

ThreatQuotient



MISP Import CDF User Guide

Version 2.2.0

June 21, 2023

ThreatQuotient

20130 Lakeview Center Plaza Suite 400
Ashburn, VA 20147



Support

Email: support@threatq.com

Web: support.threatq.com

Phone: 703.574.9893

Contents

Warning and Disclaimer	3
Support	4
Integration Details.....	5
Introduction	6
Prerequisites	7
Installation.....	8
Configuration	9
ThreatQ Mapping	11
restSearch	11
Threat Level Mapping.....	23
Distribution Mapping	23
Attribute Distribution Mapping.....	24
Analysis Mapping	24
MISP Attribute Type to ThreatQ Indicator Type Mapping.....	25
MISP Galaxy Cluster Type to ThreatQ Object Type Mapping	27
Average Feed Run.....	29
Known Issues / Limitations	30
Change Log.....	31

Warning and Disclaimer

ThreatQuotient, Inc. provides this document “as is”, without representation or warranty of any kind, express or implied, including without limitation any warranty concerning the accuracy, adequacy, or completeness of such information contained herein. ThreatQuotient, Inc. does not assume responsibility for the use or inability to use the software product as a result of providing this information.

Copyright © 2023 ThreatQuotient, Inc.

All rights reserved. This document and the software product it describes are licensed for use under a software license agreement. Reproduction or printing of this document is permitted in accordance with the license agreement.

Support

This integration is designated as **ThreatQ Supported**.

Support Email: support@threatq.com

Support Web: <https://support.threatq.com>

Support Phone: 703.574.9893

Integrations/apps/add-ons designated as **ThreatQ Supported** are fully supported by ThreatQuotient's Customer Support team.

ThreatQuotient strives to ensure all ThreatQ Supported integrations will work with the current version of ThreatQuotient software at the time of initial publishing. This applies for both Hosted instance and Non-Hosted instance customers.



ThreatQuotient does not provide support or maintenance for integrations, apps, or add-ons published by any party other than ThreatQuotient, including third-party developers.

Integration Details

ThreatQuotient provides the following details for this integration:

Current Integration Version	2.2.0
Compatible with ThreatQ Versions	>= 4.50.0
Support Tier	ThreatQ Supported

Introduction

The MISP threat sharing platform is free and open source software that enables sharing of threat intelligence represented in the MISP data model format. The MISP Import integration ingests published MISP events from a user-provided, self-hosted MISP server instance via its `POST {{user_fields.domain_name}}/events/restSearch` endpoint (note: `{{user_fields.domain_name}}` must contain the protocol, like `https://`).

The integration will fetch MISP events and return the following system objects:

- Events
- Indicators
- Attachments
- Signatures
- Adversaries
- Attack Patterns
- Course of actions
- Intrusion Sets
- Malware
- Tools
- Attack Patterns

Prerequisites

If the user intends to ingest MISP events that are related to any MITRE MISP galaxies, make sure the following feeds successfully run prior to running the MISP Import feed:

- MITRE Enterprise ATT&CK
- MITRE Mobile ATT&CK
- MITRE PRE-ATT&CK

Installation

Perform the following steps to install the integration:



The same steps can be used to upgrade the integration to a new version.

1. Log into <https://marketplace.threatq.com/>.
2. Locate and download the integration file.
3. Navigate to the integrations management page on your ThreatQ instance.
4. Click on the **Add New Integration** button.
5. Upload the integration file using one of the following methods:
 - Drag and drop the file into the dialog box
 - Select **Click to Browse** to locate the integration file on your local machine



ThreatQ will inform you if the feed already exists on the platform and will require user confirmation before proceeding. ThreatQ will also inform you if the new version of the feed contains changes to the user configuration. The new user configurations will overwrite the existing ones for the feed and will require user confirmation before proceeding.

6. If prompted, select the individual feeds to install and click **Install**. The feed will be added to the integrations page.

You will still need to [configure and then enable](#) the feed.

Configuration



ThreatQuotient does not issue API keys for third-party vendors. Contact the specific vendor to obtain API keys and other integration-related credentials.

To configure the integration:

1. Navigate to your integrations management page in ThreatQ.
2. Select the **OSINT** option from the *Category* dropdown (optional).



If you are installing the integration for the first time, it will be located under the **Disabled** tab.

3. Click on the integration entry to open its details page.
4. Enter the following parameters under the **Configuration** tab:

PARAMETER	DESCRIPTION
MISP Domain Name	The MISP server instance domain name (or IP address) preceded by the protocol it uses, such as <code>https://my-misp-server.org</code> . The provided domain name or IP address must be reachable from the ThreatQ instance.
Authorization	The MISP account API key.
Save Intrusion Sets as	The ThreatQ MITRE ATT&CK feeds can be configured to ingest Threat Actor data as Intrusion Sets or Adversaries. If the user intends to ingest MISP events that are related to any MITRE MISP galaxies, please use the same configuration as the ThreatQ MITRE ATT&CK feeds. By default, Threat Actors are ingested as Adversaries.
Query Filter Characteristics	Set which parameters that decide which events to retrieve at run-time. Options include: ◦ Modified Events - ingest contents of any modified event since the last run. ◦ New Events - ingest events having a newer date than configured start date together with their full context.
Inherited Context	Select the pieces of context to inherit from the event to the related IOCs. Options include:

PARAMETER	DESCRIPTION
	◦ Related Malware ◦ Related Adversaries
Rate Limit Delay	The number of seconds to wait between API requests. This is useful if you are hitting rate limits on the MISP API. Rate limits are configurable on the MISP server, and can vary.  Increase this value if you are running into 429 errors.
Disable Proxies	If True, specifies that this feed should not honor any proxies setup in ThreatQuotient. The default setting is disabled.
Enable SSL Verification	If True, specifies that this feed should verify SSL connections with the provider. The default setting is enabled.

