

ThreatQuotient



ZeroFox CDF

Version 1.1.2

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ThreatQuotient

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 **ThreatQ Supported**

Support

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Support

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

Support Email: support@threatq.com

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

Support Phone: 703.574.9893

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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 1.1.2

**Compatible with ThreatQ
Versions** $\geq 4.50.0$

Support Tier ThreatQ Supported

Introduction

The ZeroFox integration allows a ZeroFox user to ingest campaigns and indicators from ZeroFox. Ingested intelligence can be filtered down by privacy level (for campaigns), and threat level (for indicators).

The integration provides the following feeds:

- **ZeroFox Alerts** - ingests new Event objects and related Indicators.
- **ZeroFox Campaigns** - ingests new Campaign objects and related Indicators.
- **ZeroFox Indicators** - ingests new Indicator objects.

The following system object types are ingested by the integration:

- Events
 - Event Attributes
- Campaigns
 - Campaign Attributes
- Indicators
 - Indicator Attributes

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 yaml file.
3. Navigate to the integrations management page on your ThreatQ instance.
4. Click on the **Add New Integration** button.
5. Upload the integration yaml file using one of the following methods:
 - Drag and drop the file into the dialog box
 - Select **Click to Browse** to locate the 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. Select the individual feeds to install, when prompted, and click **Install**. The feed(s) 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 **Commercial** 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:

ZeroFox - ALL Feeds

PARAMETER	DESCRIPTION
-----------	-------------

API Token	Your ZeroFox API Token.
-----------	-------------------------

ZeroFox Alerts

PARAMETER	DESCRIPTION
-----------	-------------

Severity Filter	Specify which alerts to ingest based on their severity levels.
-----------------	--

Status Filter	Specify which alerts to ingest based on their status.
---------------	---

ZeroFox Campaigns

PARAMETER	DESCRIPTION
-----------	-------------

Campaign Name Contains (Optional)	Optional field to allow you to filter down the ingested campaigns based on a keyword.
-----------------------------------	---

Privacy Levels	Specify which campaigns or indicators to ingest based on their privacy level
----------------	--

ZeroFox Indicators

PARAMETER**DESCRIPTION****Privacy Levels**

Specify which campaigns or indicators to ingest based on their privacy level.

Threat Levels

Specify which indicators to ingest based on their threat level.

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

ZeroFox Alerts (Feed)

This feed automatically pulls brand alerts from the ZeroFox API.

