

ThreatQuotient



Intel 471 Reports, Actors, and Indicators Feed Implementation Guide

Version 1.0.3

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ThreatQuotient

11400 Commerce Park Dr., Suite 200

Reston, VA 20191

Support

Email: support@threatq.com

Web: support.threatq.com

Phone: 703.574.9893

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Versioning

- Current integration version 1.0.3
- Supported on ThreatQ versions $\geq$ 4.21.0

Introduction

Intel 471 Reports Feed ingests threat intelligence data from the following endpoints:

- Intel 471 Reports - <https://api.intel471.com/v1/report>
- Intel 471 Detailed Reports - Supplemental - https://api.intel471.com/v1/reports/:report_uid

Notes

- The supplemental feed is called for each record returned from Intel471 Reports and also for each UID in its similar_reports.
- Time constrained data fetching is possible.
- Uses basic HTTP authentication based on email address and API key.

Prerequisites

ThreatQ version 4.25 included the full STIX 2.0 object set. If you have not upgraded your ThreatQ instance to version 4.25 or later, Report objects (STIX 2.0 custom object) must be installed prior to running the feed.

The commands to install the custom objects are as follows:

1. `cd /var/www/api`
2. `sudo php artisan threatq:create-custom-objects`
3. `sudo php artisan threatq:make-object-set --
file=/var/www/api/database/seeds/data/custom_
objects/stix2_0.json`
4. `sudo php artisan up`

Installation

Perform the following steps to install the feed:



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

1. Log into <https://marketplace.threatq.com/>.
2. Locate and download the **Intel 471 Reports** feed file.
3. Navigate to your ThreatQ instance.
4. Click on the **Settings** icon and select **Incoming feeds**.
5. Click on the **Add New Feed** button.
6. Upload the feed file using one of the following methods:
 - Drag and drop the file into the dialog box
 - Select **Click to Browse** to locate the feed 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.

The feed will be added to the **Commercial** tab for Incoming Feeds. 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 feed-related credentials.

To configure the feed:

1. Click on the **Settings** icon and select **Incoming Feeds**.
2. Locate the feed under the **Commercial** tab.
3. Click on the **Feed Settings** link for the feed.
4. Under the **Connection** tab, enter the vendor-supplied email address and API key.

The Intel 471 Reports, Actors and Indicators feed supports multiple configuration parameters:

Parameter	Description
Count	Maximum number of records to retrieve from the provider per request. Default value: 10. Size range: 0-100.
Report Location	Display reports related to a certain country or region. Examples: "European Union" (as a region), "United Kingdom" (as a country). It can only search for one location at a time.
Report Tag	Display reports related to a certain tag. Examples: "Banking & Finance", "Tools", "Airlines", "Phishing", "Spam", "Credit Card Fraud". It can only search for one tag at a time.

5. Click on **Save Changes**.
6. Click on the toggle switch to the left of the feed name to enable the feed.

ThreatQ Mapping

Intel 471 provides an API that users can use to extract data in JSON format.

Each response from the provider contains the following parameters:

```
indicator_type_map:
  MD5: MD5
  IPAddress: IP Address
  ActorDomain: FQDN
  ActorWebsite: URL
  EmailAddress: Email Address
  MaliciousURL: URL
  SHA256: SHA-256
  SHA1: SHA-1
  URL: URL
```