5. Review any additional settings, make any changes if needed, and click on **Save**.
6. Click on the toggle switch, located above the *Additional Information* section, to enable it.

ThreatQ Mapping

restSearch

POST {{user_fields.domain_name}}/events/restSearch

Sample Response:

```
{
  "response": [
    {
      "Event": {
        "id": "1",
        "orgc_id": "1",
        "org_id": "1",
        "date": "2018-12-14",
        "threat_level_id": "2",
        "info": "EVENT1",
        "published": false,
        "uuid": "5c142f52-5ad0-4c04-8069-03c8ac107221",
        "attribute_count": "4",
        "analysis": "1",
        "timestamp": "1545256410",
        "distribution": "1",
        "proposal_email_lock": false,
        "locked": false,
        "publish_timestamp": "1544827221",
        "sharing_group_id": "0",
        "disable_correlation": false,
        "extends_uuid": "",
        "event_creator_email": "admin@admin.test",
        "Org": {
          "id": "1",
          "name": "ORGNAME",
          "uuid": "5bd7a775-1d18-4fd7-b2f4-08b52dc69e54"
        },
        "Orgc": {
          "id": "1",
          "name": "ORGNAME",
          "uuid": "5bd7a775-1d18-4fd7-b2f4-08b52dc69e54"
        },
        "Attribute": [
          {
            "id": "1",
            "type": "link",
            "category": "Antivirus detection",
            "to_ids": false,
            "uuid": "5c17ccfe-3c1c-4f47-9a9f-38f6ac107221",
```

```

        "event_id": "1",
        "distribution": "3",
        "timestamp": "1545063678",
        "comment": "",
        "sharing_group_id": "0",
        "deleted": false,
        "disable_correlation": false,
        "object_id": "0",
        "object_relation": null,
        "value": "https://www.virustotal.com/#/file/17a0d59255046ed2cff22cd5980fcc86c69e059839fec07d705051ac2e178693/details",
        "Galaxy": [],
        "ShadowAttribute": []
    },
    {
        "id": "1259319",
        "type": "filename|md5",
        "category": "Payload installation",
        "to_ids": false,
        "uuid": "5fffc9a4f-7ef0-4077-b278-30a5ac107221",
        "event_id": "104",
        "distribution": "5",
        "timestamp": "1610390095",
        "comment": "",
        "sharing_group_id": "0",
        "deleted": false,
        "disable_correlation": false,
        "object_id": "0",
        "object_relation": null,
        "value": "bunnyhop.exe|31f3720bef6bb3e2953d9ea2238e0580",
        "Galaxy": [],
        "ShadowAttribute": []
    },
    {
        "id": "477506",
        "type": "attachment",
        "category": "Payload delivery",
        "to_ids": false,
        "uuid": "5dde5554-6320-4647-baa8-26d3ac107221",
        "event_id": "75",
        "distribution": "5",
        "timestamp": "1574851924",
        "comment": "sample.pdf",
        "sharing_group_id": "0",
        "deleted": false,
        "disable_correlation": false,
        "object_id": "0",
        "object_relation": null,
        "value": "sample.pdf",
        "Galaxy": [],

```

```

        "data": "JVBERi0xLjMNCiXi48TDQoNCjEgMCBvYmo8DQovVHlwZS..."
    },
    {
        "id": "1",
        "type": "comment",
        "category": "Payload delivery",
        "to_ids": false,
        "uuid": "5e81aec6-5af0-498c-9826-7a63ac107122",
        "event_id": "1",
        "distribution": "5",
        "timestamp": "1585562438",
        "comment": "not applicable",
        "sharing_group_id": "0",
        "deleted": false,
        "disable_correlation": false,
        "object_id": "0",
        "object_relation": null,
        "first_seen": null,
        "last_seen": null,
        "value": "sample comment",
        "Galaxy": [],
        "ShadowAttribute": []
    },
    {
        "id": "3",
        "type": "snort",
        "category": "Network activity",
        "to_ids": false,
        "uuid": "5e81c3d7-d310-4344-bfe9-7805ac107122",
        "event_id": "1",
        "distribution": "5",
        "timestamp": "1585562583",
        "comment": "",
        "sharing_group_id": "0",
        "deleted": false,
        "disable_correlation": false,
        "object_id": "0",
        "object_relation": null,
        "first_seen": null,
        "last_seen": null,
        "value": "alert tcp $HOME_NET any -> any 3306 (msg: \"mysql
general_log write file\"; ...)"
    }
],
"Object": [
    {
        "id": "1",
        "name": "file",
        "meta-category": "file",
        "description": "File object describing a file with meta-

