# **ThreatQuotient**



## **ThreatQ User Guide**

**Version 5.27.0** 

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## **ThreatQuotient**

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# **Warning and Disclaimer**

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# **About the ThreatQ Platform**

ThreatQ is a cyber threat intelligence platform that focuses on centralizing, structuring, and strengthening a security organization's intelligence-driven defensive posture against attacks.

## Concept

The following describes how ThreatQ helps organizations manage threat intelligence, allowing them to defend against sophisticated cyber-attacks.

### Threat Library

A central repository combining global and local threat data to provide relevant and contextual intelligence that is customized for your unique environment. Over time, the library becomes more and more tuned to your environment and fills in the intelligence gaps created by different sources, all providing only some pieces of the puzzle.

### **Adaptive Workbench**

An open and extensible work area for security experts across the organization to work within your processes and tools. A customizable workflow and customer-specific enrichment streamlines investigations and analysis, and automates the intelligence life cycle.

### **Open Exchange**

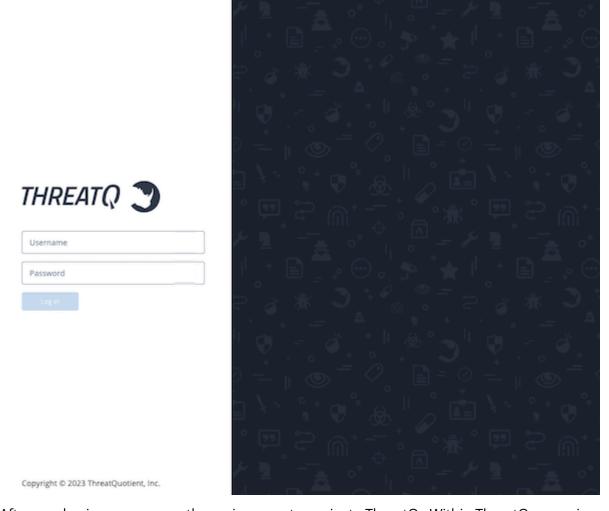
ThreatQ is the only threat intelligence platform specifically designed for customization to meet the requirements of your unique environment. Get more from your existing security investments by integrating your tools, teams and workflows through standard interfaces and an SDK/API for customization.



# **Accessing the Platform**

## **About Accessing the Platform**

ThreatQ allows you to securely manage access via user accounts with logins and password.



After you log in, you can use the main menu to navigate ThreatQ. Within ThreatQ, your view and options are based on your user account settings and permissions.

### **User Account Authentication**

User accounts can be authenticated locally within ThreatQ or externally using LDAP, SAML, or SSL Client Certificate authentication. In addition, you can implement 2-Step Verification at the user account level for additional security. Once enabled, the user needs a login, password, and authentication code to access ThreatQ.



### **Session Timeout**

User sessions time out after sixty minutes of inactivity. Users with Maintenance Account and Administrative Access can update this setting or, disable session timeouts for a specific user. See the *Editing a User* section of the Managing User Accounts topic for more details.



The initial account created when installing ThreatQ does not have a session time by default. However, one can be configured for the account.



## **Authentication Methods**

There are multiple authentication methods you can implement to secure access to the ThreatQ Platform (TQ):

METHOD	DESCRIPTION	REFERENCE
Local Authentication	User accounts are created and maintained manually within the platform. Username, passwords, and permission roles are configured within ThreatQ. Administrators can edit a user's profile including email, password, and permission role in ThreatQ.  Local users log in using the local user login method for the ThreatQ platform.	<ul> <li>About User         Management</li> <li>About Accessing         the Platform</li> </ul>
2-Step Verification	Adds an extra layer of security by requiring a security code in addition to a login and password.	• 2-Step Verification
LDAP Authentication	User accounts are created and authenticated outside of the ThreatQ platform and user roles are mapped from the user's Active Directory. Due to this, user accounts cannot be modified within the ThreatQ platform (User Management page).	About LDAP     Authentication
	LDAP users log in using the local user login method for the ThreatQ platform.	
SAML Authentication	User accounts are created and authenticated outside of the ThreatQ platform and user roles are mapped from the user's Active Directory. Due to this, user accounts cannot be modified within the ThreatQ platform (User Management page).  SAML does not allow user role mapping for	About SAML     Authentication
	maintenance accounts.	



METHOD	DESCRIPTION	REFERENCE
	SAML users log in using the single sign-on (SSO) login option for the ThreatQ platform.	
SSL Client Certificate Authentication	User accounts are created in the ThreatQ platform. Then, the individual users or Administrative/Maintenance users can add a certificate fingerprint to the user account. These certificate fingerprints are validated agains a certificate file uploaded to ThreatQ.	<ul> <li>About SSL Client Certificate Authentication</li> </ul>
	SSL Client Certificate Authentication users will login using the <b>Log in with CAC/PIV Card</b> option.	

## **Changing Authentication Methods**



ThreatQuotient strongly recommends that you perform a full backup before changing your authentication method.

CURRENT METHOD	NEW METHOD	DETAILS
Local	SAML	Current ThreatQ accounts will be mapped using the user's email address and users will use SSO to log into the platform. Local Maintenance Accounts will not be mapped in SAML and will continue to use the local login method. See the Configuring SAML topic for details on this setup process.
SAML	Local	Contact ThreatQ Support.
Local	LDAP	Current ThreatQ accounts will be mapped using the user's email address and users will continue to use the local login method. See the About LDAP Authentication topic for details on this setup process.
LDAP	Local	Contact ThreatQ Support.



CURRENT METHOD	NEW METHOD	DETAILS
LDAP	SAML	LDAP must be disabled before enabling SAML. No account updates are required if the unique account identifier for LDAP was the user's email address. The LDAP group that is mapped to the ThreatQ Maintenance role will have to be mapped to different user role as SAML does not allow maintenance account mapping.
SAML	LDAP	SAML must be disabled before enabling LDAP. No account updates are required if the unique account identifier for SAML was the user's email address.
SAML or LDAP	SSL Client Certificate Authentication	Contact ThreatQ Support.
Local	SSL Client Certificate Authentication	See SSL Client Certificate Authentication.
SSL Client Certificate Authentication	Local	See Managing Certificate Files.



## 2-Step Verification

When you enable 2-Step Verification (also known as two-factor authentication), you add an extra layer of security to your account. After 2-Step Verification is active, you sign in with your password and a code sent to your mobile device.



You will need an authenicator app that supports the scanning of QR codes to utilize this feature. Apps such as Microsoft and Google Authenticator are recommended.

The 2-Step Verification option is not available for users using SAML Authentication and the Single Sign-On (SSO) process.

## **Enabling 2-Step Verification**

- 1. Click on your avatar icon, located to the top-right of the platform, and select **My Account**.
- 2. Under Enable 2-Step Verification, click **Enabled**.
- 3. In the Enable 2 Step Verification dialog box, complete the following:
  - a. Scan the QR code using a mobile app such as Google or Microsoft Authenicator.
  - b. Enter the validation code delivered to your mobile device via your authenticator.
  - c. Click Submit.
- 4. Click Save.

#### What to do next

The next time you log in, you must use the newest verification code.



## **Platform Login**

Log in steps vary based on the authentication methods enabled for your instance and/or user account.

### **AUTHENTICATION METHOD**

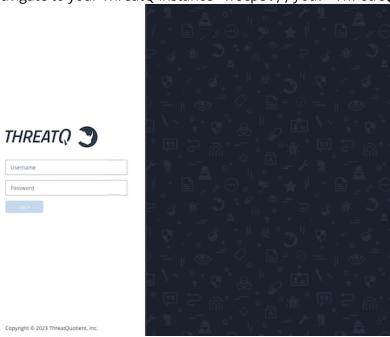
#### **LOGIN PROCESS**

Local or LDAP	Local Log In
SAML	Single Sign-On (SSO)
SSL Client Certificate	SSL Client Certificate Authentication Log In

## **Local Log In**

The local login process applies to instances using local or LDAP authentication.

1. Navigate to your ThreatQ instance - https://your-ThreatQ-web-ip-address.



- 2. Enter your username (email address) and password.
- 3. If you have 2-step verification enabled, complete the following steps:
  - Enter your verification code from Google Authenticator.
  - Optionally, choose to **Remember this computer for 30 days**.
- 4. Click **Login** or **Submit**.



## Single Sign-On (SSO)

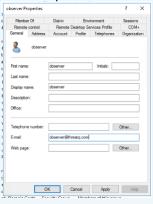


At this time, ThreatQ does not support IdP-initiated SSO, where a user can log in directly from an SSO provider's portal such as Okta's Portal. Users utilizing SSO must click the **Log In Using SSO** button on the ThreatQ landing page to authenticate with their IdP.

Users using SAML authentication use this log in method.



SAML users are required to add their email address to their user profiles in order to use the SSO. As part of the integration process, the ThreatQ platform expects that the user's email address has already been added to their IdP. See the Setting up LDAP Users/Groups for SAML topic for more details.



1. Navigate to your ThreatQ instance - https://your-ThreatQ-web-ip-address. If SAML is enabled, you will see a Single Sign-On option.



2. Click the **Log in Using SSO** button.

Navigate to your third-party authenticated site to log in. Once that has been completed, you are automatically sent back to the ThreatQ instance.

## **SSL Client Certificate Authentication Log In**



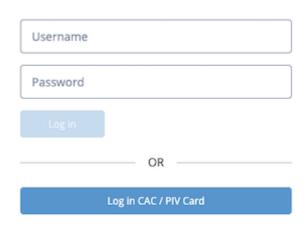
Maintenance users can log into ThreatQ using either username/password or certificate authentication. Administrative, Primary Contributor, and Read-Only users are required to use certificate authentication to log into ThreatQ if it is enabled.



After SSL Client Certificate Authentication is configured and you have added a certificate fingerprint to your user profile, you can use the following login method.

- 1. Access your certificate, and enter your PIN. Your certificate must be active in the browser before you navigate to your ThreatQ instance.
- 2. Navigate to your ThreatQ instance https://your-ThreatQ-web-ip-address.





3. Click the **Log in CAC/PIV Card** button.



# **Air Gapped Data Sync**

## **About Air Gapped Data Sync (AGDS)**

Air Gapped Data Sync (AGDS) allows you to transfer data from a source ThreatQ installation to a target air gapped ThreatQ installation. ThreatQ defines an air gapped system as one that is not connected to a public network. This means that **external** feed ingestion does not occur on the air gapped installation.

ThreatQ recommends that you consult with ThreatQ Support or a Threat Intelligence Engineer prior to performing an Air Gapped Data Sync.

An Air Gapped Data Sync consists of two synchronization commands:

- threatq:sync-export The read command that copies data from the source ThreatQ installation
- threatq:sync-import The write command that copies data to the target ThreatQ installation

If you are using LDAP or SAML authentication on your **Source** ThreatQ instance, and require users transferred via import to have authentication capabilities on your **Target** ThreatQ instance, then you must enable the same authentication method on your **Target** ThreatQ instance before performing an import.



Do not deviate from or change the following deployment details and configurations without first consulting ThreatQuotient. Any deviation from ThreatQuotient recommended settings could result in system and platform instability, may render the system non-operational, and is not supported.

## **System Requirements**

To use Air Gapped Data Sync, ThreatQ installations must meet the following requirements:

- ThreatQ v4.15 or later must be installed.
- All ThreatQ installations must run the same software version.
- All ThreatQ installations must be set to the correct time, time zone, and date, and using a clock source available to all. UTC is recommended.

### **New Installs**

See the ThreatQ V5 Platform Air Gapped Installation Guide for detailed information on new installs of ThreatQ V5 on an air gapped device.



## Air Gapped Data Sync (AGDS) and Investigation Sharing

The AGDS export process does not include Data Collections or Dashboards, but it can include Investigations if you add the following parameter:

--include-investigations=Y

The AGDS export/import process transfers users from an outside system to an air gapped system, but only for the purpose of maintaining them as sources. These users are automatically disabled on the air gapped system. As such any permissions assigned to these users will be invalid on the air gapped system, so permissions are not transferred as part of the AGDS export process.

When you run the AGDS import process on the target box, ownership of any new Investigation is assigned to the most recently created admin or super user. This owner is responsible for assigning permissions to other users on the air gapped system. The import process does not apply any changes to existing permissions even if the Investigation receives updates.



## **Executing Air Gapped Data Sync**

Air Gapped Data Sync is a two stage process. First, you export data from your source ThreatQ instance. Then, you import this data into your target ThreatQ instance.

### Running the threatq:sync-export Command

- 1. SSH to your ThreatQ installation.
- 2. Navigate to the api directory using the following command:

cd /var/www/api

3. Run the following command appended by the necessary parameters, as described in Parameters section of the threatq:sync-export topic.

sudo ./artisan threatq:sync-export

4. Review the Output and Sync report; see the Output and Sync Report section of the threatq:sync-export topic.

## Running the threatq:sync-import Command

- 1. SSH to your ThreatQ installation.
- 2. Navigate to the api directory using the following command:

cd /var/www/api

3. Run the following command appended by the necessary parameters:

sudo ./artisan threatq:sync-import

4. Review the Output and Sync report; see threatq sync-imprt File Output and Sync Report.



## threatq:sync-export

This export command pulls all objects, object context, tags, and object links from the source ThreatQ installation and then stores them in CSV data dump files. You can specify which objects are pulled, based on a date or via configuration. All data pulled into the CSV data dump files can then be transferred to a target air gapped ThreatQ installation for validation and import. Each run of this command also generates a sync report with output logs for the run.

### **Parameters**

The following table outlines the parameters for the command. All parameters for the threatq: sync-export command are optional. If you do not set any parameters, the system runs a default configuration as explained in threatq:sync-export Configuration.

PARAMETER	EXPLANATION
target	Required value. Target directory where the output file should be placed.
	Default: /tmp
	Example:target=/my/directory
start-date	Required value. The start date for data selection.
	Example:start-date="2018-01-01 00:00:00"
end-date	Required value. The end date for data selection. Applies only to objects, not object context or object links.
	Example:end-date="2018-01-02 00:00:00"
include- deleted	Determines whether objects that have been soft-deleted are included in the result set. Options are Y(es) or N(o).
	Default: N
	Example:include-deleted=Y
include- investigations	Required value. Determines whether Investigations and Tasks are included in the result set. Options are Y(es) or N(o).
	Default: N



PARAMETER	EXPLANATION
	Example:include-investigations=N
meta-only	Optional value. If present, tells the command to only include meta data (no object data) in the result set.
memory-limit	Required value. Sets the PHP memory limit in megabytes or gigabytes.  Default: 2G  Example:memory-limit=4G
object-limit	Sets the limit on the number of objects selected at a time. ThreatQuotient recommends that you set the limit to a number smaller than the default (50,000) on boxes with very large data sets.  Default: 50,000  Example:object-limit=10000
ignore-file- types	Defines a comma-delimited list of ThreatQ File Types for which physical files stored on the source ThreatQ installation should not be transferred to the target air gapped ThreatQ installation. Database records are still included in the export tarball.  Example:ignore-file-types="Malware Analysis Report"  Example:ignore-file-types="Malware Analysis Report"  Report, Malware Sample"
sources	Filters objects produced in the sync by the sources they include, allowing the user to send out a subset of data that contains a specific source.  For objects with multiple sources, other sources are included in the filter if the object contains the user-specified source(s).  Multiple sources are also supported in search parameters.  Existing CRON Runs: Use the initial-start-date option to avoid pulling all historical data.



#### **PARAMETER**

#### **EXPLANATION**

**Example**: --sources="Black Source"

--include-allrelationships

Exports all related data for an object if its source matches the -- sources parameter value. If so, the command exports the primary object's relationships to any object on the system regardless of the sources of the related objects and/or the source that created the relationships.

**Example:** --sources="Black Source" --include-all-relationships

### **Examples**

This command should be run from inside the /var/www/api directory. The following examples provide use cases for air gapped data sync.

### No Time Limit, Default Configuration

```
sudo ./artisan threatq:sync-export
```

This example pulls all objects in the system (with the exception of Investigations, Tasks, and soft-deleted Objects). The output appears in /tmp.

#### **Meta Data Only**

```
sudo ./artisan threatq:sync-export --meta-only
```

This example pulls only meta data objects from the system (Attributes, Sources, Object Statuses and Types, and so on).

#### Time Limit

```
sudo ./artisan threatq:sync-export --start-date="2018-10-01 00:00:00" --
end-date="2018-11-01 00:00:00"
```

This example pulls objects whose updated\_at or touched\_at occurs between the start and end date.

#### **Exclude Malware Files**

sudo ./artisan threatq:sync-export --ignore-file-types="Malware Sample"



This example pulls all objects, but excludes the physical files attached to any File objects with the type Malware Sample. The File objects themselves (as well as their context and relationships) are still included in the export tarball.

Any File Type can be used with this option, and multiple File Types can be included as a commadelimited list.

sudo ./artisan threatq:sync-export --ignore-file-types="STIX,PDF,Malware Sample"

### **Cron Configuration**

```
sudo ./artisan threatq:sync-export --target=/my/directory --include-
deleted=Y --include-investigations=N
```

This example searches for a previous synchronization record with the same hash (comprised of the three options provided). If any hash matches are found, the run uses the started\_at date of the most recent previous record as the start date for the current run.

If you do not require soft-deleted Objects, Investigations, or Tasks to be transferred to the target ThreatQ installation, then only the --target option is necessary (as the defaults for the other two options are both (N)o).

### **Initial Cron for First Time Use**

Determine what the cron configuration options should be:

- Target directory
- Investigations/tasks included (Y/N)
- Deleted objects included (Y/N)

The cron configuration options must be the same for every run, but they only need to be specified if different from the defaults.

Run the command with the cron configuration options:

```
php artisan threatq:sync-export --target=/my/directory --include-
investigations=Y --include-deleted=N
```

### Instructions for Larger Data Sets (Starting from the Beginning of Time)

For larger data sets, it is undesirable to do a full run from the beginning of time (performance will suffer).



ThreatQuotient recommends that you use the --end-date option to specify an upper limit on the date range pulled. Multiple runs will be necessary to process all data up to the current date.

For each of the runs, provide the configuration options along with the --end-date option:



```
php artisan threatq:sync-export --target=/my/directory --include-
investigations=Y --end-date="2017-01-01 00:00:00"
```

Once the current date has been reached, the --end-date option is no longer necessary.

### **Instructions for Larger Data Sets (Starting from a Specified Date)**

For larger data sets, it is undesirable to do a full run from the beginning of time (performance will suffer).



⚠ ThreatQuotient recommends that you use the --end-date option to specify an upper limit on the date range pulled. Multiple runs will be necessary to process all data up to the current date.

If only a subset of data needs to be processed up to the current date, then you should use the -initial-start-date option.

For the first run, provide the configuration options along with the --initial-start-date option.

```
php artisan threatq:sync-export --initial-start-date="2017-01-01 00:00:00"
--target=/my/directory --include-investigations=Y --end-date="2017-02-01"
00:00:00"
```

For each of the runs, provide the configuration options along with the --end-date option:

```
php artisan threatq:sync-export --target=/my/directory --include-
investigations=Y --end-date="2017-01-01 00:00:00"
```

Once the current date has been reached, the --end-date option is no longer necessary.

### **Run Scenarios**

### **Export Success**

When a run of this command completes successfully, a tarball of data appears in the target directory you specified (or /tmp by default). A report file describing the run is available in the data tarball, under the /sync directory. There is also a record in the database synchronizations table for the run.

### **Export Errors**

If a run of this command fails before completion, the tarball is not created. There is a data directory in the target directory (where the data is stored before it is compressed) that contains all the data that was processed before the failure. The report file appears in this directory under /sync. Error messages do not appear in the report file. However, they appear in the laravel log and in the console.



Regardless of whether the run was part of a cron configuration, it can simply be restarted. The cron configuration will look for the last completed run to find the next start date.

### **Dates**

#### **Start Date**

A start date is applied to objects according to the column available - touched\_at or updated\_at. touched\_at Objects

Adversaries, Attachments, Events, Indicators, Signatures, Custom Objects

updated\_at Objects

Investigations, Tasks, Object Links, Tagged Objects

#### **End Date**

An end date is applied only if you provide one at run time. It is applied everywhere a start date is used.

## Configuration

The configuration used for each run of this command consists of the --target, -- include\_deleted, and --include\_investigations command line options and is stored in the config\_json column of the Synchronization record. The hash column of each Synchronization record is a MD5 hash of the config\_json column.

### **Default Configuration**

The default configuration is used if the command is run with no options provided:

- target\_directory = /tmp
- include deleted = false
- include\_investigations = false

In this configuration, the initial run start date defaults to 1970-01-01 00:00:00.

### Cron

If the command is run with the --target, --include\_deleted, and --include\_investigations parameters, the hash of these values is compared against the hash column of previous runs. Using these three options on every run allows for the command to be incorporated into a scheduled task.