Intel 471 Reports

JSON response sample

```
{
  "reportTotalCount": 2,
  "reports": [
    {
      "uid": "625bf3a87263f00e06b3cb-f6cc7b6380d83fff93b7ef201d0c9e599fb6bd95bf",
      "admiraltyCode": "F4",
      "motivation": [
        "CC"
      ],
    },
  ],
}
```

```
    "subject": "Possible Ukrainian actor MentoS128  
(aka Silver128, PapoKarlo) offers hacking service; Possible  
victims identified",  
    "created": 1571659854000,  
    "dateOfInformation": 1571115600000,  
    "sourceCharacterization": "Information was derived  
from Russian-language cybercrime forum XSS and our sensitive  
and reliable source.",  
    "entities": [  
        {  
            "type": "EmailAddress",  
            "value": "kremz@mail.ua"  
        },  
        {  
            "type": "EmailAddress",  
            "value": "silver_mix@ukr.net"  
        },  
        {  
            "type": "Handle",  
            "value": "aleksandrkremlnikov"  
        }  
    ],  
    "locations": [  
        {  
            "region": "Asia",  
            "country": "India",  
            "link": "impacts"  
        },  
    ],
```

```
{
  "region": "Asia",
  "country": "Taiwan",
  "link": "impacts"
},
"tags": [
  "Database Dumps",
  "Extortion",
  "Injects",
  "IoT (Internet of Things)",
  "Ransomware"
],
"portalReportUrl": "https://ti-
tan.intel471.com/report/10757ae14960b92e04733023130fce5e",
"lastUpdated": 1571660657176,
"actorSubjectsOfReport": [
  {
    "handle": "MentoS128",
    "aliases": [
      "Silver128",
      "PapoKarlo"
    ]
  }
],
"similarReports": [
  {
    "uid": "aa210760432ea8b-
f21ed3bf42068c365bf8fa34fd4c678d321ef066055625e45",
```

```
        "admiraltyCode": "B2",
        "motivation": [
            "CC"
        ],
        "subject": "Russian actor, bulletproof
hoster yalishanda's (aka downlow, stas_vl) new control panel
for fast-flux service reviewed",
        "dateOfInformation": 1545976800000,
        "sourceCharacterization": "Information was
derived from the Russian-language cybercrime forum Exploit,
our actors' database, and our sensitive and reliable source.",
        "portalReportUrl": "https://ti-
tan.intel471.com/report/4cd457bd47c42dae80f8dbf0305c3a76"
    }
]
}
]
```

The mapping table is below.

Feed Data	ThreatQ Entity	ThreatQ Object Type or Attribute Key	Examples	Notes
.uid	report	Call Intel 471 Detailed Report		
.similarReports.uid	report	Call Intel 471 Detailed Report		

Intel 471 Detailed Reports

JSON response sample

```
{
  "uid": "cc00f36d-fd4cdb899637546cb86e1a2be4dd96e2096db0dfe7da9e2557469dbc",
  "admiraltyCode": "B4",
  "motivation": [
    "CC"
  ],
  "subject": "Possible Russian actor SOLDATKIN (aka dDonry, Hellpein, lOoOl, Rocfor, Soldat554, 2+2=5000, Joker5218) offers to sell remote access trojan based on remote manipulator system malware",
  "researcherComments": "<p><strong>Assessment of credibility</strong></p>\r\n\r\n<p><strong>SOLDATKIN </strong>is a Russian-speaking ...",
  "rawText": "<p>On Oct. 1, 2019, the actor ((strong>SOLDATKIN</strong>)) posted the following on the XSS forum:<br />\r\n---</p>\r\n\r\n....",
  "rawTextTranslated": "<p>On Oct. 1, 2019, the actor <strong>SOLDATKIN</strong> posted the following on the XSS forum:<br />\r\n....",
  "created": 1570534310000,
  "dateOfInformation": 1569906000000,
  "sourceCharacterization": "Information was derived from the Russian-language cybercrime forum XSS and our sensitive and reliable source.",
  "entities": [
```

```
{
  "type": "EmailAddress",
  "value": "denis.soldatkin@bk.ru"
},
{
  "type": "Handle",
  "value": "2+2=5000"
},
{
  "type": "Handle",
  "value": "dDonry"
},
{
  "type": "Handle",
  "value": "Denis Soldatkin"
},
{
  "type": "Handle",
  "value": "GGGGG IOILA"
}
],
"locations": [
  {
    "region": "Europe",
    "country": "Russia",
    "link": "originated_from"
  }
],
"tags": [
```

```
        "Crypters & Packers",
        "Malware",
        "Tools"
    ],
    "portalReportUrl": "https://ti-
tan.intel471.com/report/08ec0068f2a36e01b8066f0e67420824",
    "lastUpdated": 1570534757790,
    "actorSubjectsOfReport": [
        {
            "handle": "SOLDATKIN",
            "aliases": [
                "dDonry",
                "Hellpein",
                "10o0l",
                "Rocfor",
                "Soldat554",
                "2+2=5000",
                "Joker5218"
            ]
        }
    ],
    "reportAttachments": [
        {
            "fileName": "attachment-157017573009333.zip",
            "url": "https://ap-
i.in-
tel471.-
com/v1/re-
```

```
ports/c-
c00f36d-
fd4cd-
b899637546cb86e1a2be4d-
d96e2096d-
b0d-
fe7da9e2557469d-
bc/download/23cc2a8b7e4eaf7fe1a982da34f24c8f/attachment-
157017573009333.zip",
      "fileSize": 49680
    }
  ],
  "similarReports": [
    {
      "uid": "aa210760432ea8b-
f21ed3bf42068c365bf8fa34fd4c678d321ef066055625e45",
      "admiraltyCode": "B2",
      "motivation": [
        "CC"
      ],
      "subject": "Russian actor, bulletproof hoster yal-
ishanda's (aka downlow, stas_vl) new control panel for fast-
flux service reviewed",
      "dateOfInformation": 1545976800000,
      "sourceCharacterization": "Information was derived
from the Russian-language cybercrime forum Exploit, our act-
ors' database, and our sensitive and reliable source.",
      "portalReportUrl": "https://ti-
tan.intel471.com/report/4cd457bd47c42dae80f8dbf0305c3a76"
```

```

    }
  ]
}
```