```

```

information",
    "template_uuid": "688c46fb-5edb-40a3-8273-1af7923e2215",
    "template_version": "15",
    "event_id": "1",
    "uuid": "5c1abdda-4cb8-427c-97d5-71c9ac107221",
    "timestamp": "1545256410",
    "distribution": "5",
    "sharing_group_id": "0",
    "comment": "dnssrslvr.dll",
    "deleted": false,
    "ObjectReference": [],
    "Attribute": [
        {
            "id": "26131",
            "type": "md5",
            "category": "Payload delivery",
            "to_ids": true,
            "uuid": "5c1abdda-0960-4530-a4e4-71c9ac107221",
            "event_id": "1",
            "distribution": "5",
            "timestamp": "1545256410",
            "comment": "",
            "sharing_group_id": "0",
            "deleted": false,
            "disable_correlation": false,
            "object_id": "1",
            "object_relation": "md5",
            "value": "44d88612fea8a8f36de82e1278abb02f"
        }
    ]
},
{
    "id": "1",
    "name": "yara",
    "meta-category": "misc",
    "description": "An object describing a YARA rule (or a YARA
rule name) along with its version.",
    "template_uuid": "b5acf82e-ecca-4868-82fe-9dbdf4d808c3",
    "template_version": "4",
    "event_id": "1",
    "uuid": "5e81cab1-5f2c-4350-8ed0-7b28ac107122",
    "timestamp": "1585564479",
    "distribution": "5",
    "sharing_group_id": "0",
    "comment": "",
    "deleted": false,
    "first_seen": null,
    "last_seen": null,
    "ObjectReference": [],
    "Attribute": [
        {

```

```

        "id": "4",
        "type": "yara",
        "category": "Payload installation",
        "to_ids": true,
        "uuid": "5e81cab1-58d4-4155-a691-7b28ac107122",
        "event_id": "1",
        "distribution": "5",
        "timestamp": "1585564470",
        "comment": "",
        "sharing_group_id": "0",
        "deleted": false,
        "disable_correlation": false,
        "object_id": "1",
        "object_relation": "yara",
        "first_seen": null,
        "last_seen": null,
        "value": "rule Contains_VBA_macro_code\r\n{\r\n\tmeta:
\r\n\t\tauthor = ..."
    }
  ]
},
"Galaxy": [
  {
    "id": "3",
    "uuid": "698774c7-8022-42c4-917f-8d6e4f06ada3",
    "name": "Threat Actor",
    "type": "threat-actor",
    "description": "Threat actors are characteristics of
malicious actors (or adversaries) representing a cyber attack threat including
presumed intent and historically observed behaviour.",
    "version": "3",
    "icon": "user-secret",
    "namespace": "misp",
    "GalaxyCluster": [
      {
        "id": "5401",
        "collection_uuid": "7cdff317-
a673-4474-84ec-4f1754947823",
        "type": "threat-actor",
        "value": "Keyhole Panda",
        "tag_name": "misp-galaxy: threat-actor=\"Keyhole
Panda\"",
        "description": "no description",
        "galaxy_id": "3",
        "source": "MISP Project",
        "authors": [
          "Alexandre Dulaunoy",
          "Florian Roth",
          "Thomas Schreck",

```

```

        "Timo Steffens",
        "Various"
    ],
    "version": "75",
    "uuid": "ad022538-b457-4839-8ebd-3fdcc807a820",
    "tag_id": "77",
    "meta": {
        "country": [
            "CN"
        ],
        "synonyms": [
            "temp.bottle"
        ]
    }
}
],
},
{
    "id": "4",
    "uuid": "1fb6d5b4-1708-11e8-9836-8bbc8ce6866e",
    "name": "Pre Attack - Intrusion Set",
    "type": "mitre-pre-attack-intrusion-set",
    "description": "Name of ATT&CK Group",
    "version": "4",
    "icon": "user-secret",
    "namespace": "mitre-attack",
    "GalaxyCluster": [
        {
            "id": "5614",
            "collection_uuid":
"1fdc8fa2-1708-11e8-99a3-67b4efc13c4f",
            "type": "mitre-pre-attack-intrusion-set",
            "value": "APT16 - G0023",
            "tag_name": "misp-galaxy:mitre-pre-attack-intrusion-
set=\"APT16 - G0023\"",
            "description": "APT16 is a China-based threat group
that has launched spearphishing campaigns targeting Japanese and Taiwanese
organizations. (Citation: FireEye EPS Awakens Part 2)",
            "galaxy_id": "4",
            "source": "https://github.com/mitre/cti",
            "authors": [
                "MITRE"
            ],
            "version": "6",
            "uuid": "d6e88e18-81e8-4709-82d8-973095da1e70",
            "tag_id": "97",
            "meta": {
                "external_id": [
                    "G0023"
                ],
            ],

```

```

        "refs": [
            "https://attack.mitre.org/wiki/Group/G0023",
            "https://www.fireeye.com/blog/threat-
research/2015/12/the-eps-awakens-part-two.html"
        ],
        "synonyms": [
            "APT16"
        ]
    }
}
],
"Tag": [
    {
        "id": "11",
        "name": "tlp:red",
        "colour": "#CC0033",
        "exportable": true,
        "user_id": "0",
        "hide_tag": false,
        "numerical_value": null
    }
]
}
]
}
}