If any hash matches are found, the start date for the run is set to the started\_at date in the Synchronization record of the previous run with the same hash.

If no hash matches are found, the start date is set to 1970-01-01 00:00:00.



#### **Start Date Provided**

If a start date is included in the command run using the <code>--start-date</code> option, any other options also provided is honored. However, if the <code>--target</code>, <code>--include\_deleted</code> and <code>--include\_investigations</code> options are also included, a Cron check against the hash of these three options does <code>not</code> occur. The start date provided is included in <code>config\_json</code> as the <code>manual\_start\_date</code> so that the run does not collide with any Cron-related runs.

If a "beginning of time" run is necessary, use the option as --start-date="1970-01-01 00:00:00".

### **Output and Sync Report**

The following sections detail the data you may find in the export output and sync report.

#### Meta Data

Meta data is transferred with every run of this command by default. You can specify that only meta data (no object data) should be pulled in a run by using the --meta-only option.

Meta data includes information about Sources, Attributes, Tags, as well as Object Statuses and Types (both seeded and user-provided).

While meta data like Connectors and Operations are included in this list, they are not installed on the target ThreatQ installation as part of the air gapped data sync process. They are only placed in the requisite tables for use as Sources of Objects that are transferred. The same is true of any Users that are copied - these will not be enabled Users on the target installation; they will be transferred as disabled.

### **Meta Data Objects**

- Attributes
- Clients
- Connectors
- Connector Categories
- · Connector Definitions
- Content Types
- Groups
- Investigation Priorities
- <Object Type> Statuses
- <Object Type> Types
- Other Sources
- Operations
- Sources
- Tags
- TLP
- Users



### **Objects**

This command covers any objects installed on the system by default, and any custom objects that have been installed by the user. The only objects that can be excluded are Investigations and Tasks (using the --include-investigations command line option).



Custom Objects that are installed on a source ThreatQ installation that have NOT been installed on a target ThreatQ installation will NOT be installed by the air gapped data sync process. If an object is included in the export data, but is not found on the target, it will be ignored.

### **Default Objects:**

- Adversaries
- Attachments (Files )
- Events
- Indicators
- Signatures
- Campaigns
- · Courses of Actions
- Exploit Targets
- Incidents
- TTPs

#### Storage:

The data for each object is copied as a dump file in CSV format using "SELECT \* INTO OUTFILE..." MariaDB syntax. The full query for the data is built up using the options you provided (start date, end date, etc).

Dump files contain a maximum object limit of 50,000 (set in the Synchronization base class). Dump files are created (with a counter appended to the file name) until the entire object result has been covered.

To ensure that any Objects present in Object Context (Attributes, Comments, and Sources), Object Links, Tagged Objects, or Investigation Timeline Objects are also included in the base Object data, CSV dump files for each Object type are also created from queries against each of these tables. This is necessary because of the differing date columns used in each query (an object may appear in an Object Link in the specified date range according to the Object Link's updated\_at date, even though the Objects themselves saw no change to their touched\_at date in that date range). When the data from all of these object files is transferred to the target ThreatQ installation, any duplicates across dump files will be consolidated. Files that contain Object data will always include "\_obj\_" in the file title.

Sample Object File List (all of these files will contain Adversary records):

- adversaries/adversaries\_obj\_0.csv
- adversaries/adversaries\_obj\_attributes\_0.csv
- adversaries/adversaries\_obj\_comments\_0.csv
- adversaries/adversaries\_obj\_investigation\_timelines\_0.csv
- adversaries/adversaries obj object links dest 0.csv
- adversaries/adversaries obj object links src 0.csv
- adversaries/adversaries\_obj\_sources\_0.csv



adversaries/adversaries\_obj\_tags\_0.csv

### **Object Context**

The date range for queries on Object Context tables uses the updated\_at date column, with the exception of Adversary Descriptions, which uses the created\_at date column.

Adversary Descriptions are handled as part of the Object Context gathering process. The adversary\_descriptions table is queried using the created\_at date column, and the entirety of the adversary\_description\_values table is pulled, as it does not have a date column.

Not all Objects have all Object Contexts (Attributes, Attribute Sources, Comments, and Sources). Tables are only polled if they exist.

Tables Covered for each Object Type:

- <object type>\_attributes
- <object type>\_attribute\_sources
- <object type>\_comments
- <object type>\_sources

Sample Object Context File List (Indicator Object Type):

- indicators/indicator\_attribute\_sources\_0.csv
- indicators/indicator\_attributes\_0.csv
- indicators/indicator comments 0.csv
- indicators/indicator\_sources\_0.csv

#### Other Data

#### **Attachment Files**

Physical files for all attachments included in the date range are copied into the attachments/files directory of the data tarball.

#### **Object Links**

The date range for queries on Object Links uses the updated\_at date column.

Tables Covered (Object Links and Object Link Context):

- object links
- object\_link\_attributes
- · object link attribute sources
- object\_link\_comments
- object\_link\_sources

#### Sample Object Link File List:

- object\_links/object\_links\_0.csv
- object\_links/object\_link\_attributes\_0.csv
- object\_links/object\_link\_attribute\_sources\_0.csv
- object\_links/object\_link\_comments\_0.csv
- object\_links/object\_link\_sources\_0.csv

#### **Tags**



The date range for queries on Tagged Objects uses the updated\_at date column.

Tables Covered (Tags themselves are covered in the Meta Data):

tagged\_objects

Sample Tagged Objects File List:

tagged\_objects/tagged\_objects\_0.csv

### **Spearphish**

The date range for queries on Spearphish uses the updated\_at date column.

**Tables Covered:** 

spearphish

Sample Spearphish File List (Spearphish files are stored with Event data):

events/spearphish\_0.csv

#### **Investigations**

The date range for queries on additional Investigation context tables uses the updated\_at column.

**Tables Covered:** 

- investigation\_nodes
- investigation\_node\_properties
- investigation\_timelines
- investigation\_timeline\_objects
- investigation\_viewpoints

Sample Investigation additional context File List:

- investigations/investigation\_node\_properties\_0.csv
- investigations/investigation nodes 0.csv
- investigations/investigation\_timeline\_objects\_0.csv
- investigations/investigation timelines 0.csv
- investigations/investigation\_viewpoints\_0.csv

### **File Output**

#### **Data Tarball**

Once all data has been processed, a tarball is created containing all output files. This tarball will be dropped in the directory specified in the --target option, or the /tmp directory by default.

Tarball Naming Convention: tqSync\_<run date>.tar.gz

### **Example**

tqSync-19-01-16-1547649934-0849.tar.gz

#### **Sync Report**

The output for each run is stored in a Sync Report output file, which is located in the sync directory of the data tarball. The file is always named sync-export.txt.



### **Command Line Output**

Command line output displays command progress, object totals, and files written.

### **Synchronizations**

#### **Table**

synchronizations

- id The auto-incremented id for the Synchronization record
- type The Synchronization direction (options are "export" or "import")
- started\_at The date and time the command run was started
- finished\_at The date and time the command run completed
- config\_json A JSON representation of the command run configuration
- report\_json A JSON representation of the command run parameters (command line options, object counts, files created, etc)
- pid The process id of the command run
- hash Unique identifier for a command run (MD5 hash of the config\_json column)
- created\_at The date and time the Synchronization record was created
- updated\_at The date and time the Synchronization record was updated

### **Record Handling**

#### Hash

The Synchronization record hash column is automatically calculated as an MD5 of the config\_json column on record creation.

#### **Initial Creation**

A Synchronization record is created at the beginning of a command run, right after all command line options have been processed. Initial creation only covers the type, started\_at, pid, and config\_json columns. For this command (threatq:sync-export), the type will be "export". The command line option portion of the report\_json is added as well, but this column will not be complete until the record is finalized. The finished\_at column remains NULL.

#### **Finalization**

A Synchronization record is finalized when the command run has completed. At this time, the finished\_at column is filled with the completion datetime, and the report\_json column is updated to include information about the run (object counts, files created, etc).



# threatq:sync-import

This import command processes the tarball of object data created by the threatq:sync-export command. Temporary sync tables are created on the target to house this object data, and integrity checks are run against existing data to verify IDs and check for duplicate objects. Duplicate objects from the source ThreatQ installation are updated, and new objects are inserted. The temporary sync tables are dropped when data processing is complete. Each run of this command also generates a sync report without output logs for the run.



The import process moves data from the source instance to the target instance based on changes to the object's updated\_at date. It does not explicitly remove data from the target instance.

### **Parameters**

The following table outlines the parameters for the command. With the exception of --file, all parameters for the threatq:sync-import command will use the default value unless otherwise defined by the user.

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#### **EXPLANATION**

file	Required value. File path to the tarball created by the threatq:syncexport command.
	<b>Example:</b> file=/tmp/tqSync-19-01-16-1547660837-8345.tar.gz
keep- created-at	Determines whether the oldest created_at date between the source and target ThreatQ installations should be maintained, or a new created_at is set on the target system. The default if this option is not provided by the user is for the oldest created_at date to be maintained. Options are Y(es) or N(o).  Default: Y
	Example:keep-created-at=N
object- limit	Integer value used as the limit for the number of objects updated or inserted at a time. When using this option, the size of the data sets on both source and target ThreatQ installations should be taken into account. Setting the limit too high may hinder performance.  Default: 1000
	Delault. 1000



#### **PARAMETER**

#### **EXPLANATION**

**Example:** --object-limit=50000

--memorylimit Sets the PHP memory limit in megabytes or gigabytes.

Default: 2G

**Example:** --memory-limit=4G

--overridedescription Determines whether or not the descriptions on existing objects on the target ThreatQ installation are be updated. If an existing object has a NULL description, it will be updated regardless of the use of this flag.

Default: Y

**Example:** --override-description=N

### **Examples**

This command should be run from inside the **/var/www/api** directory.

#### **Basic Run**

```
sudo ./artisan threatq:sync-import --file=/tmp/
tqSync-19-01-16-1547660837-8345.tar.gz
```

This example processes all the data in the tarball provided in the --file option, using an object limit of 1000 for all inserts and updates. The created\_at date of all transferred objects is updated on the target ThreatQ installation if it is older than the current created\_at date (if the object is already present on the source ThreatQ installation). Newly inserted objects keep the created\_at date of the source ThreatQ installation.

### Set New created at Dates on the Write System

```
sudo ./artisan threatq:sync-import --file=/tmp/
tqSync-19-01-16-1547660837-8345.tar.gz --keep-created-at=N
```

This example processes all the data in the tarball provided in the --file option using an object limit of 1000 for all inserts and updates. The created\_at date of all transferred is left alone in the case of object updates, and changed to the current date in the case of new object inserts.



### **Increase the Object Limit**

```
sudo ./artisan threatq:sync-import --file=/tmp/
tqSync-19-01-16-1547660837-8345.tar.gz --object-limit=50000
```

This example processes all the data in the tarball provided in the --file option using an object limit of 50000 for all inserts and updates. The --keep-created-at option has been left out, so it uses the default setting of Y(es) and created\_at dates are retained from the Source system.

### **Initial Setup**

You **must** run the threatq:fill-sync-hash-column command, before running the threatq:sync-import command on an air gapped ThreatQ installation. This command prepares the database of an air gapped installation to run the threatq:sync-import command. Upon upgrade to ThreatQ version 4.17 or later, several tables include a sync\_hash column, which stores an MD5 hash of the unique fields for records in each table. This command fills in the data in this column, before attempting an Air Gapped Data Sync import. Data added after upgrade automatically have their sync\_hash columns populated on insert and update, so it is only necessary to run this command once.

The threatq:sync-import command checks for any NULL values in the sync\_hash column in the events, indicators, and object\_links tables before importing any data, and will fail if any NULL values are found. If the threatq:fill-sync-hash-column command is not run and sync\_hash columns are found on the indicators, events, or object\_links tables, the import will fail and ask you to run the command to fill that column before continuing.

#### Running the threatq:fill-sync-hash-column Command

- 1. SSH to your target ThreatQ installation.
- 2. Change directories to /var/www/api.
- 3. Put the ThreatQ platform into maintenance mode:

```
php artisan down
```

4. Run the following command:

```
sudo ./artisan threatq:fill-sync-hash-column
```

5. Run php artisan up to bring ThreatQ out of maintenance mode.

### **Run Scenarios**

### **Import Success**

When a run of this command completes successfully, a report appears in the directory the command was run in (/var/www/api). There is also a record in the database synchronizations table for the run. Both of these contain data describing performance metrics and object counts.



#### **Excluded Files**

If the <code>--ignore-file-types</code> option was used during creation of the export tarball, then the physical files associated with File objects that have the File Types specified in that option are not available during the import of those objects. If the import command detects that a file is missing from the export tarball, it creates a placeholder file under the same file path as was set on the read box (this is defined in the path field of the File). This placeholder file is a simple text file with the phrase "File excluded from export.". Please be aware that because the original physical file associated to the File object has been replaced, it will no longer be possible to open the physical file on the Details page for that File object.

### **Import Errors**

If a run of this command fails before completion, error messages do not appear in the report file - though they do appear in the laravel log and in the console. There is not currently a means of restarting the command from where it left off. The command must be restarted and will run through all the data again. Any data from the tarball that was written during the previous failed run is updated (rather than inserted again), meaning the end result is the same - all data is transferred from the tarball to the target system.

### **Data Processing**

Data found in CSV dump files for a table from the tarball provided in the --file option is inserted into a corresponding sync table. A sync table is a copy of a base table, with column structure maintained but indexes excluded. Indexes are added to unique columns on sync tables (which are later be used in table joins and where clauses) once data insertion from dump files is complete, since indexes slow the insertion process down.

The naming convention for a sync table is sync import <base table name> process id>.



Base table: adversaries

Sync table: sync\_import\_adversaries\_12345

All sync tables are removed from the target ThreatQ installation's database once data processing is complete.

### **Basic Table**

A basic table has no foreign keys pointing to other tables in the database. It has a single identifier (id) column for each record. Once all the data stored in the tarball for a basic table has been transferred to a sync table, the sync table has an existing\_id column added with a default value of NULL for each record. This column is used to determine whether the record already exists on the target ThreatQ installation. The ID for the record on the target system may be different from that of the record from the source ThreatQ installation, so this existing\_id column ensures that data integrity is maintained between the two.



### **Sample Basic Table:**

attachment\_types - (id, name, is\_parsable, parser\_class, created\_at, updated\_at, deleted\_at)

### Sample Sync Table created from Basic Table:

sync\_import\_attachment\_types\_12345 - (existing\_id, id, name, is\_parsable, parser\_class, created\_at, updated\_at, deleted\_at)

### **Tables with Pivots**

A pivot table has one or more foreign keys pointing to other tables in the database. Once all the data stored in the tarball for a table with pivots has been transferred to a sync table, the sync table has an existing\_<pivot>\_id column added for each foreign key column, as well as an existing\_id column for the record itself (all set to a default value of NULL).

### **File Output**

### threatq sync-import File Output and Sync Report

Once all data has been processed, a Sync Report is generated in the /var/www/api directory (where the command is run). This file is named after the tarball used in the run, with the extension "-sync-import.txt"



Tarball used: tqSync-19-01-16-1547660837-8345.tar.gz

Sync Report name: tqSync-19-01-16-1547660837-8345-sync-import.txt

### threatq:sync-import Command Line Output

Command line output displays command progress and object totals. It is similar to the output in the Sync Report.

### **Synchronizations**

SYNCHRONIZATIONS	DESCRIPTION
id	The auto-incremented ID for the Synchronization record.
type	The Synchronization direction. Options are <b>export</b> or <b>import</b> .
started_at	The date and time the command run was started.



CANCHEONIZATIONS

SYNCHRONIZATIONS	DESCRIPTION
finished_at	The date and time the command run completed.
config_json	A JSON representation of the command run configuration.
report_json	A JSON representation of the command run parameters (command line options, object counts, tables created, etc).
pid	The process ID of the command run.
hash	Unique identifier for a command run (MD5 hash of the config_json column).
created_at	The date and time the Synchronization record was created.
updated_at	The date and time the Synchronization record was updated.

DESCRIPTION

### **Record Handling**

#### Hash

The Synchronization record hash column is automatically calculated as an MD5 of the config\_json column on record creation.

#### **Initial Creation**

A Synchronization record is created at the beginning of a command run, right after all command line options have been processed. Initial creation only covers the type, started\_at, pid, and config\_json columns. For this command (threatq:sync-import), the type will be "import". The command line option portion of the report\_json is added as well, but this column will not be complete until the record is finalized. The finished\_at column remains NULL.

### **Finalization**

A Synchronization record is finalized when the command run has completed. At this time, the finished\_at column is filled with the completion date and time, and the report\_json column is updated to include information about the run (object counts, tables created, etc).



# **Upgrading an Air Gapped ThreatQ Instance**

If you are upgrading from the most recent ThreatQ 4x release to 5x, you must contact ThreatQ support for assistance with the upgrade process.



ThreatQ requires you to be on the latest version of 4x in order to upgrade to ThreatQ version 5x.

If you are upgrading from the most recent ThreatQ 4x release to 5x, or are upgrading from one 5x release to another, you can use the following steps.



Contact ThreatQ Support if you encounter any issues during the upgrade or require assistance.

### Stage 1: Download the Air Gap Upgrade File

To download the air gap upgrade file from a browser:

- 1. Log into https://install.threatg.com/ using your YUM credentials.
- 2. Locate and download the appropriate air gap upgrade file.

#### **File Name Format:**

<version>-platform.tar.gz

#### **Example:**

5.6.1-platform.tar.gz

- 3. Open the CLI of the device to upgrade and copy the upgrade file to /root/ using the SCP client of your choice.
- 4. Return to the CLI of the device and confirm that the upgrade file is present.

To download the air gap upgrade file via curl:

1. Run the following command:

```
curl https://<YUM_USER>:<YUM_PASSWORD>@install.threatq.com/<version>-
platform.tar.gz -o <version>-platform.tar.gz
```

2. Transfer the upgrade file to /root/ on the air gapped box.

### **Stage 2: Upgrade the Air Gapped Box**

- 1. Log into the air gapped box as a root user.
- 2. Run the following command to upgrade the air gapped box:

```
tqadmin platform upgrade -v <release number> -z
```

#### **Example:**

tqadmin platform upgrade -v 5.6.1 -z



3.	The upgrade process looks for the upgrade tarball in the /root/ location. If the file is not in
	that location, you are prompted to enter the absolute path of the tarball.



# **Backup and Restore**

# **ThreatQ Backup**

Before performing a backup of a ThreatQ instance, note the following:

- The backup process stops and starts all ThreatQ services automatically in order to prevent modifications to the file system and database. Requests made during this time are queued and resumed once the backup process completes.
- The time it takes to back up ThreatQ depends primarily on the size of the database. For this reason, we recommend performing a backup when system availability is not critical, such as during a scheduled maintenance window.
- The resulting backup file can be large. We recommend that you write it to a mounted drive or file location rather than the local file system. For instructions on how to mount a network-available drive, contact ThreatQ Support. If the backup file must be stored locally, you should move it off the local file system at the earliest opportunity.
- By default, the system creates a backup of the threat intelligence data index required for improved search performance and includes it in the backup file. This operation may take hours. You can omit this portion of the backup by running the backup command with the --excludesolr option. However, this means that your threat intelligence data must be re-indexed during or after the restore process.

### **Backup Options**

ThreatQ supports three backup options:

- A standard backup that includes the threat intelligence data index.
- A backup that excludes the threat intelligence data index
- An online backup that excludes the threat intelligence data index

An online backup backs up your database without performing a Solr backup. This allows users to work in the ThreatQ instance as the backup runs.



The online backup process takes longer to complete and generates a larger backup file.

When you restore from an online backup the following message prompts you to decide when to perform a Solr re-index.

### Do you want to re-index Solr now? If not, you may do this manually later. [y/n]

Since an online backup allows users to remain working in the system, you may encounter the following issues when restoring from an online backup file:

- If a CDF was running during the backup, the feed run is listed as Completed with errors/Run failed to complete.
- If a bulk job was running, the job remains stuck in progress in the Job Management page.



### **ThreatQ Backup Process**

- 1. SSH to the ThreatQ command line and elevate your user privilege to root or sudo.
- 2. Change the directory to /var/www/api.
- 3. Choose one of the following options:
  - To create a backup that includes the threat intelligence data index, run the following command:

```
sudo php artisan threatq:backup
```

 To create a backup that excludes the threat intelligence data index, run the following command:

```
sudo php artisan threatq:backup --exclude-solr
```

 To create an online backup that excludes a backup of the threat intelligence data index, run the following command:

```
sudo php artisan threatq:backup --online
```

- 4. When prompted, provide the **root mysql** password you configured during first boot.
  - You will only be prompted for a password and file path with the first initial backup. You will not be prompted for either of these items for any subsequent backups. Contact ThreatQ Support if you need to update either of these items.
- 5. Provide the path to the file location where you want to create the backup.