The mapping table is below.

Feed Data	ThreatQ Entity	ThreatQ Object Type or Attribute Key	Examples	Notes
.subject	report.value	Value	"Possible Russian actor SOLDATKIN (aka dDonry, Hellpein, IOoOI, Rocfor, Soldat554, 2+2=5000, Joker5218)...."	
.researcherComments, .rawText	report.description	Description	"Researcher Comments: Assessment of credibility ... Raw Text: On Oct. 1, 2019, the actor ((SOLDATKIN))...."	The report description will have both the .researcherComments and .rawText values concatenated.
.created or .dateOfInformation	report.published_at	Published At	"1570534310000"	formatted
.uid	report.uid	Intel471 Report ID	"cc00f36d-fd4cdb899637546cb86e1a2be4dd96e2096db0dfe7da9e2557469dbc"	
.sourceCharacterization	report.-sourceCharacterization	Intel471 Source	"Information was derived from the Russian-language cybercrime forum XSS and our sensitive and reliable source."	
.locations.region	report.region	Region	"Russia"	

Feed Data	ThreatQ Entity	ThreatQ Object Type or Attribute Key	Examples	Notes
.locations.country	report.country	Country	"United States"	
.portalReportURL	report.url	Intel471 Portal URL	"https://ti-tan.intel471.com/report/08ec0068f2a36e01b8066f0e67420824"	
.tags	report.tags	Intel471 Tags	["Crypters & Packers", "Malware", "Tools"]	
.admiraltyCode[0]	report.admiraltyReliability	Intel471 Admiralty Reliability	"B"	
.admiraltyCode[1]	report.admiraltyCredibility	Intel471 Admiralty Credibility	"4"	
.motivation	report.attribute	Intel471 Motivation	"CC"	
.entities.value	adversary.name if ["type"] == "Handle"		"coolcat"	

Feed Data	ThreatQ Entity	ThreatQ Object Type or Attribute Key	Examples	Notes
.entities.value	indicator.value if ["type"] != "Handle"		"ch4rgui@hotmail.fr"	
.entities.type	indicator.type if ["type"] != "Handle"		"EmailAddress"	indicator_type_map
.actorSubjectsOfReport.aliases	adversary.attribute	Aliases	["dDonry", "Hellpein"]	*
* Where actorSubjectsOfReport.handle == adversary.name  Created Indicators and Adversaries will have the same attributes as the Report objects.				

Average Feed Run

Metric	Result
Run Time	70 minutes
Indicators	1,351
Indicator Attributes	30,216
Adversaries	115
Adversary Attributes	2,216
Reports	9
Report Attributes	163



Object counts and Feed runtime are supplied as generalities only - objects returned by a provider can differ based on credential configurations and Feed runtime may vary based on system resources and load.

Change Log

- **Version 1.0.3**
 - Fix added to address issue with empty responses from the supplemental feed.
- **Version 1.0.2**
 - Fixed a bug where the description was not populated.
- **Version 1.0.1**
 - Added Attributes for Threat Objects including IOCs and Actors.
- **Version 1.0.0**
 - Initial Release