```

ThreatQuotient provides the following default mapping for this feed:

FEED DATA PATH	THREATQ ENTITY	THREATQ OBJECT TYPE OR ATTRIBUTE KEY	PUBLISHED DATE	EXAMPLES	NOTES
.response[].Event.info	Event.Title / Event.Description	MISP	.response[].Event. publish_timestamp	EVENT1	N/A
.response[].Event.date	Event.Happened At	N/A	N/A	2018-12-14T00:00:00	N/A
.response[].Event.Orgc. name	Event.Attribute	Source Organization	.response[].Event. publish_timestamp	ORGNAME	N/A
.response[].Event.Org. name	Event.Attribute	Member Organization	.response[].Event. publish_timestamp	ORGNAME	N/A
.response[].Event.id	Event.Attribute	ID	.response[].Event. publish_timestamp	1	N/A
.response[].Event.uuid	Event.Attribute	UUID	.response[].Event. publish_timestamp	5c142f52-5ad0-4c04- 8069-03c8ac107221	N/A
.response[].Event.threat _level_id	Event.Attribute	MISP Threat Level	.response[].Event. publish_timestamp	Medium	Maps an integer ID to a string based on the Threat Level Mapping below. If no match is found, this attribute is not ingested.
.response[].Event.analysis	Event.Attribute	Analysis	.response[].Event. publish_timestamp	Ongoing	Maps an integer ID to a string based on the Analysis Mapping below. If no match is found, this attribute is not ingested.
.response[].Event. distribution	Event.Attribute	Distribution	.response[].Event. publish_timestamp	This community only	Maps an integer ID to a string based on the Distribution Mapping below. If no match is found, this attribute is not ingested.
.response[].Event. sharing_group_id	Event.Attribute	Sharing Group	.response[].Event. publish_timestamp	0	N/A
.response[].Event. disable_correlation	Event.Attribute	Disable Correlation	.response[].Event. publish_timestamp	False	Title-cased
.response[].Event.id	Event.Attribute	External MISP	.response[].Event. publish_timestamp	{{user_fields.domain _name}}/events/view/1	Value created from the template: {{user_fields.domain_name}}/ events/view/{{id}}
.response[].Event. Object[].Attribute[]. value	Event.Attribute	YARA Rule Name	.response[].Event. publish_timestamp	My YARA Rule	Based on the jq expression: .response[].Event.Object[] select(.name == "yara") .Attribute[] select(.type == "yara-rule-name") .value
.response[].Event. Tag[].name	Event.Attribute / Related Indicator.Attribute	Tag	.response[].Event. publish_timestamp	tlp:red	N/A
.response[].Event. Tag[].name	Event.TLP / Related Indicator.TLP	N/A	N/A	RED	TLP value is extracted from MISP tags whose name starts with either tlp: or iep:traffic-light-protocol=.
.response[].Event. Attribute[].value	Event.Attribute	Category	.response[].Event. publish_timestamp	https://www.virustotal.com/ #/file/17a0d59255046ed2cff 22cd5980fcc86c69e059839fe c07d705051ac2e178693/details	Based on the jq expression: .response[].Event.Attribute[] select(.type == "link") .value
.response[].Event. Attribute[].value	Event.Attribute	Comment	.response[].Event. publish_timestamp	sample comment	Based on the jq expression: .response[].Event.Attribute[] select(.type == "comment") .value
.response[].Event. Attribute[].value	Related Indicator.Value	The indicator's type is derived from .response[].Event. Attribute[].type (see MISP Attribute Type to ThreatQ Indicator Type Mapping below)	.response[].Event. Attribute[].timestamp	bunnyhop.exe 31f3720bef 6bb3e2953d9e a2238e0580 (creates two indicators: the Filename bunnyhop.exe and the MD5 31f3720bef6bb3 e2953d9ea2238e0580)	MISP composite attributes have a value and type that are pipe-separated (" "); an indicator is created for each element in the split list. Only applicable if .response[].Event.Attribute[].type has a match in the MISP Attribute Type to ThreatQ Indicator Type Mapping below.
.response[].Event. Attribute[].category	Related Indicator.Attribute	Category	.response[].Event. Attribute[].timestamp	Payload installation	N/A