The script generates a backup file in the specified file location. The name of the file will be **threatq\_backup\_x.x.x\_yyyy-mm-dd.tgz**, where **x.x.x** is the TQ version and **yyyy-mm-dd** is the date when the backup was performed.

## **ThreatQ Restore**

To restore from a ThreatQ backup, note the following:

- The target machine must be an existing ThreatQ instance running the same version of the instance captured in the backup.
- The restore process completely overwrites the current installation.
- The backup file needs to be accessible by the target ThreatQ instance, either locally or on a mounted drive.
- The backup file will be unzipped in the same directory where it resides. Ensure that the available disk has sufficient space to hold both the backup archive and the extracted directory. The extracted directory can be removed after the restore is complete.
- Depending on the size of the instance being restored, the process can take a while.
- The machine running the target ThreatQ instance automatically restarts once the restore process is complete.



### **ThreatQ Restore Process**

To restore from a ThreatQ backup, perform the following procedure on the target ThreatQ instance.

- 1. Complete the first boot process on the new host by navigating to its IP address in a web browser and entering your credentials. If this step is not completed, the remaining steps are not successful.
- 2. SSH to the command line and elevate your user privileges to root or sudo.
- 3. Verify that you have the necessary utilities in place by running:

```
yum install policycoreutils-python-2.2.5-20.el7.x86_64
```

- 4. IChange directory to /var/www/api.
- 5. Issue the following commands: **5x command**

```
php artisan threatq:restore </path/to/backup_file>
```

#### 4x commands

```
php artisan threatq:restore </path/to/backup_file>
php artisan threatq:update-events
```

- 6. If prompted, provide the **root mysql** password you configured during first boot.
- 7. If you are restoring from an online backup or if the backup file does not include the intelligence data index required for improved search performance, the following message prompts you to decide when to perform a Solr re-index.

Do you want to re-index Solr now? If not, you may do this manually later. [y/n]



This operation may take hours.

8. After the restore completes, you should reboot the target ThreatQ system to ensure that the system processes start up correctly.



# **Command Line Interface (CLI)**

# **About the Command Line Interface (CLI)**

You can use the CLI to perform tasks and initiate specific platform processes.

### **Important Notes**

- You should SSH into your ThreatQ installation as root or have sudo permission.
- Some CLI commands require you to be in a specific directory to execute. Review the Help Center topic for each command before running.
- Most CLI commands require that the ThreatQ application be placed into maintenance mode before proceeding. Placing the application in maintenance mode allows you to perform operations which would be delayed or otherwise impeded by regular API operation. Review the Maintenance Mode section below before executing CLI commands.

### **Maintenance Mode**

Command Line Interface (CLI) commands and other processes, such as backup and restore, require that you place the ThreatQ application into maintenance mode. Placing the application in maintenance mode allows you to perform operations which would be delayed or otherwise impeded by regular API operation.

Some CLI commands automatically place the ThreatQ application into maintenance mode when executed. The Help Center topics for these commands indicates if the command will automatically place the ThreatQ application into maintenance mode.

### Placing the ThreatQ Application into Maintenance Mode

- 1. SSH to your ThreatQ installation.
- 2. Navigate to the api directory using the following command:

cd /var/www/api

3. Run the following command:

sudo php artisan down

The platform is now in maintenance mode. [root@techpubstq api]# php artisan down

Application is now in maintenance mode.

[root@techpubstq api]#



### Taking the ThreatQ Application out of Maintenance Mode



The following steps assume you are already in the CLI. If not, complete steps 1-2 from above before proceeding.

1. While under the /var/www/api directory, run the following command:

sudo php artisan up

The platform is now out of maintenance mode.

[[root@techpubstq api]# php artisan up Application is now live. [root@techpubstq api]# ■



### **Commands**

This topic contains a list of commands you can execute from ThreatQ's command line interface (CLI). These commands are grouped by their primary area of impact, Integration, System Object, or Systemwide.

### **Integration Commands**

### Add/Upgrade CDF



ThreatQuotient recommends that you use the user interface to add or upgrade integrations.

Use the steps below to add or upgrade a Configuration Driven Feed (CDF). The command creates connectors for each feed defined in the feed definition file.

#### install a CDF:

- 1. SSH to your ThreatQ installation.
- 2. Navigate to the api directory using the following command:

cd /var/www/api

- 3. Place the application into maintenance mode see the Maintenance Mode section.
- 4. Run the following command:

sudo php artisan threatq:feed-install <Feed Definition File>



The application will notify you if the feed(s) in the feed definition file already exists in the system and will cancel the installation. See the **Upgrade a CDF** and **Changes in User Configurations** sections below for more information.

threatq:feed-install 6266 Started > 2019-02-21 18:47:24 threatq:feed-install 6266 Command failed: The provided definition file contains the following installed feeds: Testing at 5 AM. Proceed with the update by using the --upgrade flag.

5. Bring the application out of maintenance mode - see the Maintenance Mode section.

#### **Upgrade a CDF**

This command can be used to update a feed's Category and Namespace. If the category exists on the appliance, the command updates both fields and links the feed to the designated category. ThreatQ confirms that the defined category exists before completing the update command. If the category does not exist, ThreatQ does not update the feed.

- 1. SSH to your ThreatQ installation.
- 2. Navigate to the api directory using the following command:



cd /var/www/api

- 3. Place the application into maintenance mode see the Maintenance Mode section.
- 4. Run the following command:

```
sudo php artisan threatq:feed-install <Feed Definition File> --upgrade
```

5. Bring the application out of maintenance mode - see the Maintenance Mode section.

### **Changes in User Configurations**

When upgrading an existing feed using the **--upgrade flag**, the application will compare the existing version of the feed with the new version for differences in the user configuration. If a difference is detected, the application will inform you that the current user configuration for that feed will be overwritten. The application will require user input to continue with the feed upgrade.

```
threatq:feed-install 6266 Started > 2019-02-21 18:47:24
threatq:feed-install 6266 Command failed:
The provided definition file contains the following installed feeds:
Testing at 5 AM. Proceed with the update by using the --upgrade flag.
```

ThreatQ recommends that you create a copy of the existing configuration values before proceeding with the upgrade.

### **Command Flag Help**

You can also see a full list of command flags using the following command while under the **/var/www/api** directory:

```
sudo php artisan threatq:feed-install --help
```

### **View Feed Queues**

Before upgrading a feed, ThreatQ recommends that you allow the previous implementation of the feed to complete processing downloaded data to avoid any data loss. The threatq:list-queues command allows you to confirm that the feed's queues have been cleared.

1. Run the following command:

```
/var/www/api/artisan threatq:list-queues -p feeds
```

2. Locate and confirm that the feed's Indicators and Reports rows display a value of "0" for the Messages Ready and Messages Unacknowledged columns.



The queues should be cleared, reporting 0 values, before proceeding with the update.



### **System Object Commands**

### **Delete Adversary Descriptions**



Due to the introduction of multiple description support, this command is not needed by customers on ThreatQ v5.21 or later.

The adversary-descriptions-cleanup command allows you to delete duplicated adversary descriptions and orphaned adversary description values. By default, the adversary-descriptions-cleanup command deletes 1,000 adversary descriptions at a time. If there are performance concerns with deleting this many adversaries at a time, you can use the optional delete-limit parameter to specify an integer value as the limit for the number of adversary descriptions deleted at a time. For example, you can run the command with a delete-limit of 100 to delete 100 orphaned/duplicate adversary descriptions at a time.



Setting the delete-limit parameter too high may hinder performance.

- 1. SSH to your ThreatQ installation.
- 2. To delete adversary descriptions in batches of 1,000, run the following command:

sudo /var/www/api/artisan threatq:adversary-descriptions-cleanup

3. To specify the number of adversary descriptions to be deleted at a time, run the following command:

sudo /var/www/api/artisan threatq:adversary-descriptions-cleanup -delete-limit number

The **number** variable above represents the maximum number of adversary descriptions you want to delete at a time. The following example command deletes a maximum of 100 adversary descriptions at a time.

#### **Example:**

sudo /var/www/api/artisan threatq:adversary-descriptions-cleanup -delete-limit 100

### **Merge Attributes**



The Attribute Management page also allows you to merge attribute keys.

The Merge Attributes command allows you to merge an existing attribute to a new or different existing attribute name. This is useful when an attribute key is outdated or entered incorrectly.



You can add the --source parameter to only merge attributes that have a specific source(s). If the source identified in the command does not exist, or the parameter is not included, the command merges all OLD-NAME attributes into MERGE-NAME.



If the MERGE-NAME attribute in the command does not exist, it is automatically created upon executing the command.

- 1. SSH to your ThreatQ installation.
- 2. Navigate to the api directory using the following command:

```
cd /var/www/api
```

- 3. Place the application into maintenance mode see the Maintenance Mode topic.
- 4. Run the following command:

```
sudo php artisan threatq:merge-attributes --old-name='OLD-NAME' --
merge-name='MERGE-NAME' --source='SOURCE'
```



The --source parameter is optional. You can omit this parameter in order to target all attributes with the OLD-NAME.

5. Bring the application out of maintenance mode - see the Maintenance Mode topic.

#### **Example - Merge Attribute without using --source**

The attribute Cuontry is merged into the Country attribute. So if you have an any instance of this attribute name (with value), Cuontry: US, on an object, after running the command, the attribute value would appear as Country: US on that object.

```
sudo php artisan threatq:merge-attributes --old-name='Cuontry' --merge-
name='Country'
```

#### **Example - Merge Attribute using --source**

The attribute Cuontry, if it has a source of CrowdStrike, is merged into the Country attribute. So if you have an instance of this attribute name (with value), Cuontry: US, on an object, after running the command, the attribute value appears as Country: US on that object.

```
sudo php artisan threatq:merge-attributes --old-name='Cuontry' --merge-
name='Country' --source='CrowdStrike'
```

### **Example - Merge Attribute using --source (multiple sources)**



The attribute Cuontry, if it has a source of CrowdStrike or McAfee ATD, is merged into the Country attribute. So if you have an instance of this attribute name (with value), Cuontry: US, on an object, after running the command, the attribute value appears as Country: US on that object.

```
sudo php artisan threatq:merge-attributes --old-name='Cuontry' --merge-
name='Country' --source='CrowdStrike' --source='McAfee ATD'
```

#### **Source Consolidation**

Use the steps below to consolidate/deduplicate similarly named sources and to remove unused sources from the ThreatQ application. A source that have been removed or merged will have its data mapped to a new source.

The command does not require recalculation of scoring.

- 1. SSH to your ThreatQ installation.
- 2. Navigate to the api directory using the following command:

```
cd /var/www/api
```

- 3. Place the application into maintenance mode see the Maintenance Mode topic.
- 4. Run the following command:

```
sudo php artisan threatq:consolidate-sources
```

5. Bring the application out of maintenance mode - see the Maintenance Mode topic.

#### **Example Scenario:**

- 1. User manually adds ABC as a source.
- 2. User enables ABC.

There are now two ABC sources in the system.

- 3. User runs consolidation command.
- 4. The application merges the sources and remaps any items linked to the correct source.

### **Source Merge**

Use the steps below to merge a user-created source (source origin) with another source (source destination). After merging, the source origin is deleted and source changes are reflected in the Audit log (Example: Source A become Source B).

The command does not affect date stamps nor does it require a recalculation of scoring.

- 1. SSH to your ThreatQ installation.
- 2. Navigate to the api directory using the following command:

```
cd /var/www/api
```

3. Place the application into maintenance mode - see the Maintenance Mode section.



4. Run the following command:

sudo php artisan threatq:merge-sources --origin-source="<source a>" -destination-source="<source b>"

5. Bring the application out of maintenance mode - see the Maintenance Mode section.

### **EXAMPLE SCENARIO**

### **DETAILS**

Merge user-created source (origin source) with a system source (destination source).

- 1. User places the platform into maintenance mode.
- 2. User runs Source Merge command.
- 3. User is presented with merge confirmation dialog.
- 4. User consents to the merge.
- 5. The platform will merge the origin source into the destination source and then delete the origin source after completion.
- 6. The platform will record the source merge in the audit log for affected data.
- 7. The user receives a command success message.
- 8. The user brings the platform out of maintenance mode.

Merge system source (origin source) with a user-created source (destination source).

- 1. User places the platform into maintenance mode.
- 2. User runs Source Merge command.
- 3. The platform will inform the user that a system source cannot be merged into another source.
- 4. The user brings the platform out of maintenance mode.

Merge user-created source (origin source) with a system source (destination source) with duplicate records.

- 1. User places the platform into maintenance mode.
- 2. User runs Source Merge command.
- 3. The platform will inform the user that there are duplicate records between the two sources and prompt the user to run the Source Consolidation command before proceeding with the merge.
- 4. User runs the Source Consolidation command.
- 5. User runs Source Merge command.
- 6. User is presented with merge confirmation dialog.
- 7. User consents to the merge.
- 8. The platform will merge the origin source into the destination source and then delete the origin source after completion.



#### **EXAMPLE SCENARIO**

#### **DETAILS**

- 9. The platform will record the source merge in the audit log for affected data.
- 10. The user receives a command success message.
- 11. The user brings the platform out of maintenance mode.

Merge user-created source (origin source) with a system source (destination source) with an assigned TLP.

- 1. User places the platform into maintenance mode.
- 2. User runs Source Merge command.
- 3. User is presented with merge confirmation dialog.
- 4. User consents to the merge.
- 5. The platform will merge the origin source into the destination source, and then delete the origin source after completion.
- The platform will then apply the destination source's default TLP settings to the merged data and record the source merge in the audit log for affected data.
- 7. The user receives a command success message.
- 8. The user brings the platform out of maintenance mode.

### **Convert TLP**

Use the following command to update all object sources and object attribute sources that have Traffic Light Protocol (TLP) stored as an object attribute. This command will not affect TLP attributes that have already been converted. Users should use this command for new incoming data, such as migrating data into the system, which has TLP attributes but no TLP set.

- 1. SSH to your ThreatQ installation.
- 2. Navigate to the api directory using the following command:

cd /var/www/api

- 3. Place the application into maintenance mode see the Maintenance Mode section.
- 4. Run the following command:

sudo php artisan threatq:convert-tlp-attributes

5. Bring the application out of maintenance mode - see the Maintenance Mode section.

#### **Use Scenarios:**

Object has one or more TLP Attributes with an invalid TLP (not currently in the TLP options)



- If the Object has just one TLP Attribute none of its Sources or Attribute Sources will be updated.
- If the Object has more than one TLP Attribute any Sources or Attribute Sources that match the Attribute Source of the TLP Attribute will not be updated.

#### **Object has a single valid TLP Attribute**

• All of the Object Sources and Object Attribute Sources will be updated to match the value of the TLP Attribute.

### **Object has multiple TLP Attributes**

- Each TLP Attribute will be evaluated separately.
- Any Object Sources or Object Attribute Sources whose source matches that of the TLP Attribute will be updated with the value of the TLP Attribute.
- Any Object Sources or Object Attribute Sources whose sources do not match will not be updated.
- If there are no matches at all between the source of the TLP Attribute and any of the Object Sources or Object Attribute Sources, a new Object Source will be added using the Attribute's TLP value. Each of the Object Attributes will receive a new Object Attribute Source with the TLP value as well.

### **Update TLP Designations**

Use the following command to update the Traffic Light Protocol (TLP) schema for an object source, object attribute source, and object description source with the source's default TLP designation.



See Traffic Light Protocol (TLP) topic for more details on setting a default TLP designation for a source.

You should use this command to update your system to match default TLP configurations, specifically attributes and sources that were added to the Threat Library prior to the release of the TLP feature introduced with ThreatQ 4.11. This command will override previous TLP schema settings for a source including ones set by users. You are prompted to confirm the action after entering the command. All updates are recorded in the audit log.



The command updates using the default TLP designation. If a default designation is set to None, all references to the source will be updated to None.

### **Update All Sources**

- 1. SSH to your ThreatQ installation.
- 2. Navigate to the api directory using the following command:

cd /var/www/api

3. Run the following command:

sudo php artisan threatq:apply-tlp-defaults



The application will warn you that this action is not reversible and will require user confirmation before proceeding.

4. Type **Yes** to confirm and proceed with the action.



The application will automatically be placed into maintenance mode. After the command has completed its operation, the application will be automatically be brought out of maintenance mode.

### **Update a Specific Source**

- 1. SSH to your ThreatQ installation.
- 2. Navigate to the api directory using the following command:

cd /var/www/api

3. Run the following command:

sudo php artisan threatq:apply-tlp-defaults --sources="<your source>"



You can apply the command to multiple sources by listing the sources in a commadelimited format.

**Example:** --sources="CrowdStrike, AlienVault"

The application will warn you that this action is not reversible and will require user confirmation before proceeding.

4. Type **Yes** to confirm and proceed with the action.



The application will automatically be placed into maintenance mode. After the command has completed its operation, the application will be automatically be brought out of maintenance mode.

### **Indicator and Signature Statuses Overrides**

The following commands allow you to change status handling on indicators and signatures updated via feed ingestion. When you run the artisan command to enable this functionality:

- An existing indicator's status is overridden with the default status configured in the CDF.
- An existing signature's status is overridden with the default status of Active.

A second artisan command disables this functionality and returns your system to default handling of indicator and signature expiration updates.

### **Enable Indicator and Signature Status Overrides**

- 1. SSH to your ThreatQ installation.
- 2. Navigate to the api directory using the following command:



cd /var/www/api

3. Run the following commands:

sudo php artisan threatq:configuration --key consumer.connectors\_override\_status --value 1 sudo php artisan cache:clear

#### **Disable Indicator and Signature Status Overrides**

- 1. SSH to your ThreatQ installation.
- 2. Navigate to the api directory using the following command:

cd /var/www/api

3. Run the following commands:

sudo php artisan threatq:configuration --key consumer.connectors\_override\_status -- delete

sudo php artisan cache:clear

### **System-Level Commands**

### **Airgap Import**

See the threatq:sync-import topic.

### **Airgap Export**

See the threatq:sync-export topic.

### **Allow Cross-Origin Resource Sharing for Specific Hostnames**

ThreatQ's explicit domain access restrictions prevent cross-origin resource sharing (CORS) attacks. This allows API requests from ThreatQ and third-party integrations but blocks cross-origin JavaScript requests unless you use the following command to specifically configure a list of allowed hosts.

- 1. SSH to your ThreatQ installation.
- 2. Run the following command:

sudo php artisan threatq:configuration --key=cors.allowed\_hosts -value https://www.site-a.com,https://www.site-b.com





The value parameter allows you to enter a single domain or multiple domains separated by a comma.

### Single Domain Example:

sudo php artisan threatq:configuration --key=cors.allowed\_hosts -value https://www.example.com

### **Multiple Domains Example:**

sudo php artisan threatq:configuration --key=cors.allowed\_hosts -value https://www.example.com,https://www.my-allowed-host.com

### **Disable Export Logging**

The exports.disable\_logging configuration option allows you to disable export logging. However, if a differential parameter is included as a URL parameter. the export logging process continues regardless of this configuration.

- 1. SSH to your ThreatQ installation.
- 2. Run the following command to disable export logging:

sudo php artisan threatq:configuration --key exports.disable\_logging
--value 1

3. To turn logging back on, run the following command:

sudo php artisan threatq:configuration --key exports.disable\_logging
--value 0

### **LDAP Diagnostic Searches**

This command runs LDAP diagnostic searches for authentication and authorization using the LDAP configuration stored in the database. Methods for searching are contained in try/catch blocks so that stack traces are printed to the debug output. You can run this command with or without the ——test—user parameter. This parameter allows you to use a known username on the LDAP server to test authentication and group searching.



The test connection and bind aspects of this command work for the anonymous LDAP configuration. However, all other aspects, including test user authentication and group searching, only work with the authenticated bind LDAP configuration.



This command has only been tested and confirmed for use with AD server configurations.

### To perform basic connect and bind authentication tests:



- 1. SSH to your ThreatQ installation.
- 2. Navigate to the api directory using the following command:

cd /var/www/api

3. Run the following command:

sudo php artisan threatq:ldap-debug

# To perform basic connect and bind authentication as well as authentication with the test username:

- 1. SSH to your ThreatQ installation.
- 2. Navigate to the api directory using the following command:

cd /var/www/api

3. Run the following command:

sudo php artisan threatq:ldap-debug --test-user=username

#### **Example:**

sudo php artisan threatq:ldap-debug --test-user=administrator

4. When prompted, enter the username's password.

Regardless of whether authentication is successful, an attempt is made to pull the LDAP user entry for the username. If authentication is successful, a group search (authorization) is performed as well.