GET <https://api.zerofox.com/1.0/alerts>

Sample Response:

```
{
  "count": 5,
  "next": null,
  "previous": null,
  "page_size": 100,
  "num_pages": 1,
  "alerts": [
    {
      "alert_type": "search query",
      "logs": [
        {
          "id": 238682352,
          "timestamp": "2021-09-28T17:36:48+00:00",
          "actor": "ZeroFox Platform Specialist",
          "subject": "",
          "action": "cancel takedown"
        },
        {
          "id": 228353522,
          "timestamp": "2021-08-18T04:36:52+00:00",
          "actor": "api_metronlabs",
          "subject": "",
          "action": "request takedown"
        }
      ],
      "offending_content_url": "http://acme-corporation.com",
      "asset_term": null,
      "assignee": "Kishaas",
      "entity": {
        "id": 1163869,
        "name": "Acme Corporation",
        "image": "https://cdn.zerofox.com/media/entityimages/rl2rybmrht5k7890b3g93i7sifh9epsupwe2xmy5h82jyv8dtznzbnbr20n2eri.jpg",
        "labels": [
          {
            "id": 2036277,
            "name": "Brand"
          }
        ]
      }
    }
  ],
}
```

```

        "entity_group": {
            "id": 6397,
            "name": "Default"
        }
    },
    "entity_term": null,
    "content_created_at": "2021-04-21T18:05:16+00:00",
    "id": 135985017,
    "severity": 4,
    "perpetrator": {
        "name": "Concealed",
        "display_name": "Concealed",
        "id": 199987205,
        "url": "http://acme-corporation.com",
        "content": "",
        "type": "page",
        "timestamp": "2021-04-21T18:05:16+00:00",
        "network": "domains",
        "username": "Jake"
    },
    "rule_group_id": 457,
    "asset": {
        "id": 1163869,
        "name": "Acme Corporation",
        "image": "https://cdn.zerofox.com/media/entityimages/
rl2rybmrht5k7890b3g93i7sifh9epsupwe2xmy5h82jyv8dtznzbnbr20n2eri.jpg",
        "labels": [
            {
                "id": 2036277,
                "name": "Brand"
            }
        ],
        "entity_group": {
            "id": 6397,
            "name": "Default"
        }
    },
    "metadata": "{\n
        \"ai_confidence_display\": [\n
        {\n
            \"color\": \"#0072ce\", \n
            \"detections\": [\n
            {\n
                \"confidence\": 0.9999945766507031, \n
                \"label\": \"English\", \n
                \"icon\": \"chat\", \n
                \"name\": \"Language
Detection\", \n
                \"alert_modal\": {\n
                \"a_records\": [\"web.netzerv.com A 13.58.70.70\"], \n
                \"analysis\": 1, \"live\": true, \"mx_records\": [], \n
                \"redirects\": [
                \"acme-corporation.com/wp-login.php?redirect_to=acme-
corporation.com\", \n
                \"acme-corporation.com\" ], \n
                \"screenshot\": \"https://storage.restpack.io/screenshot/
0b38694ae1f34d41c4ddfd53cf6f3df9aff607b48f855276983c83c03067cee\", \n
                \"whois\": \"% IANA WHOIS server\\n% for more information on IANA, visit