FEED DATA PATH	THREATQ ENTITY	THREATQ OBJECT TYPE OR ATTRIBUTE KEY	PUBLISHED DATE	EXAMPLES	NOTES
.response[].Event.Attribute[].to_ids	Related Indicator.Attribute	To IDS	.response[].Event.Attribute[].timestamp	False	Title-cased
.response[].Event.Attribute[].distribution	Related Indicator.Attribute	Distribution	.response[].Event.Attribute[].timestamp	All communities	Maps an integer ID to a string based on the Attribute Distribution Mapping below. If no match is found, this attribute is not ingested.
.response[].Event.Attribute[].timestamp	Related Indicator.Attribute	Timestamp	.response[].Event.Attribute[].timestamp	2019-04-08 09:27:58-00:00	N/A
.response[].Event.Attribute[].comment	Related Indicator.Attribute	Comment	.response[].Event.Attribute[].timestamp	sample comment	This attribute is created only if the comment does not contain the substring "Pertinence".
.response[].Event.Attribute[].comment	Related Indicator.Attribute	Pertinence	.response[].Event.Attribute[].timestamp	sample comment	This attribute is created only if "Pertinence" appears in the comment value. The attribute's value is the text after "Pertinence:".
.response[].Event.Attribute[].sharing_group_id	Related Indicator.Attribute	Sharing Group	.response[].Event.Attribute[].timestamp	0	N/A
.response[].Event.Attribute[].deleted	Related Indicator.Attribute	Deleted	.response[].Event.Attribute[].timestamp	False	Title-cased
.response[].Event.Attribute[].disable_correlation	Related Indicator.Attribute	Disable Correlation	.response[].Event.Attribute[].timestamp	False	Title-cased
.response[].Event.Attribute[].object_relation	Related Indicator.Attribute	Object Relation	.response[].Event.Attribute[].timestamp	N/A	Title-cased
.response[].Event.Attribute[].Tag[].name	Related Indicator.Attribute	Tag	.response[].Event.Attribute[].timestamp	N/A	N/A
.response[].Event.Attribute[].type	Related Indicator.Attribute	IP Type	.response[].Event.Attribute[].timestamp	ip-dst	The attribute value is "ip-dst" if "ip-dst" is in the type value. Else, the attribute value is "ip-src" if "ip-src" is in the type value. If neither of the aforementioned cases are true, this attribute is not created.
.response[].Event.Object[].Attribute[].value	Related Indicator.Value	The indicator's type is derived from .response[].Event.Object[].Attribute[].type (see MISP Attribute Type to ThreatQ Indicator Type Mapping below)	N/A	44d88612fea8a8f36de82e1278abb02f	All indicators created from a MISP Object's Attributes are inter-related. Only applicable if .response[].Event.Object[].Attribute[].type has a match in the MISP Attribute Type to ThreatQ Indicator Type Mapping below.
.response[].Event.Object[].Attribute[].category	Related Indicator.Attribute	Category	N/A	Payload delivery	N/A
.response[].Event.Object[].Attribute[].to_ids	Related Indicator.Attribute	To IDS	N/A	False	Title-cased
.response[].Event.Object[].Attribute[].distribution	Related Indicator.Attribute	Distribution	N/A	All communities	Maps an integer ID to a string based on the Attribute Distribution Mapping below. If no match is found, this attribute is not ingested.
.response[].Event.Object[].Attribute[].sharing_group_id	Related Indicator.Attribute	Sharing Group	N/A	0	N/A
.response[].Event.Object[].Attribute[].comment	Related Indicator.Attribute	Comment	N/A	sample comment	N/A
.response[].Event.Object[].Attribute[].type	Related Indicator.Attribute	IP Type	N/A	ip-dst	The attribute value is "ip-dst" if "ip-dst" is in the type value. Else, the attribute value is "ip-src" if "ip-src" is in the type value. If neither of the

FEED DATA PATH	THREATQ ENTITY	THREATQ OBJECT TYPE OR ATTRIBUTE KEY	PUBLISHED DATE	EXAMPLES	NOTES
					aforementioned cases are true, this attribute is not created.
.response[].Event.Galaxy[].GalaxyCluster[].value / .response[].Event.Galaxy[].GalaxyCluster[].meta.synonyms[]	Related Indicator.Attribute	Related Adversary	N/A	Keyhole Panda	If Inherited Context includes Related Adversaries.
.response[].Event.Galaxy[].GalaxyCluster[].value	Related Indicator.Attribute	Malware Family	N/A	Pegasus	If Inherited Context includes Related Malware.
.response[].Event.Attribute[].value	Related Attachment.Name / Related Attachment.Title	MISP Attachment	.response[].Event.Attribute[].timestamp	sample.pdf	Based on the jq expression: <code>.response[].Event.Attribute[] select(.type == "attachment") .value</code>
.response[].Event.Attribute[].data	Related Attachment.Content	N/A	N/A	JVBERi0xLjMNCixi48TDQoNCjEgMCBvYmo8DQovVHlwZS...	N/A
.response[].Event.Attribute[].id	Related Attachment.Attribute	ID	.response[].Event.Attribute[].timestamp	477506	N/A
.response[].Event.Attribute[].category	Related Attachment.Attribute	Category	.response[].Event.Attribute[].timestamp	Payload delivery	N/A
.response[].Event.Attribute[].to_ids	Related Attachment.Attribute	To IDS	.response[].Event.Attribute[].timestamp	True	Title-cased
.response[].Event.Attribute[].uuid	Related Attachment.Attribute	UUID	.response[].Event.Attribute[].timestamp	5dde5554-6320-4647-baa8-26d3ac107221	N/A
.response[].Event.Attribute[].distribution	Related Attachment.Attribute	Distribution	.response[].Event.Attribute[].timestamp	All communities	Maps an integer ID to a string based on the Attribute Distribution Mapping below. If no match is found, this attribute is not ingested.
.response[].Event.Attribute[].comment	Related Attachment.Attribute	Comment	.response[].Event.Attribute[].timestamp	sample comment	N/A
.response[].Event.Attribute[].sharing_group_id	Related Attachment.Attribute	Sharing Group	.response[].Event.Attribute[].timestamp	0	N/A
.response[].Event.Attribute[].deleted	Related Attachment.Attribute	Deleted	.response[].Event.Attribute[].timestamp	False	Title-cased
.response[].Event.Attribute[].disable_correlation	Related Attachment.Attribute	Disable Correlation	.response[].Event.Attribute[].timestamp	False	Title-cased
.response[].Event.Attribute[].value	Related Signature.Value	YARA	N/A	import "pe"\n\nrule OceanLotus_Steganography_Loader {\n\n\tmeta:...	Based on the jq expression: <code>.response[].Event.Attribute[] select(.type == "yara") .value</code> . Unicode characters "LEFT DOUBLE QUOTATION MARK" (\u201c) and "RIGHT DOUBLE QUOTATION MARK" (\u201d) are normalized to ASCII double quotations ("). Unicode character "HYPHEN" (\u2010) is normalized to the ASCII hyphen (-).
.response[].Event.Attribute[].value	Related Signature.Name	N/A	N/A	OceanLotus_Steganography_Loader	Rule name extracted from the YARA parser.
.response[].Event.Object[].Attribute[].value	Related Signature.Value	YARA	N/A	rule Contains_VBA_macro_code {\n\n\tmeta:...	Based on the jq expression: <code>.response[].Event.Object[] select(.name == "yara") .Attribute[] select(.type == "yara") .value</code> . Unicode characters "LEFT DOUBLE QUOTATION MARK" (\u201c) and "RIGHT DOUBLE QUOTATION MARK" (\u201d) are normalized to ASCII double quotations ("). Unicode character "HYPHEN" (\u2010) is normalized to the ASCII hyphen (-).