### **Auto Configuration MariaDB Command**

The Auto Configuration MariaDB command will execute a script that will update your MariaDB configurations based on your available system resources. The script is executed automatically during the platform install/upgrade process but can executed manually by using the command below. You will typically use this command after making a change to the size of your ThreatQ instance or system memory.



MariaDB will need to be restarted after the script has completed its updates.

/etc/my.cnf.d/config\_gen/mysql\_config\_generator



### **System ThreatQ Purge**



Read this section carefully before running the ThreatQ Purge Command. After running this command, your threat intelligence data cannot be recovered.

The ThreatQ Purge command will **permanently** delete all object-related threat intelligence data from your ThreatQ installation, including audit logs. It will maintain any configuration-related settings, such as expiration, scoring, and so on.

### **Running the ThreatQ Purge Command**

The ThreatQ Purge command will **permanently** delete all object-related threat intelligence data from your ThreatQ installation, including audit logs. It will maintain any configuration-related settings, such as expiration, scoring, and so on.

- 1. SSH to your ThreatQ installation.
- 2. Navigate to the api directory using the following command:

cd /var/www/api

- 3. Place the application into maintenance mode see the Maintenance Mode section.
- 4. Run the following command:

sudo php artisan threatq:purge-threat-intelligence

5. You will be presented the following prompt:

You are about to erase all of your data, are you sure?

- 6. Enter **Yes** or **No**.
- 7. Bring the application out of maintenance mode see the Maintenance Mode section.

#### **Reset User Password**



You cannot reset a SAML nor LDAP user's password from the command line.

If you have root access to your ThreatQ installation, you can reset any user's password from the command line.

- 1. SSH to your ThreatQ installation as root.
- 2. Navigate to the api directory:

cd /var/www/api

3. Run the following command:

sudo php artisan threatq:password-reset



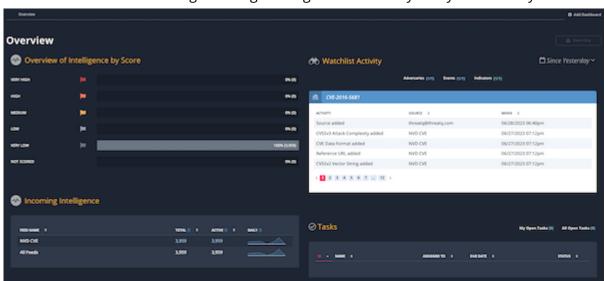
- 4. At the prompt, enter the email address or username for the user whose password you are resetting.
- 5. At the prompt, enter the new password.
- 6. At the prompt, re-enter the new password to confirm.



# **Dashboards**

### **About Dashboards**

When you log into ThreatQ, your default view is the Overview dashboard. This pre-configured dashboard includes four widgets that give a high-level view of your system activity.

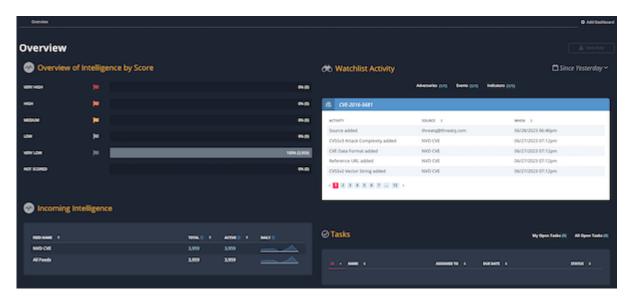


While the Overview dashboard cannot be modified, Primary Contributors, Administrators, and Maintenance users can use ThreatQ widgets to build custom dashboards that can be shared with individual users or all users. These custom dashboards allow you to narrow your focus on threat intelligence trends that affect your organization the most.



### **Default Dashboard**

The system default dashboard, Overview, displays metrics and visualizations to provide at-a-glance views of your threat intelligence data.



### Widgets include:

- · Overview of intelligence by score
- · Watchlist activity
- Incoming intelligence
- Open assigned tasks

### **Overview of Intelligence by Score**

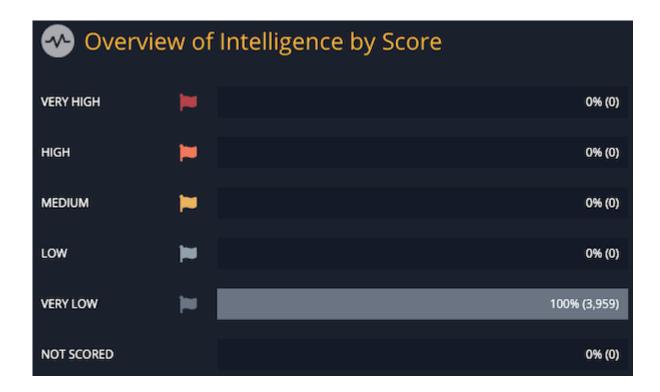
This dashboard graph provides a summary of indicator scoring in the system. It lists total indicators by score in the following order:

- Very High
- High
- Medium
- Low
- Very Low
- · Not Scored

Ideally, this dashboard reflects a small number of **Very High** indicators with the bulk of the remaining indicators scored as **Low** or **Very Low**. This distribution reflects a focus on key threat intelligence. You can use Scoring Algorithms or Indicator Scoring to adjust the scores assigned to your indicators.

You can click the percentage/number of indicators to launch an advanced search based on that criteria.





### **Incoming Intelligence**

This dashboard graph provides a view of threat intelligence from all incoming feeds.



The system categorizes threat intelligence by:

- · Feed Name
- Total number of indicators reported by a source
- Indicators reported by a source with a status of active
- All indicators reported by a source per day (includes existing indicators)

Clicking on the **Total** and Active values will navigate you to the Threat Library Advanced Search page with the appropriate filters applied

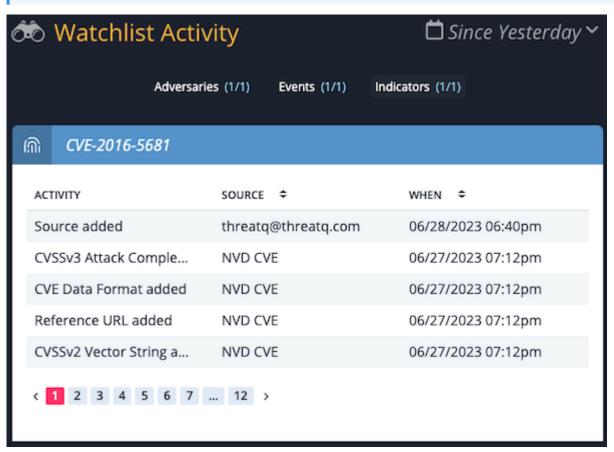


### **Watchlist Activity**

This dashboard section provides a view of the intelligence data that you selected to watch. You may click on any accompanying link to view the details page of the item being watched.



The Watchlist Activity widget is not displayed for Read-Only users.



See the Add/Remove an Object to the Watchlist topic for steps on how to add an object to your watchlist.

### **Tasks**

This dashboard widget provides a view of all open tasks in the platform. You can view your open tasks or view all open tasks. Tasks on the dashboard are categorized by:

- Task ID
- Task Name
- User the Task is Assigned To
- Due Date
- Status



### **Custom Dashboards**

### **About Custom Dashboards**

You can create and share multiple custom dashboards to be used on the ThreatQ landing page.



Each dashboard is comprised of system widgets which are populated by data derived from data collections - see Managing Search Results topic for more details. You can click on an individual segment of data within a widget to view it in the ThreatQ Threat Library.

With the dashboard sharing option, you can determine which dashboards you want to share with other users and which ones you want to keep private. See the Dashboard Sharing topic for more details.

You can control which shared dashboards created by other users appear in your view. Dashboards added to your view will appear dashboard horizontal menu as well as the Dashboards dropdown menu. You can also remove your own dashboards from your view without deleting them from the platform. See the User View Management topic for more details.

Topics covered in this section include:

SECTION	DETAILS
About Analytics Dashboards	Deploy pre-configured dashboards for Adversaries , Events , Files , and Indicators .
Dashboard Widgets	You can add the following widgets to your custom dashboards: Bar Chart, Description, Line Chart, Pie Chart, Count, and Table.
Dashboard Management	You can create, edit, and delete your own custom dashboards.



Dashboard Sharing	You have the ability to configure how your custom dashboards are shared across the ThreatQ platform.
User View Management	Add, remove, and reorder dashboards that you created or have been shared with you.



# **Analytics Dashboard**

### **About Analytics Dashboards**

You can deploy preconfigured dashboards, formerly known as Analytics, to your dashboard view.



Analytics dashboards cannot be edited.

#### Options include:

SECTION	DETAILS
Adversaries Analytics	The Adversaries dashboard provides an overview of all the Adversaries within ThreatQ as well as overlapping use of specific indicators.
Events Analytics	The Events dashboard provides a high-level view of what types of Events have occurred and how frequently they are occurring.
Files Analytics	The Files dashboard provides you with a pie chart displays the percentage of different types of Files within the system and a table that lists the files, the date and time they were created, their title, their source, their category, and associated keywords.
Indicators Analytics	The Indicators Dashboard provides an insight into what Indicators have been added to the system within the last 15 days, as well as an overview of how many indicators fall under each indicator type.

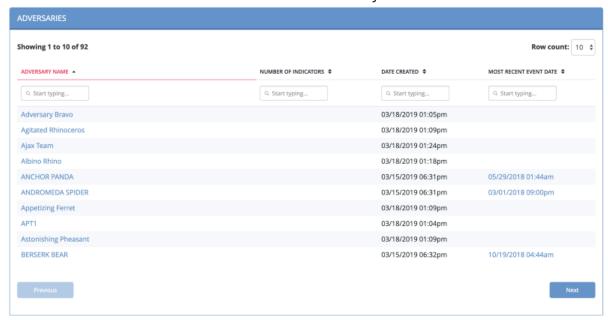


## **Adversaries Analytics**

The Adversary Analytics dashboard provides an overview of all the Adversaries within ThreatQ as well as overlapping use of specific indicators.

#### **Adversaries Summary Table**

The Adversaries Summary table lists Adversaries by name, number of Indicators, date created, and the most recent event date associated with the adversary.



The following functions are available:

FUNCTION	DETAILS
Opening the Adversary Details page for an adversary	Click the name in the Adversary Name column.
Performing a search for related indicators	Click the number in the Number of Indicators column to set the adversary name as a search criterion and open the Advanced Search page.
Opening the Event Details page for an adversary event	Click the date in the Most Recent Event Date to open the Event Details page.
Changing the number of entries displayed in the table	Click the paging batch option located to the bottom-right of the table.



FUNCTION	DETAILS
Sorting the table by a column	Click the column header. To reverse the column sorting order, click the header a second time.
Searching within the Adversary Name column	Click within the search box at the top of the column, and enter your search criteria.

### **Adversaries Overlap Table**

The Adversary Overlap table lists Adversaries , the date and time they were created, their type, and any overlapping indicators.



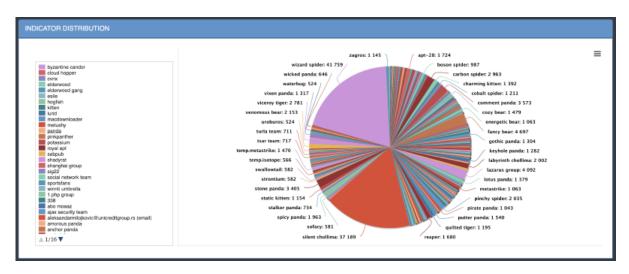
The following functions are available:

FUNCTION	DETAILS
Opening the Adversary Details page for an adversary	Click the name in the Adversary Name column.
Opening the Indicator Details page for an overlapping indicator	Click the identity in the Overlapping Indicator column.
Changing the number of entries displayed in the table	Click the paging batch option located to the bottom-right of the table.
Sorting the table by a column	Click the column header. To reverse the column sorting order, click the header a second time.
Searching within a column	Click within the search box at the top of the column, and enter your search criteria.



#### **Indicator Distribution Pie Chart**

The Adversary Overlap table lists adversaries, the date and time they were created, their type, and any overlapping indicators.



The following functions are available:

FUNCTION DETAILS

# Viewing more information about a selected value

Hover over a colored section of the pie chart to open a popup identifying the indicator.

The number of times the indicator was found within the specified time frame, and what percentage of the total number of indicators it represents.

# Hiding or unhiding one of the values from the pie chart

Click the indicator on the left of the pie chart to remove it; click a second time to reinstate it.

# Adjusting the time frame of the information displayed

Click the dropdown menu at the top right and select the desired timeframe.

You can select from:

- · Last 24 Hours
- Last 7 Days
- · Last 30 Days
- · Last Year
- User-set custom range



### **FUNCTION DETAILS**

Printing the graph or saving it as a PNG, JPEG, PDF, or SVG

Click the hamburger menu  $\equiv$  and select the desired option.



# **Events Analytics**

The Event Analytics dashboard provides a high-level view of what types of Events have occurred and how frequently they are occurring.



#### **Events History Scatter Plot**

The scatter plot points are plotted by date (x-axis) and hour (y-axis). The legend under the scatter plot identifies the different kinds of events shown.



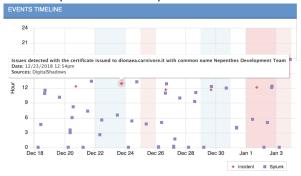
The following functions are available:



#### FUNCTION DETAILS

Viewing an event's name, date and time, and source

Hover your mouse over an event on the scatter plot to see its name, date and time, and source.



Opening the Event Details page for one of the events

Click the event in the scatter plot.

For more information, see About Object Details.

Hiding or unhiding one or more of the event types

Click the event type in the legend immediately below the scatter plot to remove it from the graph; click it again to reinstate it.

Adjusting the time frame of the information displayed

Click the dropdown menu at the top right and select the desired time frame.

You can select from:

- Last 24 Hours
- Last 7 Days
- Last 30 Days
- Last Year
- User-set custom range

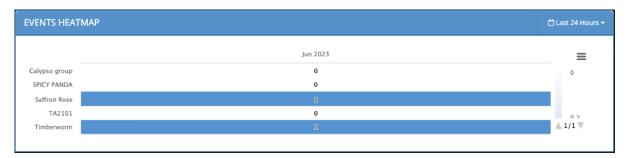
Printing or downloading the scatter plot as a PNG, JPEG, PDF, or SVG file

1. Click the hamburger menu and select the desired option.

#### **Events Heatmap**

The Events Heatmap table lists events by adversary. Shading of the totals is used to allow you to quickly scan for patterns in the events and to quickly detect events with higher counts.





The following functions are available:

#### **FUNCTION**

#### **DETAILS**

# Viewing an event's name and monthly count

1. Hover your mouse over an event on the heatmap to see its name and monthly count.



# Adjusting the time frame of the information displayed

1. Click the dropdown menu at the top right and select the desired time frame.

You can select from:

- Last 24 Hours
- Last 7 Days
- o Last 30 Days
- Last Year
- User-set custom range

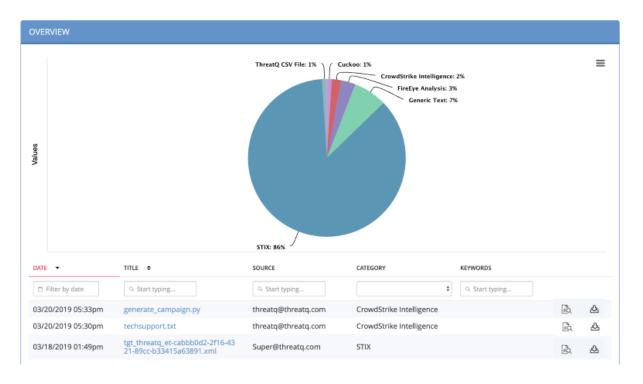
Printing the graph or saving it as a PNG, JPEG, PDF, or SVG

1. Click the hamburger menu ≡ and select the desired option.



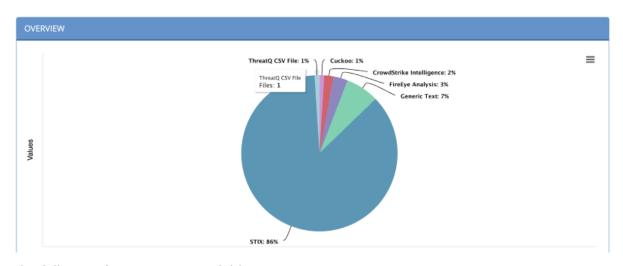
## **Files Analytics**

The Files Analytics dashboard provides you with a pie chart displays the percentage of different types of Files within the system and a table that lists the files, the date and time they were created, their title, their source, their category, and associated keywords.



#### **File Type Pie Chart**

The file type pie chart displays the percentage of different types of files within the system.



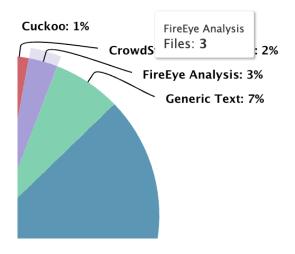
The following functions are available:



FUNCTION DETAILS

# Viewing more information about a selected file

Hover over a colored section of the pie chart to view the number tha corresponds to the file type percentage.



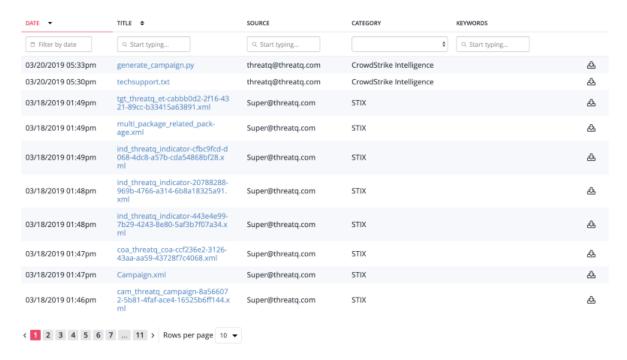
Printing the graph or saving it as a PNG, JPEG, PDF, or SVG

Click the hamburger menu  $\blacksquare$  and select the desired option.

#### **Files Table**

Immediately below the file type pie chart is a table that lists the files, the date and time they were created, their title, their source, their category, and associated keywords.





The following functions are available:

FUNCTION DETAILS

Opening the File Details page for a file	Click the name in the Title column.
Changing the number of entries displayed in the table per page	Click the paging batch option located to the bottom-right of the table.
Sorting the table by a column	Click the column header. Click on the header a second time to reverse the column sorting order.
Searching within a column	Click within the search box at the top of a column, and enter your search criteria.
Downloading a file	Click the file's download icon $lacktriangle$ .
Previewing a file	Click the file's preview icon Preview Icon. If your browser does not support file preview for a specific file type, the file is downloaded instead.



#### **DETAILS FUNCTION**



You cannot preview a malware locked file.

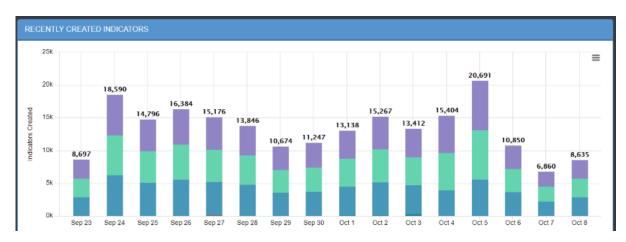


### **Indicators Analytics**

The Indicator Analytics dashboard provides an insight into what Indicators have been added to the system within the last 15 days, as well as an overview of how many indicators fall under each indicator type.

#### **Recently Created Indicators Histogram**

The histogram is organized by date. Daily indicator totals are at the top of each column. Each bar is broken down into colors, one for each indicator type.

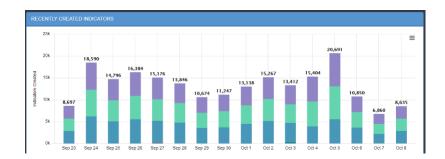


The following functions are available:

FUNCTION DETAILS

Viewing the number of indicators created each day by type

Hover over a colored section to view a popup showing how many attempts of a particular type (for example, MD5, SHA-1, SHA-256) were made on that date.



Zooming in for a closer view

1. Drag your mouse over a section of the histogram, and your view will be magnified.



**FUNCTION DETAILS** 



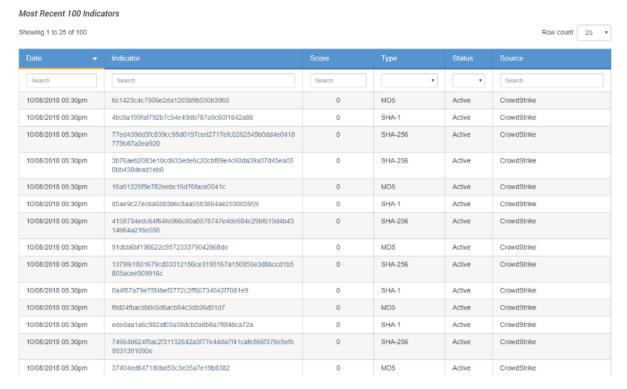
2. Click **Reset Zoom** to return to the full histogram.