```

```
http://www.iana.org\\n% This query returned 1 object\\n\\nrefer:
whois.verisign-grs.com\\n\\n\\ndomain: COM\\n\\n\\norganisation:
VeriSign Global Registry Services\\n\\n\\naddress: 12061 Bluemont Way\\n
\\naddress: Reston Virginia 20190\\n\\n\\naddress: United States\\n\\n\\n
\\ncontact: administrative\\n\\n\\nname: Registry Customer Service\\n
\\norganisation: VeriSign Global Registry Services\\n\\n\\naddress: 12061
Bluemont Way\\n\\n\\naddress: Reston Virginia 20190\\n\\n\\naddress: United
States\\n\\n\\nphone: +1 703 925-6999\\n\\n\\nfax-no: +1 703 948 3978\\n
\\ne-mail: info@verisign-grs.com\\n\\n\\ncontact: technical\\n
\\nname: Registry Customer Service\\n\\n\\norganisation: VeriSign Global
Registry Services\\n\\n\\naddress: 12061 Bluemont Way\\n\\n\\naddress: Reston
Virginia 20190\\n\\n\\naddress: United States\\n\\n\\nphone: +1 703
925-6999\\n\\n\\nfax-no: +1 703 948 3978\\n\\ne-mail: info@verisign-
grs.com\\n\\n\\nnserver: A.GTLD-SERVERS.NET 192.5.6.30
2001:503:a83e:0:0:0:2:30\\n\\nnserver: B.GTLD-SERVERS.NET 192.33.14.30
2001:503:231d:0:0:0:2:30\\n\\nnserver: C.GTLD-SERVERS.NET 192.26.92.30
2001:503:83eb:0:0:0:0:30\\n\\nnserver: D.GTLD-SERVERS.NET 192.31.80.30
2001:500:856e:0:0:0:0:30\\n\\nnserver: E.GTLD-SERVERS.NET 192.12.94.30
2001:502:1ca1:0:0:0:0:30\\n\\nnserver: F.GTLD-SERVERS.NET 192.35.51.30
2001:503:d414:0:0:0:0:30\\n\\nnserver: G.GTLD-SERVERS.NET 192.42.93.30
2001:503:eea3:0:0:0:0:30\\n\\nnserver: H.GTLD-SERVERS.NET 192.54.112.30
2001:502:8cc:0:0:0:0:30\\n\\nnserver: I.GTLD-SERVERS.NET 192.43.172.30
2001:503:39c1:0:0:0:0:30\\n\\nnserver: J.GTLD-SERVERS.NET 192.48.79.30
2001:502:7094:0:0:0:0:30\\n\\nnserver: K.GTLD-SERVERS.NET 192.52.178.30
2001:503:d2d:0:0:0:0:30\\n\\nnserver: L.GTLD-SERVERS.NET 192.41.162.30
2001:500:d937:0:0:0:0:30\\n\\nnserver: M.GTLD-SERVERS.NET 192.55.83.30
2001:501:b1f9:0:0:0:0:30\\nds-rdata: 30909 8 2
E2D3C916F6DEEAC73294E8268FB5885044A833FC5459588F4A9184CFC41A5766\\n\\n\\n
\\nwhois: whois.verisign-grs.com\\n\\n\\nstatus: ACTIVE\\n
\\nremarks: Registration information: http://www.verisigninc.com\\n\\n\\n
\\ncreated: 1985-01-01\\n\\nchanged: 2017-10-05\\n\\nsource: IANA\\n
\\n\\n\\n\\n\\n\\n"},\\n\\n \\n"enrichment\\n": {\\n
\\n"analysis-message-mapper\\n": {\\n \\n"enterpriseID\\n": 5031,\\n
\\n"entityID\\n": 1163869,\\n \\n"images\\n": [\\n {\\n
\\n"field\\n": "\\ncontent.domain.screenshot\\n",\\n \\n"item\\n":
\\n"https://storage.restpack.io/screenshot/
0b38694ae1f34d41c4ddfd53cf6f3df9aff607b48f855276983c83c03067cee\\n\\n
}\\n ],\\n \\n"network\\n": "\\ndomains\\n",\\n
\\n"relation\\n": "\\nsearch_query\\n",\\n \\n"serviceOrigin\\n": "\\nanalyst-
console\\n",\\n \\n"subtype\\n": "\\nunspecified\\n",\\n
\\n"texts\\n": null,\\n \\n"type\\n": "\\npage\\n",\\n \\n"urls\\n":
null\\n },\\n \\n"language-detection\\n": {\\n
\\n"confidence\\n": 0.9999961125,\\n \\n"detected_language\\n": "\\nen\\n",\\n
\\n"detection_method\\n": "\\nlanguageProbability\\n",\\n
\\n"language_probability\\n": {\\n \\n"en\\n":
0.9999961125\\n },\\n \\n"text\\n": "\\nacme-
corporation.com\\n",\\n },\\n \\n"nlp-utils\\n": {\\n
\\n"lemmatized_and_stop_words_filter\\n": "\\nacme-corporation.com\\n",\\n
\\n"nlp_model\\n": "\\nen\\n",\\n },\\n \\n"ocr-analysis\\n": {\\n
\\n"data\\n": [\\n {\\n \\n"details\\n": {\\n
\\n"bounding_boxes\\n": [ [ [ 203, 599 ], [ 275, 618 ] ], [ [ 170, 665 ], [ 206,
```

```

679 ] ], [ [ 214, 664 ], [ 308, 683 ] ], [ [ 197, 727 ], [ 242, 740 ] ],
[ [ 247, 727 ], [ 283, 740 ] ] ],\n                                \"confidences\":
[ 0.96, 0.96, 0.96, 0.96, 0.77 ],\n                                \"height\": 900,\n\"width\": 800,\n                                \"words\": [\n\"Register\", \n                                \"Lost\", \n\"password?\", \n                                \"Privacy\", \n\"Policy\" \n                                ] \n                                }, \n\n\"image\": \"https://storage.restpack.io/screenshot/
0b38694ae1f34d41c4dddfa53cf6f3df9aff607b48f855276983c83c03067cee\" \n
    } \n                                } \n                                }, \n\n\n\"image_overlays\": [ \n                                { \n                                \"image_url\": \"https://
storage.restpack.io/screenshot/
0b38694ae1f34d41c4dddfa53cf6f3df9aff607b48f855276983c83c03067cee\", \n
\"image_width\": 800, \n                                \"image_height\": 650, \n
\"image_highlights\": [], \n                                \"image_discovered_text\": \"Register
Lost password? Privacy Policy\" \n                                } \n                                ], \n\n\n\"occurrences\": [ \n                                { \n                                \"origin\": null, \n
\"term\": \"acme-corporation.com\" \n                                } \n                                ] \n                                }\",
    \"status\": \"Open\",
    \"timestamp\": \"2021-10-04T04:55:00+00:00\",
    \"rule_name\": \"Advanced Domain Analysis - Full String Match\",
    \"last_modified\": \"2021-10-04T05:14:12Z\",
    \"protected_locations\": null,
    \"darkweb_term\": null,
    \"business_network\": null,
    \"reviewed\": true,
    \"escalated\": true,
    \"network\": \"domains\",
    \"protected_social_object\": null,
    \"notes\": \"Impersonation - Name\",
    \"reviews\": [
        {
            \"id\": 204501,
            \"label\": \"NOT_HELPFUL\",
            \"alert\": 135985017,
            \"created_by\": \"\",
            \"timestamp\": \"2021-06-29T11:42:10Z\"
        },
        {
            \"id\": 204502,
            \"label\": \"IRRELEVANT\",
            \"alert\": 135985017,
            \"created_by\": \"\",
            \"timestamp\": \"2021-06-29T11:48:17Z\"
        }
    ],
    \"rule_id\": 38161,
    \"entity_account\": null,
    \"entity_email_receiver_id\": null,
    \"tags\": [
        \"a-record\",

