of this section contain required fields, including geometry information.
The geometry section of the message is not valid. Point or circle data may contain invalid coordinates.
Only image, anchor, and basic formatting are permitted in text fields when HTML is used.
If the same ID is used multiple times, any subsequent use of that ID will be displayed as an update to the alert with the same ID.
If an update is sent but does not have an associated alert, this message will be transformed into an alert rather than an update.
Subsequent updates should always be set with a later time than the previous alert or update.
Check that the location and date range of the alert match your selected timeline and location view on the map.
Ensure that the 'sent' time is a later date than the previous 'sent' time of the alert.
To send an updated version of a previous message, you must use the same ID and specify a later time in the 'sent' field. The 'msgType' field will be automatically set.
There is a rate limit of 500 events per every 20 minutes. You must wait to send more data or throttle your data during peak times.



I sent multiple events simultaneously, but then I received 429 error.	Endpoint processes only one event at a time. Time space your event requests.
I sent a list of events to the bulk endpoint but then received a 400 error.	Ensure that the bulk request has no more than 1000 events and the payload size is less than 10 MB.
I sent a list of events to bulk endpoint, but then I received a 422 error.	Ensure that the bulk request has no duplicate events.
Sometimes my bulk request is accepted, but then I receive a 429 error.	There is a rate limit of 500 events per every 20 minutes. You must wait to send more data or throttle your data during peak times.
I sent multiple bulk requests, but then I received a 429 error.	Bulk endpoint processes one request at a time. Time space bulk requests.
I know my bulk payload is valid, but I received a 400 error.	An invalid event in the list of bulk events may exist.

Troubleshooting Historical

In addition to the above troubleshooting steps, you may encounter these issues when importing historical data.

Issue	Explanation
Sometimes my bulk request is accepted, but I receive a 429 error.	For historical events, there is rate limit of 1000 events per every 20 minutes. You must wait to send more data or throttle your data during peak times.
My bulk upload was accepted, but some of my data is missing.	Check the response codes and errors. Historical data can be partially accepted.