Printing the histogram or downloading it as a PNG, JPEG, PDF, or SVG file Click the hamburger menu  $\equiv$ , and select the desired option.



#### **Most Recent 100 Indicators**

The Most Recent 100 Indicators list displays the 100 most recently reported Indicators .



The following functions are available:

**FUNCTION** 

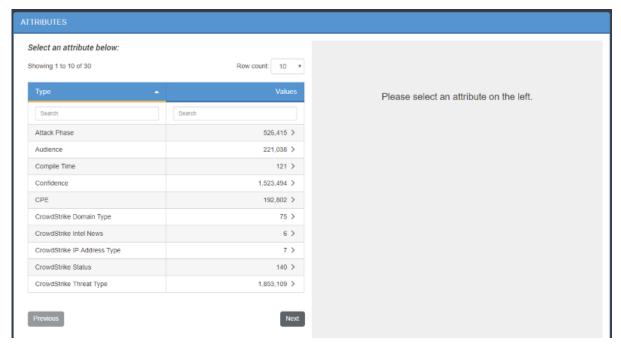
Resort the Table	Click on the different table headings to resort that table by that column.
Search and Filter Table Results	Click on one of the search boxes at the top of the columns and enter a keyword to filter the results.  You can use the supplied dropdown selections for the Status and Type columns to filter by system-available values.
Modify the Number of Rows Displayed	Click on the <b>Row Count</b> icon located to the top-right of the chart and select a new display count from the dropdown.
Access the Indicator Details Page for a Specific Indicator	Click on the specific Indicator to review to open the Indicator's Details page.

**DETAILS** 



#### **Attributes Table**

The attributes list on the left side displays attributes related to Indicators in your system.



The following functions are available:

FUNCTION	DETA	IIL2

Change the Number of Entries Displayed in the Table	Click the <b>Row Count</b> icon located to the top-right of the chart and select a new display count from the dropdown.
Search/Filter Attributes and Values	Click within the search box at the top of the column, and enter your search criteria.

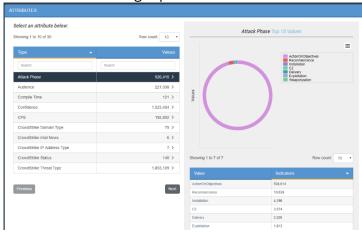


#### **FUNCTION**

# View More Information About a Selected Attribute

DETAILS

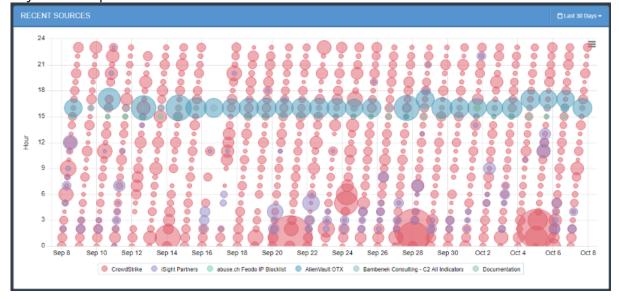
1. Click on an attribute row in the table to view additional information in the right pane.



- 2. Hover the mouse over different portions of the pie chart to reveal the segment's value.
- 3. Click on an **Attribute Value** in the summary table below the pie chart to open the Advanced Search page with those attribute values applied.

#### **Recent Sources**

The Recent Sources Scatter plot displays how many indicators were provided by a given source each day within a specified time frame.



The following functions are available:

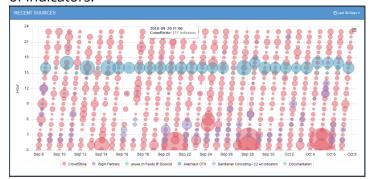


#### **FUNCTION**

#### **DETAILS**

### View the Date and Number of Indicators from a Given Source

1. Hover the mouse over one of the scatter plot circles to view a popup with the Source, Date, Time and Number of Indicators.



2. Click on the one of the scatter plot circles to open the Advanced Search page with the specific filter settings used for that selection.

# Adjust the Date Range of the Information Displayed

The default date range is 30 days.

1. Click the date range icon located to the top-right of the chart and use the dropdown menu select the desired range.

You can select from:

- Last 24 Hours
- Last 7 Days
- o Last 30 Days
- Last Year
- User-set custom range

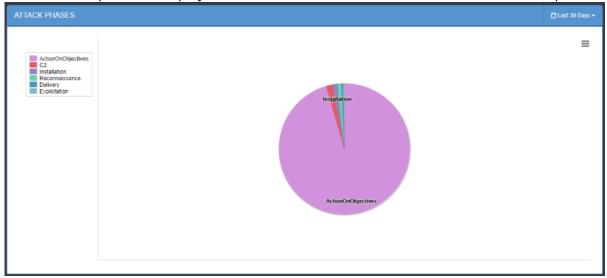
# Hide Values from the Scatterplot

- 1. Click on a source in the legend under the scatter plot to hide it.
  - The Source will be removed from the scatter plot and the source in the legend appear grayed out.
- 2. Click on the source again to add it back to the scatter plot.



#### **Attack Phases**

Attack Phases are the ways an indicator might be used and are listed as indicator attributes. The Attack Phases pie chart displays the number of indicators that fall under each attack phase.



The following functions are available:

#### **FUNCTION**

# **DETAILS**

# View the Number of Indicators for an Attack Phase

- 1. Hover the mouse over a portion of the pie chart to view a popup the Attack Phase and number of indicators associated with it.
- 2. Clicking on a pie chart section will open the Advanced Search page with the specific filter settings used for that selection.

# Adjust the Date Range for the Information Displayed

The default Date Range is 30 days.

1. Click the date range icon located to the top-right of the chart and use the dropdown menu select the desired range.

Users can select from:

- Last 24 Hours
- Last 7 Days
- o Last 30 Days
- Last Year
- User-set custom range

#### Hide a Values from the Pie Chart

1. Click on a Attack Phase in the legend to the left of the pie chart to hide it.



**FUNCTION DETAILS** 

The Attack Phase will be removed from the pie chart and the source in the legend appear greyed out.

2. Click on the Attack Phase again to add it back to the pie chart.



# **Dashboard Widgets**

You can use the following Dashboard Widgets to build your custom dashboards: Bar Chart, Description, Line Chart, Pie Chart, Count, and Table.



Why do my chart segments add up to over 100%? In the case that an object matches more than one segment in the chart, it is counted individually for each segment. For example, when using a pie chart to represent the sources in your Threat Library, objects that have multiple sources will appear in multiple segments.

#### **Bar Chart**



You can click on individual bars within the chart to view those results in the Threat Library.



Bar charts that include score data include scores greater than ten as a part of the bar representing objects with a score of ten.

Complete the following fields to add a Bar Chart widget to your custom dashboard.



DESCRIPTION

Title	The title that will appear above the widget.
Automatically Update	The refresh time for the data. Options include: <ul><li>15 Minutes</li><li>30 Minutes</li><li>60 Minutes</li></ul>



FIELD	DESCRIPTION
	• None
Data Collection	Select the data collection to populate the data.
Object	Select a specific object type to display.
Group By	Select a data column to sort the information such as source, tags, etc.
Visual Display	Select whether to show the bar chart horizontally or vertically.
Show Top Options	Select the number of results to display. Options include: • Top 5 • Top 10

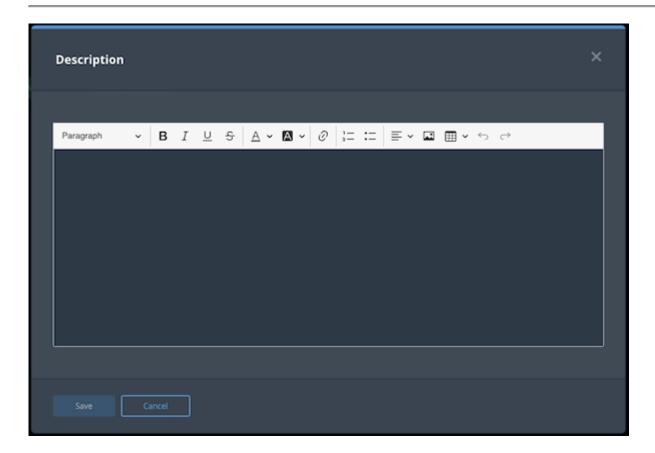
### **Description**

The Description widget allows you to provide further context and additional instructions for your custom dashboard. You can use the supplied editor to format your content.

# Tips and Tricks for Adding Images to Description Widgets

- **Image captions** Add your image captions after you select your image alignment. If you change alignment after adding a caption, the caption is removed and must be added again.
- **Image text alternatives** If you add an image text alternative to an image, it is available for use by screen reading tools but is only displayed on screen if the image fails to load. It is not displayed when you hover on the image.
- Add a line above or below When you click an image, the arrow icons located on the bottom left and top right corners allow you to insert a line above (top right arrow) or below (bottom left arrow) the image.
- **Resize an image** The resize image option allows you to adjust your image to 25%, 50%, or 75% of the size of the Description field. Or, you can return your image to its original size.

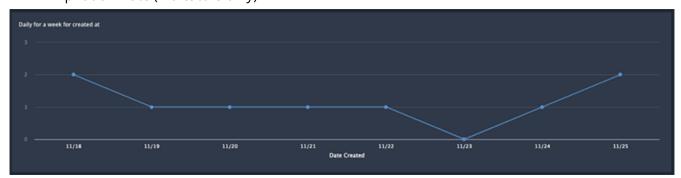




#### **Line Chart**

The Line Chart widget displays object information in a linear graph using the following date stamps:

- Date Created (all object types)
- Last Modified (all object types)
- Expiration Date (indicators only)



Complete the following fields to add a line chart widget to your custom dashboard.

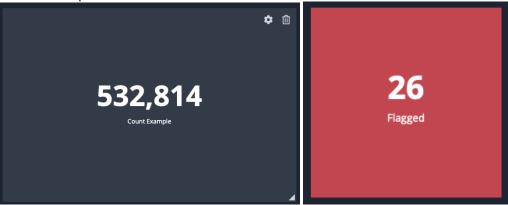


FIELD	DESCRIPTION
Title	The title that will appear above the widget.
Automatically Update	The refresh time for the data. Options include: <ul> <li>15 Minutes</li> <li>30 Minutes</li> <li>60 Minutes</li> <li>None</li> </ul>
Data to Show in Widget	Select the data collection to populate the data.
Object	Select a specific object type to display.
Date Metric	<ul> <li>The date stamp to use with the line chart. Options include:</li> <li>Date Created (all object types)</li> <li>Last Modified (all object types)</li> <li>Expiration Date (indicators only)</li> </ul>
Time Range	<ul> <li>The time range from today to be displayed. Options include:</li> <li>1 Week</li> <li>3 Months</li> <li>6 Months</li> <li>1 Year</li> </ul>
Time Segments	<ul> <li>Select how the dates will be displayed on the line chart. Options include: <ul> <li>Days (1 Week Time Range only)</li> <li>Weeks (3 Months, 6 Months, 1 Year only)</li> <li>Months (3 Months, 6 Months, 1 Year only)</li> <li>Quarters (3 Months, 6 Months, 1 Year only)</li> <li>Quarters will return the following results based on Time Range selection: <ul> <li>3 Months will display the current quarter plus the previous quarter</li> <li>6 Months will display the current quarter plus the previous two quarters.</li> <li>1 Year will display the current quarter plus the previous four quarters.</li> </ul> </li> </ul></li></ul>



#### Count

The Count widget displays the total number a specific object type. You can configure the widget to display a different background color if the total number of objects associated with the widget is above or below a specific value.



Complete the following fields to add a Count widget to your custom dashboard.

FIELD	DESCRIPTION
Title	The title that will appear above the widget.
Automatically Update	The refresh time for the data. Options include: <ul> <li>15 Minutes</li> <li>30 Minutes</li> <li>60 Minutes</li> <li>None</li> </ul>
Data to Show in Widget	Select the data collection to populate the data.
Object	Select a specific object type to display.
Emphasize Data Using Color	Check this box to use different colors to highlight the widget if the count is less than or greater than a specific value.  If checked, you will be prompted to select a count value and background color.

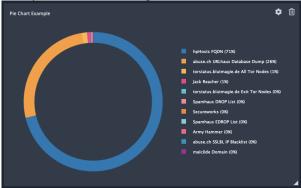


#### **Pie Chart**



You can click on individual segments within the chart to view those results in the Threat Library.

Complete the following fields to add a Pie Chart widget to your custom dashboard.



DESCRIPTION

Title	The title that will appear above the widget.
Automatically Update	The refresh time for the data. Options include: <ul> <li>15 Minutes</li> <li>30 Minutes</li> <li>60 Minutes</li> <li>None</li> </ul>
Data Collection	Select the data collection to populate the data.
Object	Select a specific object type to display.
Group By	Select a data column to sort the information such as source, tags, etc.

#### **Table**

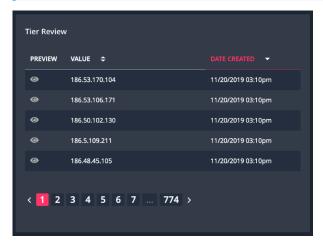
Table widgets allow you to add as many column fields as needed. You can click on a row's **value** entry to view it in the ThreatQ Threat Library. You can also click on the **eye** icon for a row to view a preview of the system object details.

If your table lists files, you also have the option to preview or download each file as long as the file is not malware locked.





You cannot preview a malware locked file.



Complete the following fields to add a Table widget to your custom dashboard.

FIELD	DESCRIPTION
Title	The title that will appear above the widget.
Automatically Update	The refresh time for the data. Options include:  • 15 Minutes  • 30 Minutes  • 60 Minutes  • None
Data Collection	Select the data collection to populate the data.
Object	Select a specific object type to display.
Group By	Select a data column to sort the information such as source, tags, etc.
Manage Columns	Select the data columns to display in the table. Click the Add Columns option to add more columns to your table.
Sorting	Select the column to sort the table and the order (ascending/descending).



# **Dashboard Management**

Access to dashboards is determined by your user role and Sharing permission level.

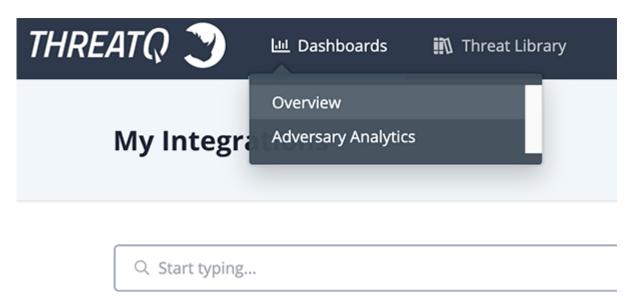
#### **Accessing a Dashboard**

If your dashboard view includes more tabs than can be displayed in a single screen, the left and right arrows on the right side of the screen allow you to scroll through the list of dashboard tabs.



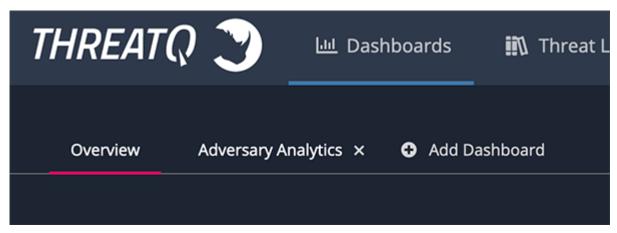
You can access a specific custom dashboard using the following methods:

• Click the **Dashboards** link in the top navigation and select a dashboard from the dropdown menu.



• When viewing a dashboard, click another dashboard tab. If you are not viewing a dashboard at the time, you can click on the ThreatQ logo to load your default dashboard.





After you select a dashboard, you can click the licon next to the dashboard name to view:

- · Dashboard owner
- · Date and time of the last change to the dashboard



#### Add an Existing Dashboard to Your View

You can customize your dashboard view by adding a dashboard you created, a default dashboard, or a dashboard shared with you by another user.

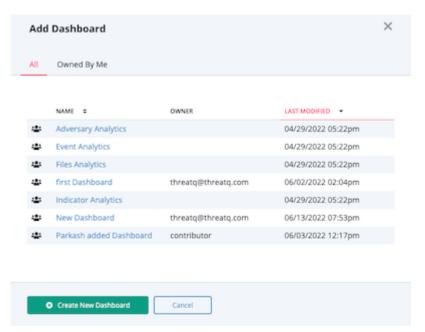
- 1. Navigate to the ThreatQ landing page.
- 2. Click the Add Dashboard link.

The Add Dashboard window displays an All and an Owned By Me tab. The All tab lists all of the dashboards you have access to including default, shared, and owned dashboards. The Owned By Me tab lists only the dashboards for which you are designated as the owner.



If you are a read-only user or do not own any dashboards, the Owned By Me tab is grayed out and inactive.



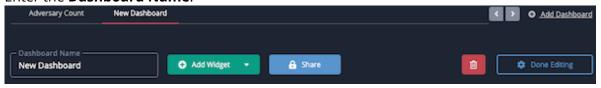


3. Click the dashboard you want to add to your view.

### **Creating a Dashboard**

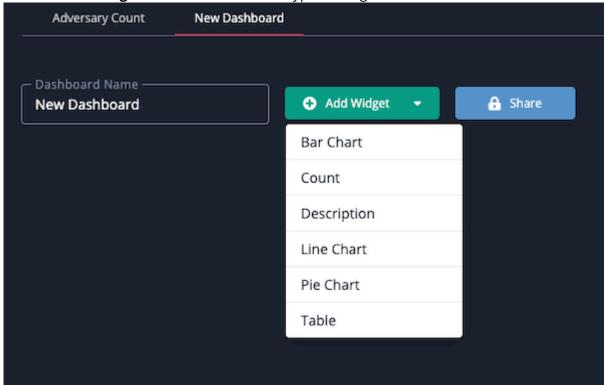
All User Roles, except Read-Only Access can create custom dashboards.

- 1. Navigate to the ThreatQ landing page.
- 2. Click one of the following options:
  - **Create New Dashboard** If your view includes all the dashboards that you created and that are shared with you, click this link to begin creating a new dashboard.
  - Add Dashboard If your view does not include all of the dashboards you created or that
    are shared with you, click this link to access the Add Dashboard window and then click the
    Create New Dashboard button.
- 3. Enter the **Dashboard Name**.





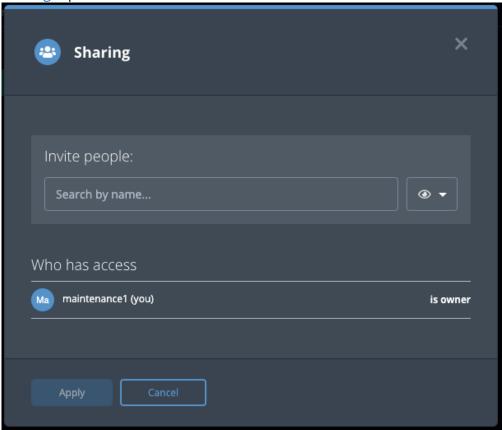
4. Click the **Add Widget** button and select the type of widget to add.



- 5. After adding a widget, you can resize it by clicking and dragging the mouse on the bottom-right grey corner.
- 6. You can move the widget around the dashboard by clicking the widget header and dragging it around the page.



7. Click on the **Share** button and specify user access to the dashboard. See the Dashboard Sharing topic for more details.



8. Click the **Done Editing** button to save the dashboard.

## **Editing a Dashboard**

You can only edit a Dashboard for which you have owner or editor permissions.

- 1. Switch to the custom dashboard you want to edit.
- 2. Click the Edit button.



3. You can click the gear con in the header of a widget to edit individual widget settings. You can click the delete con to delete the widget.





If you add and save a new widget that references a data collection, all users who have access to the dashboard are also granted viewing access to the data collection.

4. After you make your changes, click the **Done Editing** button to save all updates.

#### **Deleting a Dashboard**

This action will delete the dashboard from the platform. You can also remove a dashboard from your view without completely deleting it from the platform. See the User View Management topic for more details.

You cannot delete the default system dashboard or dashboards created by other users.

- 1. Switch to the custom dashboard you want to delete.
- 2. Click the **Edit Dashboard** button.
- 3. Click the red delete icon next to the **Done Editing** button.



4. Confirm the deletion by clicking the **Delete Dashboard** button in the **Are you sure?** window.

#### Reassigning a Dashboard of a Deleted User

When you delete a user, you must reassign ownership of his dashboards or they will be automatically deleted with his account. See the Managing User Accounts topic for more details.



# **Dashboard Sharing**

Owners and editors have the option to share a dashboard with other users. However, only the dashboard owner can remove a user's permissions entirely. In addition, the Share(d) button displayed to depends on your permission level and the sharing status of the dashboard.