```

```

        "matching-term",
        "live-domain",
        "test",
        "tag",
        "skopje"
    ]
}
]
}

```

ThreatQ provides the following default mapping for this feed:

These mappings are based on the data pulled from the `alerts` list from the API response

FEED DATA PATH	THREATQ ENTITY	THREATQ OBJECT TYPE OR ATTRIBUTE KEY	PUBLISHED DATE	EXAMPLES	NOTES
.alerts[].alert_type/rule_name/severity/id	Event.Title	Alert	.alerts[].timestamp	[Search Query] Inferred Vulnerability (Severity: Medium; ID: 142919722)	Key values are concatenated to form title
.alerts[].content_created_at	Event.Happened_at	N/A	.alerts[].timestamp	2021-04-21T18:05:16+00:00	N/A
.alerts[].offending_content_url	Related Indicator.Value	URL	.alerts[].timestamp	http://acme-corporation.com	This is not always present
.alerts[].perpetrator.url	Related Indicator.Value	URL	.alerts[].timestamp	http://acme-corporation.com	This is not always present
.alerts[].tags[]	Event.Tag	N/A	.alerts[].timestamp	a-record	N/A
.alerts[].perpetrator.name	Event.Attribute	Perpetrator Name	.alerts[].timestamp	Concealed	N/A
.alerts[].perpetrator.username	Event.Attribute	Perpetrator Username	.alerts[].timestamp	Jake	N/A
.alerts[].perpetrator.url	Event.Attribute	Perpetrator URL	.alerts[].timestamp	http://acme-corporation.com	N/A
.alerts[].perpetrator.type	Event.Attribute	Perpetrator Type	.alerts[].timestamp	page	N/A
.alerts[].perpetrator.network	Event.Attribute	Perpetrator Network	.alerts[].timestamp	domains	N/A
.alerts[].alert_type	Event.Attribute	Alert Type	.alerts[].timestamp	search query	N/A
.alerts[].assignee	Event.Attribute	Assignee	.alerts[].timestamp	Kishaas	N/A
.alerts[].darkweb_term	Event.Attribute	Dark Web Term	.alerts[].timestamp	N/A	N/A
.alerts[].entity_term	Event.Attribute	Entity Term	.alerts[].timestamp	N/A	N/A
.alerts[].escalated	Event.Attribute	Escalated	.alerts[].timestamp	True	Mapped to True or False
.alerts[].reviewed	Event.Attribute	Reviewed	.alerts[].timestamp	False	Mapped to True or False
.alerts[].network	Event.Attribute	Network Source	.alerts[].timestamp	domains	N/A
.alerts[].notes	Event.Attribute	Note	.alerts[].timestamp	Impersonation - Name	N/A