FEED DATA PATH	THREATQ ENTITY	THREATQ OBJECT TYPE OR ATTRIBUTE KEY	PUBLISHED DATE	EXAMPLES	NOTES
					QUOTATION MARK" (\u201d) are normalized to ASCII double quotations ("). Unicode character "HYPHEN" (\u2010) is normalized to the ASCII hyphen (-).
.response[].Event.Object[].Attribute[].value	Related Signature.Name	N/A	N/A	Contains_VBA_macro_code	Rule name extracted from the YARA parser.
.response[].Event.Attribute[].value	Related Signature.Value	Snort	N/A	alert tcp \$HOME_NET any -> any 3306 (msg: "mysql general_log write file"; ...)	Based on the jq expression: .response[].Event.Attribute[] select(.type == "snort") .value. Unicode characters "LEFT DOUBLE QUOTATION MARK" (\u201c) and "RIGHT DOUBLE QUOTATION MARK" (\u201d) are normalized to ASCII double quotations ("). Unicode character "HYPHEN" (\u2010) is normalized to the ASCII hyphen (-).
.response[].Event.Attribute[].value	Related Signature.Name	N/A	N/A	mysql general_log write file	Name extracted from Snort msg option if available; else, defaults to "Snort Rule". Leading or trailing whitespace is trimmed.
.response[].Event.Object[].Attribute[].value	Related Signature.Value	Snort	N/A	alert tcp \$HOME_NET any -> any 3306 (msg: "mysql general_log write file"; ...)	Based on the jq expression: .response[].Event.Object[] select(.name == "suricata") .Attribute[] select(.type == "snort") .value. Unicode characters "LEFT DOUBLE QUOTATION MARK" (\u201c) and "RIGHT DOUBLE QUOTATION MARK" (\u201d) are normalized to ASCII double quotations ("). Unicode character "HYPHEN" (\u2010) is normalized to the ASCII hyphen (-).
.response[].Event.Object[].Attribute[].value	Related Signature.Name	N/A	N/A	mysql general_log write file	Name extracted from Snort msg option if available; else, defaults to "Snort Rule". Leading or trailing whitespace is trimmed.
.response[].Event.Galaxy[].GalaxyCluster[].value / .response[].Event.Galaxy[].GalaxyCluster[].meta.synonyms[]	Related Adversary.Name	N/A	Keyhole Panda, temp.bottle	N/A	Based on the jq expression: .response[].Event.Galaxy[] select(.type == "threat-actor") (.GalaxyCluster[].value, .GalaxyCluster[].meta.synonyms[])
.response[].Event.Galaxy[].GalaxyCluster[].id	Related Adversary.Attribute	ID	N/A	5401	N/A
.response[].Event.Galaxy[].GalaxyCluster[].type	Related Adversary.Attribute	Type	N/A	threat-actor	N/A
.response[].Event.Galaxy[].GalaxyCluster[].description	Related Adversary.Attribute	Description	N/A	no description	N/A
.response[].Event.Galaxy[].GalaxyCluster[].galaxy_id	Related Adversary.Attribute	Galaxy ID	N/A	3	N/A
.response[].Event.Galaxy[].GalaxyCluster[].version	Related Adversary.Attribute	Version	N/A	75	N/A
.response[].Event.Galaxy[].GalaxyCluster[].tag_id	Related Adversary.Attribute	Tag ID	N/A	77	N/A
.response[].Event.Galaxy[].GalaxyCluster[].meta."cfr-suspected-state-sponsor"[]	Related Adversary.Attribute	Suspected State Sponsor	N/A	China	N/A