See the Sharing topic for more information on the permissions you can assign to each dashboard.

### **Sharing a Dashboard**

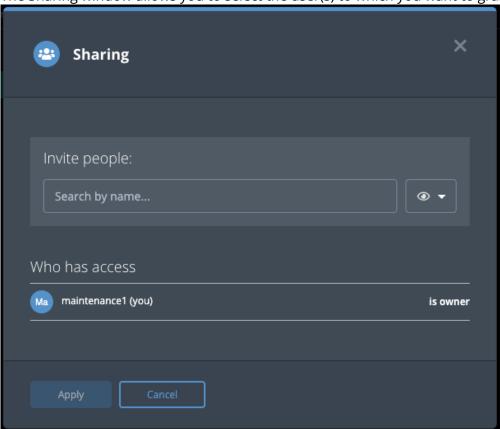
Dashboard owners and editors can update sharing settings for a dashboard at any time.

1. Enter a dashboard's **Edit** view.

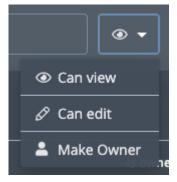


2. Click the **Share** button.

The Sharing window allows you to select the user(s) to which you want to grant access.



- 3. Click the arrow next to the ② icon to select the user's permission level.
  - If you are granting access to all users, you must select the **Can View** option. You can only assign editing permission to individual users not to all users.
  - If you assign owner permissions to another user, your permissions automatically change to editor-level.



4. Use the search field to locate and select a user's name or the **Everybody (Public)** option. This option grants view-only access to all users.

The user is now listed in the **Who has access** list. From this listing, you can change or delete the user's permissions.





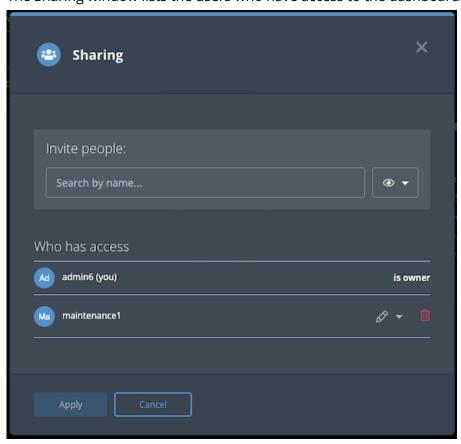
When you share a dashboard with a user, you also give him viewing permissions for all data collections used by the dashboard's widgets.

5. Click the Apply button to save the user's permission level.

#### **Updating Dashboard Permissions**

- 1. Enter a dashboard's **Edit** view.
- 2. Click the **Share** button.

  The Sharing window lists the users who have access to the dashboard.



- 3. From the Sharing window, you can:
  - **Remove a user's permissions** If you are the dashboard owner, click the trashcan icon to the right of the user name.
  - **Change a user's permission** Click the arrow next to the user's current permission icon and select a new permission level.
- 4. Click the **Apply** button to save the user's permission level.

#### **Shared Dashboards of a Deleted User**

When you delete the owner of a dashboard from the platform, ThreatQ prompts you to reassign the dashboard to another user or to delete it. See the Managing User Accounts topic for more details.



#### **Dashboard Export**

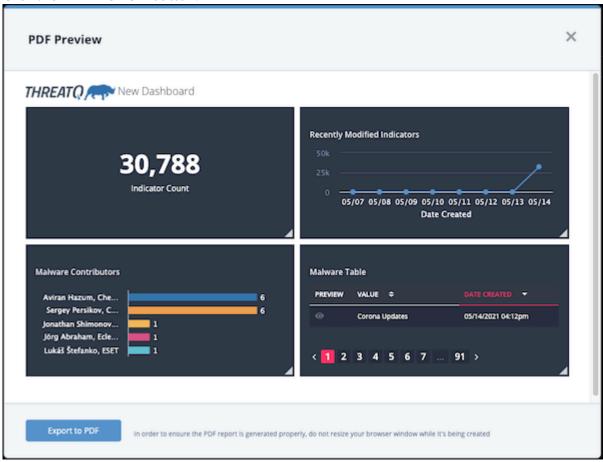
When you select a custom dashboard, the PDF Preview button gives you the option to export a PDF copy of all the widgets in the dashboard. The PDF preview window allows you to rearrange the widget order before you print and/or save the PDF.



You cannot export the default dashboard or the Analytics dashboards to PDF.

#### **Creating a Dashboard PDF**

- 1. Navigate to the ThreatQ landing page.
- 2. Click a custom dashboard.
- 3. Click the **PDF Preview** button.



4. Review the layout of the PDF. You can use the following methods to customize the widget display:



ThreatQ saves your changes locally so that you do not have to repeat the process the next time you generate a PDF for the dashboard.

• Click a widget header then drag and drop to move it to a new location on the page.



- Resize a widget by clicking and dragging the bottom-right grey corner.
- 5. Click the **Export to PDF** button.

The system exports the dashboard widgets to a PDF file which you can save and/or print. The PDF file name defaults to dashboard.pdf. The PDF title includes the ThreatQ logo and the name of your dashboard.



Do not attempt to resized your browser window during PDF generation.

#### **Sample PDF:**

THREAT() Head Office





#### **User View Management**

The User View refers to your individual view of the ThreatQ landing page. You can create custom dashboards and manage which dashboards, both shared and your own custom ones, appear in your view.

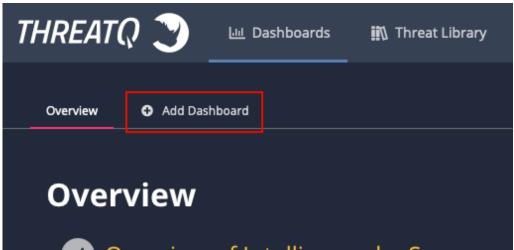


Any dashboard that is part of your User View will also be listed in the Dashboards dropdown menu.

#### Adding a Dashboard to Your View

You can add dashboards that have been shared with you as well as your own private dashboards that are not currently part of your view.

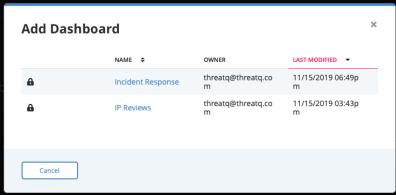
- 1. Navigate to the ThreatQ landing page.
- 2. Click the Add Dashboard button.





If there are no available shared dashboards, the **Add Dashboard** link will be replaced with **Create New Dashboard**.

The Add Dashboard window lists the dashboards that have been shared with you and any of your private dashboards that are not currently part of your view.





3. Click a dashboard in the list to add it to your view.

#### Removing a Dashboard from Your View

You can remove a shared dashboard created by another user from your view as well as your own dashboards. This process does not delete the dashboard from the platform. See the Dashboard Management topic for instructions on how to delete a dashboard.

1. Hover your cursor over the name of the dashboard you want to remove.

An **X** icon will appear to the right of the dashboard name.



2. Click the **X** to remove the dashboard from your view.

#### **Changing Dashboard Order**

You can change the order of dashboard tabs listed in your view, including the default Overview tab.

- 1. Navigate to a custom dashboard.
- 2. Click and hold the mouse down over a dashboard tab.
- 3. Drag the tab to your desired order and release the mouse button.



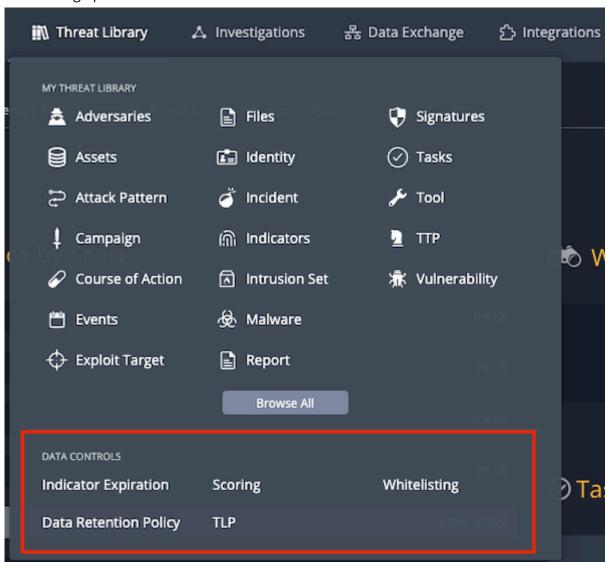
Order changes are saved automatically. These changes also update the order in the Dashboards dropdown menu.



## **Data Controls**

#### **About Data Controls**

When you click the Threat Library option on the Main Navigation menu, the Data Controls section of the drop down list allows you to access Indicator Expiration, Data Retention Policy, Scoring, TLP, and Whitelisting options.



These Data Control options allow you to configure:

SECTION DETAILS



Indicator Expiration Policies	Configure expiration policies to automatically deprecate stale intelligence as it becomes less relevant.
Data Retention Policy	Automate the deletion of system objects based on the parameters defined in a Data Collection.
Scoring Algorithms	Configure scoring to filter through the millions of indicators your platform has ingested to focus on the data that really applies to your environment while retaining all other indicators and context for threat research.
Traffic Light Protocol (TLP)	Configure your Traffic Light Protocol (TLP) schema to provide a set of designations to ensure that sensitive information is shared with the appropriate audience.
Whitelisted Indicators	Identify non-malicious indicators using the Whitelisting feature.



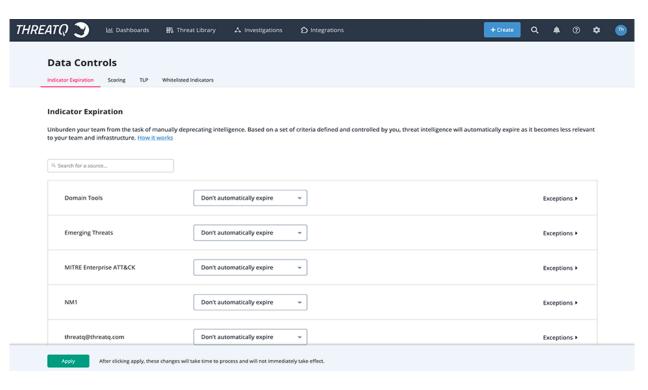
## **Indicator Expiration Policies**

Automatic expiration allows you to deprecate stale intelligence based on a set of defined criteria. As the data becomes less relevant, ThreatQ sets the status to Expired, which relieves the data burden on your team or infrastructure.

## **Accessing the Indicator Expiration Page**

1. From the navigation menu, click on Threat Library and select **Indicator Expiration** under the *Data Controls* heading.

The Data Controls page displays with the Indicator Expiration tab selected by default.



#### **How ThreatQ Calculates Expiration Dates**

SCENARIO DESCRIPTION

Indicator Reported by Source with an Expiration Policy If an indicator has an expiration date and it's reported by a new source that has an expiration policy, ThreatQ will set the expiration date using the policy with the greater expiration date.



If an indicator has an expiration date and it's reported by a new source that has an expiration policy of Never Expire, ThreatQ sets that indicator to Never Expire.

#### Indicator Reported by a Source with an Exception for that Indicator

If an indicator is reported by a source that has an exception for the indicator, the exception expiration date will be used regardless of the greater expiration date.

An exception takes precedence over the source's expire policy.

# Indicator Reported by Two Different Sources

If an indicator is reported by a source with an Expiration Policy and then reported by a second source with another Expiration Policy, the greatest expiration date is selected to set the expiration date. The expiration date will be set based on the date the second source reported the indicator.

#### Indicator Reported by Two Different Sources, one with an Exception

If an indicator is reported by a source that has an exception for the indicator and then reported by a second source, the greatest expiration date is selected despite the exception. The expiration date will be set based on the date the second source reported the indicator.

## **Selecting an Expiration Policy per Feed**

You can choose from three options when configuring an expiration policy for a source of intelligence:

#### **OPTION**

#### **DESCRIPTION**

#### Don't automatically expire (No policy set)

ThreatQ sets all feeds to **Don't Automatically Expire** until an analyst decides otherwise. When set, indicators reported from this specific feed do not have an expiration date automatically applied to them.

If an indicator is reported by Source A (an intelligence feed without an expiration policy), and is later reported by Source B (an intelligence feed that expires data in 7 days), ThreatQ sets the indicators to automatically expire in 7 days.

# Automatically Expire Indicators

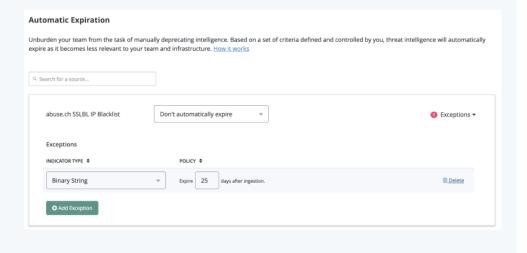
When setting a specific intelligence feed to **Automatically Expire Indicators**, ThreatQ requires you to provide a specific number of days. After you configure this setting, it applies to all intelligence currently in the system, as well as new intelligence as it is ingested. ThreatQ



#### **OPTION**

#### **DESCRIPTION**

calculates the appropriate expiration date based on the number of days from ingestion. Once an indicator's expiration date is met, its status changes to **Expired**.



**Never Expire** 

Using this setting ensures that all intelligence reported by a specific feed is protected from automatic expiration, regardless of scenario.

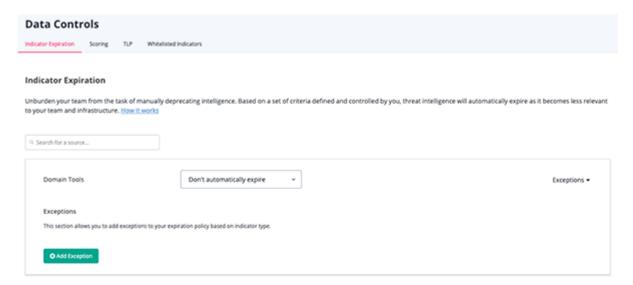
## **Adding Exceptions**

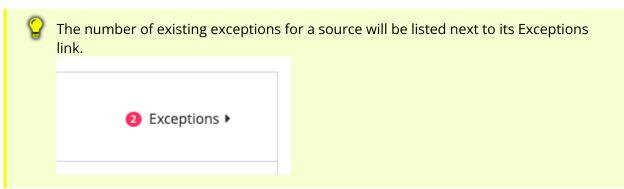
ThreatQ allows you to add exceptions based on specific indicator types within in a feed in addition to setting an expiration policy at a global level for all intelligence ingested by a specific feed.

- 1. From the navigation menu, click on Threat Library and select **Indicator Expiration** under the *Data Controls* heading.
- 2. Locate the source.
- 3. Click **Exceptions** to expand the option.



The Exceptions option menu opens.





- 4. Click **Add Exception**.
- 5. Select the **Indicator Type** from the dropdown.
- Enter the number of days after the item has been ingested before expiring.Repeat steps 4-6 to add multiple
- 7. Click on **Delete** next to the row to delete an exception.
- 8. Click on Save.

#### **Applying Expiration Policy Changes to Data**

When updating an expiration policy, the system now applies the update to all selected existing data in the platform to honor the new policy. This process can take a while based on system resources and the number of indicators in the system.

Refer to the following table for estimates on the total time required for the system to apply the selected policy to existing data, based on the following criteria:

- Dataset: 6 Million Indicators
- System Specifications: 32GB VM 4 vCPU



INDICATORS TO RESET EXPIRATION OUT OF 6M TOTAL INDICATORS	RESET AND RECALCULATE EXPIRATION	EXPIRE INDICATORS	TOTAL TIME FOR RESET
50,000	3 hours and 30 minutes	53 seconds	3 hours 31 minutes
100,000	4 hours and 51 minutes	1.8 minutes	4 hours 53 minutes
200,000	10 hours 20 minutes	3.5 minutes	10 hours 24 minutes
1.2 million	2 days 7 hours 4 minutes	35 minutes	2 days 7 hours 40 minutes
3.1 million	3 days 16 hours 42 minutes	3.5 hours	3 days 20 hours
5.3 million	4 days 7 hours 17 minutes	4.7 hours	4 days 12 hours

# **Common Expiration Policy Scenarios**

SCENARIO	DESCRIPTION	
An indicator is reported by a single source (with an expiration policy)	<ol> <li>On 10/1, Source A reports the indicator and the expiration date is set to 10/8.</li> <li>When the date switches from 10/7 to 10/8, this indicator is queued to have its status changed to <b>Expired</b>.</li> </ol>	
An indicator is reported by Source A (with an expiration policy of 7 days) and 3 days later is reported	<ol> <li>On 10/1, Source A reports the indicator and the expiration date is set to 10/8.</li> <li>Source B reports the same indicator 3 days later (10/4). The indicator's expiration date is set using the greatest expiration date between the two sources. In this example, the new expiration</li> </ol>	



#### **SCENARIO**

#### **DESCRIPTION**

by Source B (with an expiration policy of 10 days).

- date will be 10/14 (10 days from when it was reported by Source B).
- 3. When the date switches from 10/14 to 10/15, this indicator is queued to have its status changed to **Expired**.

An indicator is reported by Source A (with an expiration policy of 7 days) and is later reported by Source B (with an expiration policy of Never Expire).

- 1. On 10/1, Source A reports the indicator and the expiration date is set to 7 days.
- 2. Source B reports the same indicator 3 days later with a policy of **Never Expire**. The indicator's expiration date is removed and the indicator is now set to **Protect from auto-expiration**.

A FQDN indicator is reported by Source A (with an expiration policy of 10 days with an exception for 5 days for FQDN indicators) and is later reported by Source B (with an expiration policy of 15 days).

- On 10/1, Source A reports the FQDN indicator and the expiration date is set to 10/6.
   An exception takes precedence over the source's expire policy.
- 2. Source B reports the same indicator 1 day later (10/2). The indicator's expiration date is set using the greatest expiration date between the two sources. In this example, the new expiration date will be 10/17 (15 days from when it was reported by Source B).
- 3. When the date switches from 10/17 to 10/18, this indicator is queued to have its status changed to **Expired**.

# Common Expiration Policy Scenarios - Feed Updates of Indicator Statuses

#### **SCENARIO**

#### DESCRIPTION

#### **Default Indicator Status Behavior:**

- An indicator is currently set to Expired and is reported by Source A (with an expiration policy of 7 days).
- 1. On 10/1, an indicator is in ThreatQ with a status of **Expired**.



#### **SCENARIO**

#### **DESCRIPTION**

- 2. On 10/1, Source A reports the indicator. The status of the indicator does not change.
- An indicator is currently set to Expired and is reported by Source A (with an expiration policy of Never Expire).
- 1. An indicator is in ThreatQ with a status of Expired.
- 2. Source A, with an expiration policy of Never Expire, reports the indicator. The status of the indicator does not change

#### Status Behavior with Indicator/Signature Status Overrides Enabled:

- An indicator is currently set to Expired and is reported by Source A (with an expiration policy of 7 days).
- 1. On 10/1, an indicator is in ThreatQ with a status of **Expired**.
- 2. On 10/1, Source A reports the indicator. The status of the indicator changes to whatever the default status is for Source A and the expiration date is set to 10/8.
- 3. When the date switches from 10/7 to 10/8, this indicator is queued to have its status changed to **Expired**.
- An indicator is currently set to Expired and is reported by Source A (with an expiration policy of Never Expire).
- 1. An indicator is in ThreatQ with a status of Expired.
- 2. Source A, with an expiration policy of Never Expire, reports the indicator. The expiration of that indicator changes to Protect from auto-expiration.



## **Data Retention Policy**



The ThreatQuotient team strongly recommends that you disable your DRP when making changes to an associated data collection and then reviewing the Calculate Impact option before re-enabling DRP to prevent the unintended deletion of system objects. See the Data Retention Policy Bug product alert for more details. It is also recommend that you perform a backup of your ThreatQ instance before implementing a Data Retention Policy.

Setting up a Data Retention Policy allows you to automatically delete system objects from the Threat Library using a data collection to specify the criteria for deletion.



Similar to the bulk delete process, the Data Retention Policy does not support the deletion of tasks or files.

When ThreatQ applies the Data Retention Policy, it runs a bulk delete job to delete all objects included in the data collection. For example, you can create a data collection that captures all Indicators with an expiration date older than fifteen days ago. When you add this data collection to your Data Retention Policy, a Retention Policy job runs each day that deletes indicators with expiration dates prior to fifteen days ago.

After you enable your data retention policy, ThreatQ provides updates on the associated object deletions through system notifications and the Job Management page.

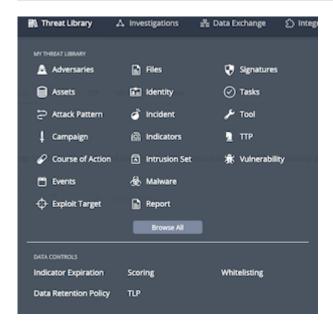
#### **Tips and Tricks**

- If you assign an unshared data collection to the data retention policy, all users are automatically granted view-only permissions for the data collection.
- If you disable the data retention policy, the Policy Activity & Performance graph continues to track created objects.