FEED DATA PATH	THREATQ ENTITY	THREATQ OBJECT TYPE OR ATTRIBUTE KEY	PUBLISHED DATE	EXAMPLES	NOTES
.alerts[].reviews.label	Event.Attribute	Alert Review	.alerts[].timestamp	NOT_HELPFUL	N/A
.alerts[].rule_name	Event.Attribute	Rule Name	.alerts[].timestamp	Advanced Domain Analysis - Full String Match	N/A
.alerts[].severity	Event.Attribute	Severity	.alerts[].timestamp	4	Mapped to string-value
.alerts[].status	Event.Attribute	Status	.alerts[].timestamp	Open	N/A
.alerts[].entity.name	Event.Attribute	Targeted Entity	.alerts[].timestamp	Acme Corporation	N/A
.alerts[].asset.name	Event.Attribute	Targeted Asset	.alerts[].timestamp	Acme Corporation	N/A
.alerts[].offending_content_url	Event.Attribute	Offending Content URL	.alerts[].timestamp	http://acme-corporation.com	N/A
.alerts[].asset.labels.name	Event.Attribute	Targeted Asset Label	.alerts[].timestamp	Brand	N/A
.alerts[].entity.labels.name	Event.Attribute	Targeted Entity Label	.alerts[].timestamp	Brand	N/A
.alerts[].protected_social_object	Event.Attribute	Protected Social Object	.alerts[].timestamp	N/A	N/A
.alerts[].id	Event.Attribute	ZeroFox Link	.alerts[].timestamp	https://cloud.zerofox.com/alerts/135985017	N/A

Severity Map:

METRIC	VALUE
1	Info
2	Low
3	Medium
4	High
5	Critical

ZeroFox Campaigns (Feed)

This feed will ingest campaigns and indicators from ZeroFox's API.

GET <https://tg-api.zerofox.com/campaigns>

Sample Response:

```
{
  "next": null,
  "previous": null,
  "results": [
    {
      "id": 115,
      "name": "Phishing Domains - Apple and Amazon",
      "privacy_level": "public",
      "description": "Phishing Domains - Apple and Amazon",
      "url_descriptions": [],
      "created_at": "2019-12-03T20:13:39.593334Z",
      "updated_at": "2019-12-03T20:13:39.593355Z"
    },
    {
      "id": 114,
      "name": "Amazon India Phishing Site",
      "privacy_level": "public",
      "description": "Amazon India Impersonator Site",
      "url_descriptions": [],
      "created_at": "2019-12-03T18:20:13.473048Z",
      "updated_at": "2019-12-03T18:20:13.473076Z"
    }
  ]
}
```

ThreatQ provides the following default mapping for this feed:

FEED DATA PATH	THREATQ ENTITY	THREATQ OBJECT TYPE OR ATTRIBUTE KEY	PUBLISHED DATE	EXAMPLES	NOTES
results[].name	Campaign.Value	N/a	results[].created_at	Phishing Domains - Apple and Amazon	N/A
results[].description	Campaign.Description	N/A	results[].created_at	Amazon India Impersonator Site	N/A
results[].privacy_level	Campaign.Attribute	Privacy Level	results[].created_at	Public	Converted to title casing

Get Related Indicators (Supplemental)

This supplemental feed will ingest only indicators related to ingested campaigns.