FEED DATA PATH	THREATQ ENTITY	THREATQ OBJECT TYPE OR ATTRIBUTE KEY	PUBLISHED DATE	EXAMPLES	NOTES
.response[].Event. Galaxy[].Galaxy Cluster[].meta. "cfr-suspected- victims"[]	Related Adversary.Attribute	Suspected Victims	N/A	Japan	N/A
.response[].Event. Galaxy[].Galaxy Cluster[].meta. "cfr-target- category"[]	Related Adversary.Attribute	Target Category	N/A	Private sector	N/A
.response[].Event. Galaxy[].Galaxy Cluster[].meta. "cfr-type-of- incident"[]	Related Adversary.Attribute	Type of Incident	N/A	Espionage	N/A
.response[].Event. Galaxy[].Galaxy Cluster[].meta. country[]	Related Adversary.Attribute	Country	N/A	CN	N/A
.response[].Event. Galaxy[].Galaxy Cluster[].meta.refs[]	Related Adversary.Attribute	References	N/A	http://intelreport.mandiant.com/Mandiant_APT1_Report.pdf	N/A
.response[].Event. Galaxy[].Galaxy Cluster[].value	Related Adversary.Name / Related Attack Pattern.Value / Related Course of Action.Value / Related Intrusion Set.Value / Related Malware.Value / Related Tool.Value	N/A	N/A	N/A	Attempts to map .response[].Event.Galaxy[].Galaxy Cluster[].type to a ThreatQ Object Type based on the MISP Galaxy Cluster Type to ThreatQ Object Type Mapping below.

Threat Level Mapping

MISP THREAT LEVEL ID	THREATQ ATTRIBUTE VALUE
1	High
2	Medium
3	Low
4	Undefined

Distribution Mapping

MISP DISTRIBUTION ID	THREATQ ATTRIBUTE VALUE
0	Your organization only
1	This community only
2	Connected communities
3	All communities
4	Sharing Group

Attribute Distribution Mapping

MISP ATTRIBUTE DISTRIBUTION ID	THREATQ ATTRIBUTE VALUE
0	Your organization only
1	This community only
2	Connected communities
3	All communities
4	Sharing Group
5	Inherit event

Analysis Mapping

MISP ANALYSIS ID	THREATQ ATTRIBUTE VALUE
0	Initial
1	Ongoing
2	Completed

MISP Attribute Type to ThreatQ Indicator Type Mapping

MISP ATTRIBUTE TYPE	THREATQ INDICATOR TYPE
md5	MD5
sha1	SHA-1
sha256	SHA-256
sha384	SHA-384
sha512	SHA-512
filename	Filename
ip	IP Address
ip-src	IP Address
ip-dst	IP Address
hostname	FQDN
domain	FQDN
email-subject	Email Subject
email-attachment	Email Attachment
email-src	Email Address
email-x-mailer	X-Mailer

MISP ATTRIBUTE TYPE	THREATQ INDICATOR TYPE
ssdeep	Fuzzy Hash
regkey	Registry Key
user-agent	User-Agent
mutex	Mutex
url	URL
vulnerability	CVE
uri	URL Path

MISP Galaxy Cluster Type to ThreatQ Object Type Mapping

MISP GALAXY CLUSTER TYPE	THREATQ OBJECT TYPE
mitre-mobile-attack-malware	Malware
mitre-enterprise-attack-malware	Malware
mitre-malware	Malware
mitre-enterprise-attack-tool	Tool
mitre-mobile-attack-tool	Tool
mitre-tool	Tool
mitre-enterprise-attack-course-of-action	Course of Action
mitre-mobile-attack-course-of-action	Course of Action
mitre-course-of-action	Course of Action
mitre-pre-attack-intrusion-set	Intrusion Set / Adversary (depends on value of the "Save Intrusion Sets as" configuration parameter)
mitre-intrusion-set	Intrusion Set / Adversary (depends on value of the "Save Intrusion Sets as" configuration parameter)
mitre-enterprise-attack-intrusion-set	Intrusion Set / Adversary (depends on value of the "Save Intrusion Sets as" configuration parameter)
mitre-mobile-attack-intrusion-set	Intrusion Set / Adversary (depends on value of the "Save Intrusion Sets as" configuration parameter)

MISP GALAXY CLUSTER TYPE	THREATQ OBJECT TYPE
mitre-enterprise-attack-attack-pattern	Attack Pattern
mitre-attack-pattern	Attack Pattern
mitre-mobile-attack-attack-pattern	Attack Pattern
mitre-pre-attack-attack-pattern	Attack Pattern

Average Feed Run

MISP server instances vary widely in their setup and the data stored within them. Due to this, average feed run results cannot be confidently provided.