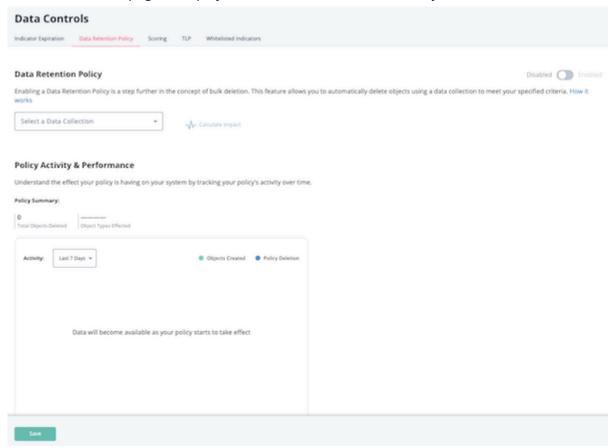
## **Accessing the Data Retention Policy Page**

From the navigation menu, click on Threat Library and select **Data Retention Policy** under the *Data Controls* heading.





The Data Controls page is displayed with the Data Retention Policy tab selected.

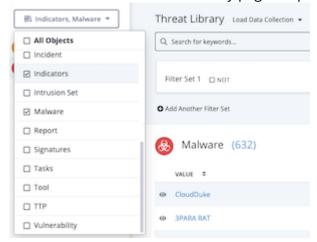


## **Creating a Data Collection for the Data Retention Policy**

Before you create a Data Retention Policy, you must create/select the data collection that used to identify the system objects to be deleted during the Policy's scheduled run. We recommend you apply the following guidelines in creating a Data Collection for use by your Data Retention Policy:



• To restrict your Data Retention Policy to specific object types, use the object type filter on the left side of the main Threat Library page to specify the object types for your data collection.



- Since your Data Retention Policy cannot delete tasks or files, your data collection should not include these system objects.
- If you assign an unshared data collection to the data retention policy, all users are automatically granted view-only permissions for the data collection.

See the Managing Search Results topic for step-by-step instructions on creating a data collection.

## **Creating a Data Retention Policy**

- 1. Create a data collection that includes the system objects you want to delete.
- 2. In the Data Retention Policy tab, click the Select a Data Collection field to locate and select the data collection you created in step 1.



The drop-down list for this field displays all the data collections that are shared with you as well as the ones you own.

- 3. Click the Calculate Impact option to view how many objects will be removed during the initial application of the data retention policy.
- 4. To save the data collection you selected without enabling the data retention policy, click the **Save** button.

If the data collection is in use in another area such as a dashboard, the **Are You Sure?** window prompts you to click the **Save** button to confirm your action.

To enable the data retention policy with the data collection you selected, move the Disabled/ Enabled toggle to Enabled.

- 5. After you enable the data retention policy:
  - The system creates and begins processing the first job to apply the data retention policy you configured.
  - You receive a notification center message reminding you that you can monitor the progress of the job from the Job Management page where it is listed with a Job Type of Retention Policy.



To view the notification center message, you must refresh your browser.



 After the initial job is complete, the system creates and runs a job for the data retention policy each day at 12 AM UTC. After the daily job run, the Policy & Activity Performance graph reflects the objects deleted by the data retention policy.

#### **Reviewing Data Retention Policy Performance**

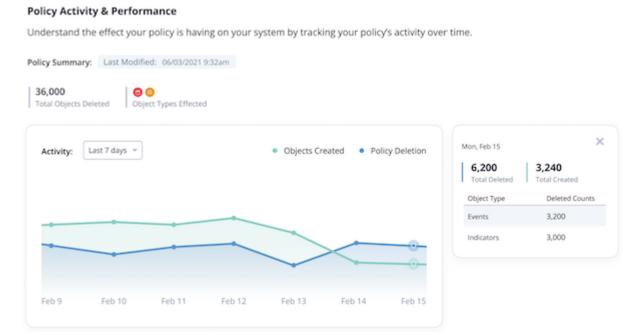
The Policy Activity & Impact section of the Data Retention Policy page displays a line chart that represents objects deleted by the data retention policy and objects created. By default, the Policy Activity & Performance section displays the last 7 days of activity. You can change the date range displayed by clicking the Activity field and selecting Monthly or Yearly. You can click a point on the graph to view object details for a specific day such as the total objects deleted, total objects created, and deletion counts by object type.

#### **Chart Updates**

The object data displayed in the Policy Activity & Impact chart during the day is cached data reflecting the most recent objects created and policy deletion update processes:

- **Objects Created** Updates at 8 AM UTC and reflects the objects created from 12 AM UTC of the prior day until 12 AM UTC of the current day.
- **Policy Deletion** Updates after each 12 AM UTC processing of the Data Retention Policy and reflects the policy deletions since the last 12 AM UTC process.

When you update your data retention policy, the line chart does not reflect your updates until the next objects created and policy deletion processes complete.





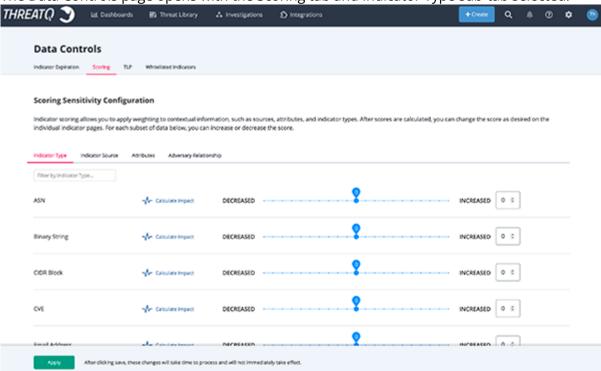
## **Scoring Algorithms**

ThreatQ's scoring algorithms calculate and assign scores to indicators as they are added to the system. By configuring scoring, you can filter through the millions of Indicators that may have been collected to focus on the percentage that applies to your organization. Scoring allows you to prioritize key indicators while still retaining all other indicators and context for threat research.

ThreatQ's Overview dashboard contains the Overview of Intelligence by Score which shows the current distribution of indicator scores. You can also filter Threat Library searches by score and create data collections based on scoring.

## **Accessing the Scoring Sensitivity Page**

From the navigation menu, click Threat Library and select **Scoring** under the *Data Controls* heading. The Data Controls page opens with the Scoring tab and Indicator Type sub-tab selected.



## **Scoring Criteria**

ThreatQ's scoring algorithm allows you to influence indicator scores by:

- Indicator Type
- Indicator Source
- Attributes
- Adversary Relationship

Customizing scoring based on these criteria updates the score assigned to the associated indicators.



## **Scoring Tips and Tricks**

- The **Calculate Impact** option identifies how many system objects are affected by a score change.
- Scoring configuration and updates take time to process, the Threat Library does not reflect these changes immediately.
- If you use an indicator's object details page to manually update its score, the manually selected score overrides any changes to the calculated score caused by updates to the scoring algorithm.
- You have the option to adjust the score sensitivity of indicators. Indicator scores range from 10, which creates a score of **Very High**, to -10, **Very Low**. A higher indicator score creates increased priority for that indicator.
- By default, indicators are set to a neutral score of 0.

## **Configuring Your Scoring Algorithm for Indicator Types and Sources**

Scoring by indicator type allows you to prioritize indicators based on their usefulness to your organization. If your organization cannot process or does not want to use a specific indicator type, such as Fuzzy Hash, you can assign a lower score, such as -3, to the indicator type.

Scoring by indicator source allows you to prioritize indicators based on your confidence in the source of the data. For example, you may have higher confidence in the value of data from paid feeds and would therefore want to assign a higher score, such as a 3, to indicators from these sources.

- 1. Select the indicator type or source by filtering by source name or by scrolling to the desired indicator.
- 2. Use one of the following methods to adjust scoring:
  - Click and drag the slider to adjust the score.
  - Click the up/down arrow next to the current score to increase/decrease the score.
- 3. To save your changes, click the **Apply** button.

#### **Configuring Your Scoring Algorithm for Attributes**

The Attributes tab allows you to specify scoring by attribute key and value. You can use attribute scoring to prioritize indicators based on attributes provided by a vendor and/or customer attributes applied by internal users.



If your organization applies a Department attribute (attribute key) to indicators based on the team targeted by the threat (attribute value), for instance *Department - Tech Pubs*, you can apply higher scores to indicators with attributes associated with high value targets such as *Department - Finance*.

- 1. From the Attributes tab, click the **Add** button.
- 2. Use one of the following methods to specify an attribute key:
  - Click the arrow in the Key field to select an attribute type from the dropdown list.
  - Type the attribute key in the Key field.
- 3. Use one of the following methods to populate the Value field:
  - Enter the attribute value to which the score applies.



- Enter an attribute value that contains the wildcard character (\*). The wildcard specifies that any characters can appear in multiple positions represented by the wildcard.
- 4. Use one of the following methods to adjust the score:
  - Click and drag the slider to adjust the score.
  - Click the up/down arrow next to the current score to increase/decrease the score.
- 5. Click the **Add** button to continue adding attribute scoring criteria.
- 6. Click the **Apply** button to save your attribute scoring.

  The Attributes tab now lists your scoring entry in the following format: 

  <Key> is <Value>

## **Configuring Your Scoring Algorithm for Adversary Relationships**

The Adversary Relationship tab allows you to configure the scoring of indicators associated with specific adversaries. You can use this scoring to prioritize indicators associated with adversaries that tend target your industry in general and/or your organization specifically.

Adversary relationship scoring supports a wildcard option, *Any Adversary*, that allows you to specify a score for any indicator with a positive attribution.

- 1. From the Adversary Relationship tab, click the **Add** button.
- 2. Click the arrow in the Select Adversary field to select an adversary from the dropdown list. You can use the scroll bar or Search field to locate the adversary.



Select the *Any Adversary* option to prioritize any indicator with a positive attribution.

- 3. Use one of the following methods to adjust the score:
  - Click and drag the slider to adjust the score.
  - Click the up/down arrow next to the current score to increase/decrease the score.
- 4. Click the **Add** button to continue adding adversary relationship scoring.
- 5. Click the **Apply** button to save your scoring.

## **Updating Your Scoring Algorithms**

After you set up your initial scoring, you can update assigned scores to reflect changes in your threat environment and priorities. Periodic reviews and updates to your scoring algorithms ensure they reflect:

- Changes to your risk profile based on political or organization changes.
- New adversaries
- New adversary tactics
- New tool sets
- 1. Click the appropriate tab (Indicator Type, Indicator Source, Attributes, Adversary Relationship).
- 2. Use one of the following methods to adjust the score:
  - Click and drag the slider to adjust the score.
  - Click the up/down arrow next to the current score to increase/decrease the score.
- 3. Click the **Apply** button to save your update.



# **Traffic Light Protocol (TLP)**

Traffic Light Protocol (TLP) schema provides a set of labels used to ensure that sensitive information is shared with the appropriate audience. ThreatQ provides a method for designating the availability of intelligence information by their sources. Users can also use TLP schema to filter objects when creating an export - see the **Adding an Export** section in the Managing Exports topic for more details.



Administrators have the ability to configure TLP visibility settings for the ThreatQ application.

#### Labels

TLP employs four lights to indicate the expected sharing boundaries for data:

LIGHT	LABEL	DESCRIPTION
•	Red	Not for disclosure, restricted to participants only.
•	Amber+strict	Limited disclosure, restricted to participants' organization.
•	Amber	Limited disclosure, restricted to participants' organization and its clients.
•	Green	Limited disclosure, restricted to the community.
$\circ$	Clear	Disclosure is not limited.

## **TLP Assignment Hierarchy**

The ThreatQ TLP assignment hierarchy is as follows (highest to lowest precedence):

METHOD	DETAILS
Manually Set	Using the Add New Source option when creating an object will allow you to select a TLP label.



Source Provided Data	TLP label received from ingested data.
Source Default	Administrators can set a source's default TLP label. See the Add TLP to Source section.
No TLP	A TLP label has not been set for the source.

## **Access TLP Settings**

Users can manage TLP settings for system sources by accessing the **TLP** tab under the **Data Controls** page.

1. From the navigation menu, click on Threat Library and select **TLP** under the *Data Controls* heading.

The Data Controls page will load with TLP tab selected by default.

THREATQ 

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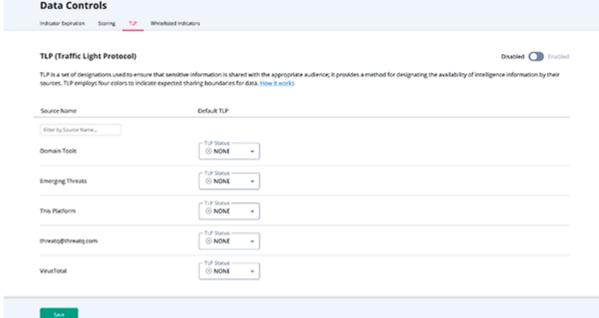
By Threat Library 

A investigations 

Data Controls

Indicator Beylation Scoring 

Whitelibred Indicators



## **Configure TLP Visibility**

System administrators can set visibility settings to either hide or show TLP labels to users. Enabled indicates that TLP labels are visible to users.



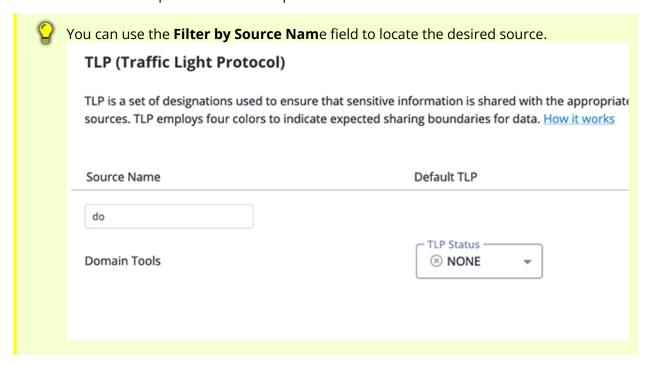
1. Click the **Enabled/Disabled** toggle.



You do not need to click the **Save** button. Changes to the Enabled/Disabled status are made immediately.

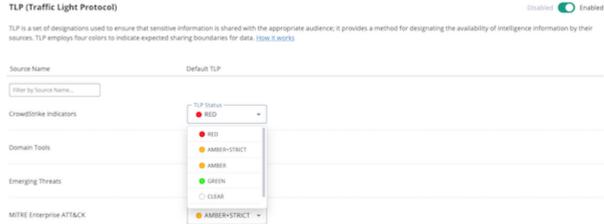
## **Apply a TLP Label to Source**

1. Locate the source to update from the list provided.





2. Click on the TLP dropdown to the right of the source and select the appropriate TLP label.



3. Click Save.



You can override a source-default TLP label when manually adding a source to an object. See the Adding a Source to an Object topic for more details.



#### Whitelisted Indicators

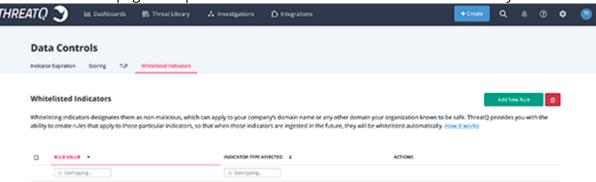
There are some Indicators that should be considered to be whitelisted, or non-malicious, and we do not want those indicators going out to other systems. For example, a company's own domain name would never need to be blocked.

The Whitelisting process creates rules that apply to particular indicators, so that when those indicators come in in the future, they will be automatically whitelisted.

## **Accessing the Whitelisted Indicator Rules**

1. From the navigation menu, click on Threat Library and select **Whitelisting** under the *Data Controls* heading.

The Data Controls page will open with the Whitelisted Indicators tab selected by default.



## **Creating a Whitelisted Rule**



ThreatQ prevents you from creating duplicate whitelist rules through the user interface or an API. If you attempt to do so, the system returns an error message.

From the Whitelisted Indicators Page:

1. Click Add Rule.



The Add Whitelist Rules dialog box opens.



- 2. Select the Indicator type the rule will apply to.
- 3. Add a Rule Value.
- 4. Click Next.

Affected indicators are listed in the dialog box.



5. Review the affected indicators to determine if you are satisfied with the rule.



The rule has not been applied yet, so you still have time to edit it based on whether you are satisfied with how it affects the indicators.

6. Click Continue Editing this Rule.



7. If you are satisfied with the rule, click **Add Rule**.

The rule is applied to existing indicators, and it is entered into the Whitelisted Rules table.



Any new indicators will also have the rule applied to them as they enter the system.

## **Editing a Whitelisted Rule**

- 1. In the Whitelisted Rules table, locate the rule you wish to edit.
- 2. Click Edit.

The Edit Whitelist Rule dialog box opens.



3. Make the desired edits and click Next.



Affected indicators are listed in the dialog box.



4. Review the affected indicators to determine if you are satisfied with the rule.



The rule has not been applied yet, so you still have time to edit it based on whether you are satisfied with how it affects the indicators.

5. If you are satisfied, click **Edit Rule**.

The rule is applied to existing indicators, and it is updated in the Whitelist Rules table.



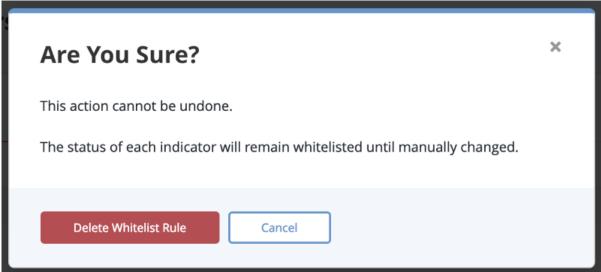
Any new indicators will also have the rule applied to them as they enter the system.

## **Removing a Whitelisted Rule**

- 1. Locate and select the rule(s) from the Whitelisted Indicators table that you wish to remove.
- 2. Click on the delete Icon ...



A confirmation dialog box opens, asking if you are sure.



#### 3. Click **Delete Whitelist Rule**.

The rule be now be removed.

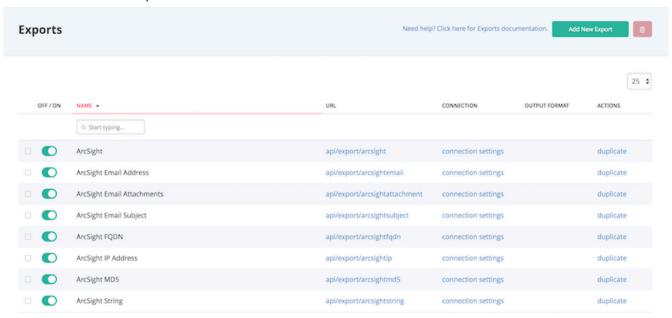


# **Exports**

## **About Exports**

Exporting is one of the most important ThreatQ features, as it allows you to output non-whitelisted Indicators and other system object types to an external threat detection system.

The Export page allows you to view, update, or delete the exports you have created as well as to view the standard system exports seeded in the ThreatQ. You can also copy a standard export to use it as the basis for a new export.



ThreatQ Exports are built on the Smarty PHP Template Engine; see <a href="https://www.smarty.net/">https://www.smarty.net/</a> which provides an easy to understand syntax that simplifies export creation and updates.



## **Managing Exports**



You should NOT attempt to export all of your threat intelligence data with a single export. Attempting to do so will cause system degradation and the export will not complete.

The Exports page lists all existing exports in ascending, alphabetical order by export name. You can easily identify active exports by the green toggle in the Off/On column. In addition, all seeded exports have a blank Output Format field and all exports created in your instance, have an output format link.

To customized the Export page display, you can change the number of rows displayed from the default of 25 to 10, 50, or 100. You can change the sort order to descending alphabetical by clicking the Name column.

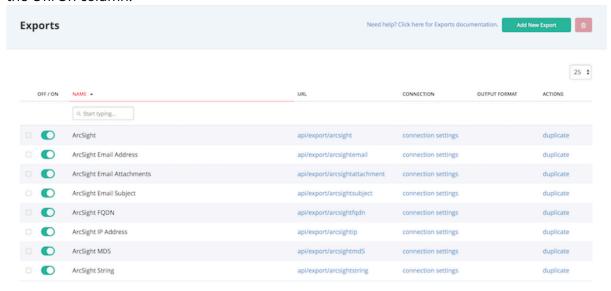
#### **Tips and Tricks**

- Use the seeded exports or output format template examples provided by ThreatQuotient as building blocks for new exports.
- Give each new export a descriptive name.
- In some instances, you may need to stop the export log process. ThreatQ provides a CLI configuration command that allows you to disable export logging.