GET https://tg-api.zerofox.com/campaigns/{id}/list_indicators

```
{
  "next": null,
  "previous": null,
  "results": [
    {
      "id": 2404244,
      "indicator_type": "non-social",

```



```

"value": "http://109.230.199.227",
"network": "all",
"classifications": [],
"campaigns": [
  {
    "id": 105,
    "name": "Cybercriminal Group FIN7 Updates Toolset",
    "privacy_level": "public",
    "description": "FIN7, a notorious cybercriminal group with
significant resources that target the retail, restaurant and hotel industries,
has been deploying new tools within their arsenal. Incident responders at
FireEye's Mandiant released a post outlining two new tools - dubbed RDFSNIFFER
and BOOSTWRITE. BOOSTWRITE is an in memory dropper for malware, and RDFSNIFFER
is a malicious DLL that hijacks a remote administration client built by NCR
Corporation.",
    "url_descriptions": [],
    "created_at": "2019-10-10T17:54:16.318585Z",
    "updated_at": "2019-10-10T17:54:16.318615Z"
  }
],
"privacy_level": "public",
"created_at": "2019-10-10T17:59:42.701910Z",
"updated_at": "2019-10-10T17:59:42.707703Z",
"threat_level": "high",
"expired": "false",
"ttl": "2020-02-07T17:59:42.701910Z",
"zf_alert_id": null
},
{
  "id": 2404243,
  "indicator_type": "file_hash_sha256",
  "value":
"18cc54e2fbdad5a317b6aeb2e7db3973cc5fffb01bbf810869d79e9cb3bf02bd5",
  "network": "all",
  "classifications": [],
  "campaigns": [
    {
      "id": 105,
      "name": "Cybercriminal Group FIN7 Updates Toolset",
      "privacy_level": "public",
      "description": "FIN7, a notorious cybercriminal group with
significant resources that target the retail, restaurant and hotel industries,
has been deploying new tools within their arsenal. Incident responders at
FireEye's Mandiant released a post outlining two new tools - dubbed RDFSNIFFER
and BOOSTWRITE. BOOSTWRITE is an in memory dropper for malware, and RDFSNIFFER
is a malicious DLL that hijacks a remote administration client built by NCR
Corporation.",
      "url_descriptions": [],
      "created_at": "2019-10-10T17:54:16.318585Z",
      "updated_at": "2019-10-10T17:54:16.318615Z"
    }
  ]
}

```

```

    }
  ],
  "privacy_level": "public",
  "created_at": "2019-10-10T17:59:21.140847Z",
  "updated_at": "2019-10-10T17:59:21.146710Z",
  "threat_level": "high",
  "expired": "false",
  "ttl": "2020-02-07T17:59:21.140847Z",
  "zf_alert_id": null
}
]
}

```

ThreatQ provides the following default mapping for this feed:

FEED DATA PATH	THREATQ ENTITY	THREATQ OBJECT TYPE OR ATTRIBUTE KEY	PUBLISHED DATE	EXAMPLES	NOTES
results[].indicator_type	Indicator.Type	SHA-256	results[].created_at	file_hash_sha256	This will be mapped
results[].value	Indicator.Value	N/A	results[].created_at	http://109.230.199.227	N/A
results[].classifications[].name	Indicator.Attribute	Classification	results[].created_at	Domain	For each item in array
results[].privacy_level	Indicator.Attribute	Privacy Level	results[].created_at	Private	Converted to title casing
results[].threat_level	Indicator.Attribute	Threat Level	results[].created_at	High	Converted to title casing
results[].zf_alert_id	Indicator.Attribute	ZeroFox Alert ID	results[].created_at	12345	This can be null

ZeroFox Indicators (Feed)

This feed will ingest indicators from ZeroFox's API.