Known Issues / Limitations

- MISP does not verify whether a Snort or YARA rule entered into it is valid. However, the Snort and YARA parsers used by this feed depend on the Snort or YARA rules being well-formed. Please refer to the following non-comprehensive list to aid in making sure that the Snort or YARA rules stored in your MISP server instance are valid so that they can be properly ingested by this feed.
- Snort:
 - Each rule option must be terminated with a semicolon (;).
 - Offending Snort rule: `alert tcp $HOME_NET any -> $EXTERNAL_NET [80,443,8080,7080,21,50000,995] (msg:"BDS MALICIOUS Emotet Worming Traffic Likely";content:"d29ybSBzdGFydGVk";content:"POST";http_method;classtype:spreader;sid:7;rev:1)`
 - Correction needed: `rev:1` should be `rev:1;`
 - Rule option values must be valid. For instance, options like `rev`, `sid`, and `gid` must have base 10 integers as their value.
 - Offending Snort option: `sid:#####;`
 - Correction needed: Either remove `sid` if the value is not known or replace the value with a valid ID, like `sid:7;`.
 - The value of the `snort` MISP attribute must contain at least one entire Snort rule. Multiple Snort rules can be provided in a single value if separated by newlines. The value must not contain any excess text, such as a header like `Snort rule:`.
- YARA:
 - The value of the `yara` MISP attribute must contain at least one entire YARA rule. Multiple YARA rules can be provided in a single value if separated by newlines. The value must not contain any excess text, such as a header like `YARA rule:`.
 - Make sure that any text that is not valid YARA syntax is either removed or commented out.

Change Log

- **Version 2.2.0**
 - Added new configuration option, **Inherited Context**, to inherit context from top-level events to related IOCs.
 - Added new configuration option, **Rate Limit Delay**, to set a delay to prevent rate limiting (429 errors).
- **Version 2.1.5**
 - Updated the python implementation of the MISP filter to improve feed efficiency.
 - Updated the minimum ThreatQ version to 4.50.0.
- **Version 2.1.4**
 - Removed the **Use the Event Data as Query Parameter** UI configuration parameter.
 - Added new UI configuration parameter: **Query Filter Characteristics**. Time constrained data fetching for both schedule and manual runs are now user configurable via this new field.
- **Version 2.1.3**
 - Added new configuration parameter - **Use Event Date as Query Parameter**.
 - Performed updates on time constrained data fetching for both scheduled and manual runs. **Scheduled Runs** retrieve MISP events and event attributes from events that have received a modification using the start date only. **Manual Runs** can retrieve MISP events and attributes using the start date only or the start and end dates depending on configuration options. See the **Use the Event Date as Query Parameter** option in the [Configuration](#) chapter of this guide.
- **Version 2.1.2**
 - Updated the timing query parameters used for pulling data.
- **Version 2.1.1**
 - Added the ability to Normalize more Unicode quotations and hyphens
 - Add the ability to parse the YARA Rule Name ThreatQ Event Attribute from MISP Object Attributes that contain the key-value pair
`object_relation: "yara-rule-name"` in addition to the parsing logic added in 2.1.0, in which the YARA Rule Name ThreatQ Attribute is parsed from MISP Object Attributes that contain the key-value pair
`type: "yara-rule-name"`
- **Version 2.1.0**
 - Normalized Unicode double quotations to ASCII double quotations in YARA and Snort signature values
 - Normalized Unicode hyphens to ASCII hyphens in YARA and Snort signature values
 - Adjusted logic used to derive a YARA rule from MISP Object Attributes. Previously, the logic depended on a MISP YARA Object having both `yara` and `yara-rule-name` attributes, in which it derived a YARA rule based on the template rule `{{yara_rule_name}} {{yara}}` before passing the derived rule through the YARA parser. This was not often seen in the wild; the MISP `yara` attribute usually contains the entire YARA rule. Even the documentation for the MISP YARA Object suggests that these attributes be used in a mutually exclusive manner: use the `yara` attribute if the user has

the entire YARA rule to provide to MISP; else, reference a YARA rule using the `yara-rule-name` attribute. As a result, the following changes are in this version of the CDF:

- Ingest the `yara-rule-name` MISP Object Attribute as a ThreatQ Attribute of the MISP Event object
- Ingest the `yara` MISP Object Attribute as a ThreatQ YARA Signature
- Parse MISP Suricata Objects in order to ingest its Snort Object Attributes as ThreatQ Snort Signatures.
- Although well-formed Snort rules should contain a `msg` option, which is used to derive the ThreatQ Snort Signature's Name, account for a Snort rule not containing a `msg` option by defaulting the ThreatQ Snort Signature's Name to "Snort Rule".
- **Version 2.0.0**
 - Add configuration parameter "Enable SSL Verification"
 - Change behavior of scheduled feed runs such that it only fetches data published within the last day
 - Add support for parsing MISP YARA Objects
 - Add support for parsing MISP Snort Attributes
 - Add additional key-value pairs to the MISP Galaxy Cluster Type to ThreatQ Object Type Mapping
 - Change the value of `happened_at` for ingested events by using `date` instead of `timestamp`
- **Version 1.0.4**
 - Ingest MISP Attachment Attributes as ThreatQ Attachments
- **Version 1.0.3**
 - Add configuration parameter "Disable Proxies"
- **Version 1.0.0**
 - Initial release