GET <https://tg-api.zerofox.com/indicators>

Sample Response:

```

{
  "next": "https://tg-api.zerofox.com/indicators/?
cursor=cD0yMDE5LTEyLTA1KzE0JTNBMDAlM0ExMy43MzY1NDU1MkIwMCUzQTAw",
  "previous": null,
  "results": [
    {
      "id": 2550745,
      "indicator_type": "non-social",
      "value": "http://43.247.68.165/",
      "network": "all",
      "classifications": [
        {
          "id": 73,

```

```

    "name": "Twitter - Phishing Listener",
    "privacy_level": "public",
    "created_at": "2018-07-16T16:01:25.636504Z",
    "updated_at": "2018-07-16T16:01:25.636522Z"
  }
],
"campaigns": [],
"privacy_level": "public",
"created_at": "2019-12-05T15:31:20.925689Z",
"updated_at": "2019-12-05T15:31:20.929551Z",
"threat_level": "medium",
"expired": "false",
"ttl": "2020-04-03T15:31:20.925689Z"
}
]
}

```

ThreatQ provides the following default mapping for this feed:

FEED DATA PATH	THREATQ ENTITY	THREATQ OBJECT TYPE OR ATTRIBUTE KEY	PUBLISHED DATE	EXAMPLES	NOTES
results[].indicator_type	Indicator.Type	SHA-256	results[].created_at	file_hash_sha256	View indicator mapping table below
results[].value	Indicator.Value	N/A	results[].created_at	http://109.230.199.227	N/A
results[].classifications[].name	Indicator.Attribute	Classification	results[].created_at	Domain	For each item in array
results[].privacy_level	Indicator.Attribute	Privacy Level	results[].created_at	Private	Converted to title casing
results[].threat_level	Indicator.Attribute	Threat Level	results[].created_at	High	Converted to title casing
results[].expired	Indicator.Attribute	Is Expired	results[].created_at	False	Mapped to True or False

Indicator Type Mapping

Mapped (ZeroFox -> ThreatQ):

PROVIDER FIELD VALUE	THREATQ FIELD VALUE
non-social	URL
email	Email Address

PROVIDER FIELD VALUE	THREATQ FIELD VALUE
----------------------	---------------------

file_hash_md5	MD5
---------------	-----

file_hash_sha1	SHA-1
----------------	-------

file_hash_sha256	SHA-256
------------------	---------

ipv4_address	IP Address
--------------	------------

domain	FQDN
--------	------

Unmapped:

PROVIDER FIELD VALUE	VALUE
----------------------	-------

profile	Twitter profiles, forum profiles, etc.
---------	--

post	Twitter posts, forum posts, etc.
------	----------------------------------

page	Facebook pages
------	----------------

hashtag	Twitter hashtags
---------	------------------

phonenummer	Phone numbers
-------------	---------------

btc_wallet	BTC wallet IDs
------------	----------------

Average Feed Run



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.

ZeroFox Alerts

METRIC	RESULT
Run Time	1 min
Events	5
Event Attributes	60
Indicators	5

ZeroFox Campaigns and Get Related Indicators

METRIC	RESULT
Run Time	3 mins
Campaign	6
Campaign Attributes	12
Indicators	3,184
Indicator Attributes	9,571

ZeroFox Indicators

METRIC	RESULT
Run Time	1 min
Indicators	185
Indicator Attributes	926

Known Issues / Limitations

- Depending on whether you are ingesting public or private data, files may be downloaded, even if no data is ingested. This is because the public/private filtering happens at the integration code level instead of the API level.
- The ZeroFox Alerts feed may not take the same API key as the other feeds

Change Log

- **Version 1.1.2**
 - Resolved an issue where users encountered a `TypeError ('Cannot parse argument of type None.')` error.
- **Version 1.1.1**
 - Updated the integration for improved handle incomplete metadata JSON responses and the offending content URL field.
- **Version 1.1.0**
 - Added ZeroFox Alerts feed.
- **Version 1.0.0**
 - Initial Release