## **Accessing the Exports List**

1. Select the **Settings** icon >Exports.

The Exports page lists all exports in alphabetical order. Active exports display a green toggle in the Off/On column.



## **Viewing an Export**

From the Exports page, click the export's URL.
 A new tab opens in your browser and displays the data returned from the export. By default,



this tab displays up to ten objects. To increase the number of objects included in your export, you can update the limit value in the export's URL.



#### **Original URL - Default 10 Objects:**

https://te-28440.threatq.com/api/export/b98c62268ac80754e3e0e774afafc639/? limit=**10**&token=49vx259akYhOgvaJ2Fa8

#### New URL - 300 Objects:

https://te-28440.threatq.com/api/export/b98c62268ac80754e3e0e774afafc639/?limit=**300**&token=49vx259akYhOgvaJ2Fa8



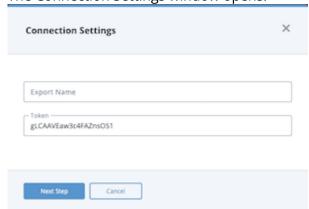
The load time may be lengthy depending on the amount of data returned.

## **Enabling/Disabling Exports**

- 1. From the Exports page, locate the export you want to enable/disable.
- 2. Click the toggle in the On/Off column to enable/disable the export.

#### **Adding an Export**

From the Exports page, click the **Add New Export** button.
 The Connection Settings window opens.



- 2. Enter the export name.
- 3. Verify or edit the token.



4. Click the **Next Step** button.

The Output Format dialog box opens. **Output Format** × Type of information you would like to export? -Indicators Output type text/plain Filter by TLP ☐ Red ☐ Amber+Strict ☐ Amber ☐ Green ☐ Clear □ Not Specified Special Parameters (optional) -Provide URL Parameters to further refine information being exported: Learn more about managing exports. - Output Format Template -{} Save Settings Cancel

5. Populate the following fields:



FIELD VALUE

# Which type of information would you like to export?

This field defaults to a value of Indicators. Click the field to select from a list of object types.

#### **Output Type**

Select a format for the export such as text/plain or text/json. This sets the content type of the export response to a specific value (e.g. text/plain, text/json). Output Type does not have an impact on how the data is formatted but it does affect the content type within the header of the exported document.

For example, if you select Output Type of text/json, when viewing the source of the export, the header will contain a Content Type = text/json attribute.

See http://www.w3.org/Protocols/rfc1341/4\_Content-Type.html for more information.

#### Filter by TLP

(Optional) By default, all the TLP filter options are checked so that your export includes all objects regardless of their source, attribute source, or description source TLP labels. To exclude objects with a particular TLP label, you can uncheck the box to the left of the label name. For example, to omit objects with sources assigned a Red TLP label, uncheck the Red box.



The **Filter by TLP** field options will only appear if administrators have enabled Traffic Light Protocol (TLP) viewing. See the Traffic Light Protocol (TLP) topic for more information.

#### Special Parameters

(Optional) See the Output Format Options topic for more information.

Output Format Template (Optional) See the Output Format Templates topic for more

information.

#### 6. Click Save Settings.

The export you just created appears at the bottom of the Exports table. By default, the new export is toggled to Off.

7. To begin exporting data, click the export's Off/On toggle to On.



#### **Duplicating an Export**

Duplicating an export creates a new version that you can edit.

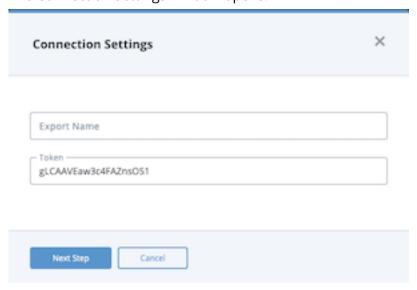
- 1. From the Exports page, locate the Export you want to duplicate.
- Click the duplicate option in the Actions column.
   The duplicate appears at the bottom of the Exports table. By default, the copy you just created is toggled to Off.

## **Editing an Export's Connection Settings**

Connection settings are available for each of the exports. The Connection Settings window contains the name of the export as well as the token you need to connecting a device to ThreatQ.

While you cannot edit or delete any of the exports originally supplied by ThreatQ, you can edit exports you have added to ThreatQ or copies of the original exports.

- 1. From the Exports page, locate the export you want to edit.
- 2. Click **connection settings** in the Connection column. The Connection Settings window opens.



- 3. Enter your changes.
- 4. Click the Save Settings button.

## **Editing an Export's Output Format**

While you cannot edit or delete any of the exports originally supplied by ThreatQ, you can edit exports you have added to ThreatQ as well as copies of the original exports.

- 1. From the Exports page, locate the export you want to edit.
- 2. Click **output format** in the Output Format column.
- 3. From the Output Format window, enter your changes.
- 4. Click the Save Settings button.



## **Deleting an Export**

While you cannot delete any of the exports included with your ThreatQ installation, you can delete any exports you have added or copies of the default exports.

- 1. From the Exports page, locate the export(s) you wish to delete.
- 2. For each export you want to delete, check the box next to the export's off/on toggle.
- 3. Click the delete icon next to the **Add New Export** button.



# **Output Format Options**

The Special Parameters and Output Format Template fields allow you to control the data included in your exports. The Special Parameters field allows you filter the data included in the export and the Output Format Template field allows you to specify which data points are included in the export.

You can customize these fields for an custom or duplicated export but not for the seeded exports supplied by ThreatQ.

## **Special Parameters Field**

The Special Parameters field allows you to filter the data exported.

## **Examples:**

TO EXPORT ALL INDICATORS WITH AN
ACTIVE STATUS

INDICATOR.STATUS=ACTIVE

To export all CIDR Block indicators that have an active status	Indicator.Status=Active&Indicator.Type=cidr block
To export all CIDR Block indicators and IP Addresses that have an active status	Indicator.Status=Active&Indicator.Type=cidr block&Indicator.Type=ip address
To export all indicators with a score greater than or equal to 7	Indicator.Score>=7

You can add the following parameters to an export's Special Parameters field to filter the data included in the export:

#### **Assets**

```
assets.value
assets.status
assets.point_of_contact
assets.description
assets.Sources
assets.Attributes
assets.Indicators
assets.Adversaries
assets.Events
assets.Attachments
assets.Signatures
assets.Investigations
```



```
assets.Tasks
assets.Campaign
assets.Course_of_action
assets.Exploit_target
assets.Incident
assets.Ttp
assets.Attack_pattern
assets.Identity
assets.Intrusion_set
assets.Malware
assets.Report
assets.Tool
assets.Vulnerability
assets.Tags
assets.Assets
```

#### **Adversary**

```
adversary.name
adversary.touched_at
adversary.deleted_at
adversary.deleted
adversary.sources_count
adversary.id
adversary.description
adversary.created_at
adversary.updated_at
adversary.Sources
adversary.sources.dates=Y
adversary.Attributes
adversary. Indicators
adversary.Adversaries
adversary. Events
adversary.Attachments
adversary.Signatures
adversary. Investigations
adversary. Tasks
adversary.Campaign
adversary.Course_of_action
adversary.Exploit_target
adversary. Incident
adversary.Ttp
adversary.Attack_pattern
adversary. Identity
adversary.Intrusion_set
adversary.Malware
adversary.Report
adversary.Tool
adversary. Vulnerability
```



adversary.Tags
adversary.Assets

#### Attack Pattern

```
attack_pattern.value
attack_pattern.status_id
attack_pattern.status
attack_pattern.point_of_contact
attack_pattern.type_id
attack_pattern.description
attack_pattern.deleted_at
attack_pattern.deleted
attack_pattern.sources_count
attack_pattern.sources.dates=Y
attack_pattern.id
attack_pattern.status
attack_pattern.type
attack_pattern.touched_at
attack_pattern.created_at
attack_pattern.updated_at
attack_pattern.Sources
attack_pattern.Attributes
attack_pattern.Indicators
attack_pattern.Adversaries
attack_pattern.Events
attack_pattern.Attachments
attack_pattern.Signatures
attack_pattern.Investigations
attack_pattern.Tasks
attack_pattern.Campaign
attack_pattern.Course_of_action
attack_pattern.Exploit_target
attack_pattern.Incident
attack_pattern.Ttp
attack_pattern.Attack_pattern
attack_pattern.Identity
attack_pattern.Intrusion_set
attack_pattern.Malware
attack_pattern.Report
attack_pattern.Tool
attack_pattern.Vulnerability
attack_pattern.Tags
attack_pattern.Assets
```

CampaignCampaign

Course of ActionCourse of Action

**Event** 



```
event.type_id
event.status
event.point_of_contact
event.title
event.happened_at
event.hash
event.description
event.deleted_at
event.deleted
event.sources_count
event.id
event.type
event.touched_at
event.created_at
event.updated_at
event.Sources
event.sources.dates=Y
event.Attributes
event.Indicators
event.Adversaries
event.Events
event.Attachments
event.Signatures
event.Investigations
event.Tasks
event.Campaign
event.Course_of_action
event.Exploit_target
event.Incident
event.Ttp
event.Attack_pattern
event. Identity
event.Intrusion_set
event.Malware
event.Report
event.Tool
event. Vulnerability
event.Tags
event.Assets
```

### Exploit TargetExploit Target

## Identity

```
identity.value
identity.status_id
identity.status
identity.point_of_contact
identity.type_id
identity.description
```



```
identity.contact_information
identity.deleted_at
identity.deleted
identity.sources_count
identity.sources.dates=Y
identity.id
identity.status
identity.type
identity.touched_at
identity.created_at
identity.updated_at
identity.Sources
identity.Attributes
identity. Indicators
identity.Adversaries
identity. Events
identity.Attachments
identity.Signatures
identity. Investigations
identity.Tasks
identity.Campaign
identity.Course_of_action
identity.Exploit_target
identity. Incident
identity.Ttp
identity.Attack_pattern
identity. Identity
identity.Intrusion_set
identity.Malware
identity.Report
identity.Tool
identity. Vulnerability
identity.Tags
identity. Assets
```

#### IncidentIncident

#### **Indicator**

```
indicator.type_id
indicator.status_id
indicator.value
indicator.description
indicator.hash
indicator.last_detected_at
indicator.expires_at
indicator.expired_at
indicator.touched_at
indicator.deleted_at
indicator.deleted
indicator.sources_count
```



```
indicator.sources.dates=Y
indicator.id
indicator.status
indicator.type
indicator.sincedeleted
indicator.whitelisted *
indicator.score
indicator.created_at
indicator.updated_at
indicator.Sources
indicator.Attributes
indicator.Tags
indicator.Assets
```

indicator.status=whitelistedflag. Additionally, to include only whitelisted indicators in your export, you will need to use both flags:

indicator.status=Whitelisted&indicator.whitelisted=Y

### Intrusion Set

```
intrusion_set.value
intrusion_set.status_id
intrusion_set.status
intrusion_set.point_of_contact
intrusion_set.type_id
intrusion_set.description
intrusion_set.started_at
intrusion_set.ended_at
intrusion_set.deleted_at
intrusion_set.deleted
intrusion_set.sources_count
intrusion_set.sources.dates=Y
intrusion_set.id
intrusion_set.status
intrusion_set.type
intrusion_set.touched_at
intrusion_set.created_at
intrusion_set.updated_at
intrusion_set.Sources
intrusion_set.Attributes
intrusion_set.Indicators
intrusion_set.Adversaries
intrusion_set.Events
intrusion_set.Attachments
intrusion_set.Signatures
intrusion_set.Investigations
intrusion_set.Tasks
intrusion_set.Campaign
intrusion_set.Course_of_action
```

<sup>\*</sup> Using the indicator.whitelisted=Y flag allows whitelisted indicators to be exported. It does not filter indicators by the whitelisted status. For that option, use the



```
intrusion_set.Exploit_target
intrusion_set.Incident
intrusion_set.Ttp
intrusion_set.Attack_pattern
intrusion_set.Identity
intrusion_set.Intrusion_set
intrusion_set.Malware
intrusion_set.Report
intrusion_set.Tool
intrusion_set.Vulnerability
intrusion_set.Tags
intrusion_set.Assets
```

#### Malware

```
malware.value
malware.status_id
malware.status
malware.point_of_contact
malware.type_id
malware.description
malware.deleted_at
malware.deleted
malware.sources count
malware.sources.dates=Y
malware.id
malware.status
malware.type
malware.touched at
malware.created_at
malware.updated at
malware.Sources
malware.Attributes
malware.Indicators
malware.Adversaries
malware.Events
malware.Attachments
malware.Signatures
malware. Investigations
malware.Tasks
malware.Campaign
malware.Course_of_action
malware.Exploit_target
malware.Incident
malware.Ttp
malware.Attack_pattern
malware. Identity
malware.Intrusion_set
malware.Malware
malware.Report
malware.Tool
```



malware.Vulnerability
malware.Tags
malware.Assets

#### Report

```
report.value
report.status_id
report.status
report.point_of_contact
report.type_id
report.description
report.deleted_at
report.deleted
report.sources_count
report.id
report.status
report.type
report.touched_at
report.created_at
report.updated_at
report.Sources
report.sources.dates=Y
report.Attributes
report.Indicators
report.Adversaries
report.Events
report.Attachments
report.Signatures
report. Investigations
report.Tasks
report.Campaign
report.Course_of_action
report.Exploit_target
report.Incident
report.Ttp
report.Attack_pattern
report. Identity
report.Intrusion_set
report.Malware
report.Report
report.Tool
report. Vulnerability
report.Tags
report.Assets
```

Signature



```
signature.description
signature.hash
signature.last_detected_at
signature.name
signature.status_id
signature.touched_at
signature.type_id
signature.value
signature.deleted_at
signature.deleted
signature.sources_count
signature.id
signature.status
signature.type
signature.created_at
signature.updated_at
signature.Sources
signature.sources.dates=Y
signature.Attributes
signature. Indicators
signature.Adversaries
signature.Events
signature.Attachments
signature.Signatures
signature. Investigations
signature. Tasks
signature.Campaign
signature.Course_of_action
signature.Exploit_target
signature.Incident
signature.Ttp
signature.Attack_pattern
signature. Identity
signature.Intrusion_set
signature.Malware
signature.Report
signature.Tool
signature. Vulnerability
signature.Tags
signature.Assets
```

#### Tag

You can add parameters to the .Tags variable to filter exported objects based on the presence of all specified tags (ex: &<object>.Tags=tag1,tag2,tag3) or the presence of at least one of the specified tags (ex: &<object>.Tags=tag1|tag2|tag3)

Tool



```
tool.value
tool.status_id
tool.status
tool.point_of_contact
tool.type_id
tool.description
tool.deleted_at
tool.deleted
tool.sources_count
tool.sources.dates=Y
tool.id
tool.status
tool.type
tool.touched_at
tool.created_at
tool.updated_at
tool.Sources
tool.Attributes
tool.Indicators
tool.Adversaries
tool.Events
tool.Attachments
tool.Signatures
tool.Investigations
tool.Tasks
tool.Campaign
tool.Course_of_action
tool.Exploit_target
tool.Incident
tool.Ttp
tool.Attack_pattern
tool.Identity
tool.Intrusion_set
tool.Malware
tool.Report
tool.Tool
tool. Vulnerability
tool.Tags
too.Assets
```

#### TTP

```
ttp.value
ttp.status_id
ttp.status
ttp.point_of_contact
ttp.type_id
ttp.description
ttp.deleted_at
ttp.deleted
```



```
ttp.sources_count
ttp.sources.dates=Y
ttp.id
ttp.status
ttp.type
ttp.touched_at
ttp.created_at
ttp.updated_at
ttp.Sources
ttp.Attributes
ttp.Indicators
ttp.Adversaries
ttp.Events
ttp.Attachments
ttp.Signatures
ttp.Investigations
ttp.Tasks
ttp.Campaign
ttp.Course_of_action
ttp.Exploit_target
ttp.Incident
ttp.Ttp
ttp.Attack_pattern
ttp.Identity
ttp.Intrusion_set
ttp.Malware
ttp.Report
ttp.Tool
ttp.Vulnerability
ttp.Tags
ttp.Assets
```

#### **Vulnerability**

```
vulnerability.value
vulnerability.status_id
vulnerability.status
vulnerability.point_of_contact
vulnerability.type_id
vulnerability.description
vulnerability.deleted_at
vulnerability.deleted
vulnerability.sources_count
vulnerability.sources.dates=Y
vulnerability.id
vulnerability.status
vulnerability.type
vulnerability.touched_at
vulnerability.created_at
vulnerability.updated_at
vulnerability.Sources
```



vulnerability. Attributes vulnerability.Indicators vulnerability. Adversaries vulnerability. Events vulnerability. Attachments vulnerability.Signatures vulnerability. Investigations vulnerability. Tasks vulnerability.Campaign vulnerability.Course\_of\_action vulnerability.Exploit\_target vulnerability.Incident vulnerability.Ttp vulnerability.Attack\_pattern vulnerability. Identity vulnerability.Intrusion\_set vulnerability.Malware vulnerability.Report vulnerability.Tool vulnerability. Vulnerability vulnerability. Tags vulnerability.Assets

## **Adding Differential Flags**

You can use a differential flag in the Special Parameters field to limit the output to new data. This allows you to include only new data each time the export is run instead of exporting all data. Include the following to limit exports to new data only:

differential=1

If you have multiple systems pulling from the same Export, each system should use a unique differential value.



### external system 1

https://{tg-host}/api/export/c2ab6df72e67ee13cef90f0e00981b62/? token=npc6z01pFXwfHYb5tm51hMvKQJNYecTG& differential=1

### external system 2

https://{tq-host}/api/export/c2ab6df72e67ee13cef90f0e00981b62/? token=npc6z01pFXwfHYb5tm51hMvKQJNYecTG& differential=2



## Adding Parameters to the End of the URL

You can append the parameters listed above to the end of any export URL to achieve the same results. However, you lose the option of having one place to manage what is being exported via that export.

## **Using Export Filters**

You can configure exports to output objects matching filter conditions based on comparisons such as greater than (>) or less than (<) as well as logical operators such as AND and OR. You can add these filters to the export's Special Parameters field (Output Format window) or append the filter criteria to the export's URL. Use the following examples as guidelines for creating your own export filters.

- 1. Searching using greater than, less than, or equal to
  The first example captures indicators with a score greater than or equal to 5. The second
  example captures indicators with a score less than or equal to 5.
  - Special Parameters field:

```
indicator.score>=5
indicator.score<=5</pre>
```

Appended to Export URL:

```
&indicator.score=>=5
&indicator.score=<=8</pre>
```

- 2. Adding multiple criteria for a single field using an AND comparison

  The following example captures indicators with a score of 5 and indicators with a score of 8.
  - Special Parameters field:

```
indicator.score=5&indicator.score=8
```

Appended to Export URL:

```
&indicator.score[]=5&indicator.score[]=8
```

- 3. Adding a criteria range for a single field using an AND comparison The following example captures indicators with a score of 5, 6, 7 and 8.
  - Special Parameters field:

```
indicator.score>=5&indicator.score<=8</pre>
```

Appended to Export URL:



```
&indicator.score[]=>=5&indicator.score[]=<=8</pre>
```

- 4. Adding criteria for multiple fields using an OR comparison

  The following example captures indicators with a score of 8 OR a status of indirect.
  - Special Parameters field:

```
indicator.score=8||indicator.status=indirect
```

Appended to Export URL:

```
&indicator.score[]=8||indicator.status[]=indirect
```

- 5. Adding criteria for a multiple fields using an AND comparison

  The following example captures indicators with a score of 8 AND a status of indirect.
  - Special Parameters field:

```
indicator.score>=8&indicator.status=indirect
```

Appended to Export URL:

```
&indicator.score[]=>=8&indicator.status[]=indirect
```

## **Output Format Template Field**

You can use the template examples provided by ThreatQuotient as a baseline for your exports or you can add your own export parameters to the Output Template field.

## **Inserting Variables**

The **Insert Variable** button above the field allows you to select from a drop down list of variables based on the object type included in the export. To insert a variable, click the location for the variable, click the **Insert Variable** button, and select the variable from the dropdown list.

## **Template Format**

This Output Format Template field allows you to control exactly how your data is printed out within an export.



When formatting your output template, you must wrap all of your declarations within a loop as shown in the following example:



{foreach \$data as \$indicator}

Your variables go here
{/foreach}



# **Output Format Templates**

ThreatQuotient provides output format template examples that you can use as a starting point for a new export. You can copy and paste these examples to the Output Format Template field and make changes based on the data you want to export.

# **Export Template Examples by Object Type**

Each of these examples includes the following placeholder text to clarify where you can add additional variables to customize your export:

• Your variables go here

In addition, these examples include text labels to clarify the data included in the export. For example, the output of the Indicators example, list of the name of each variable separated from the value by a colon as in **Type: IP Address**.

```
1.33.5.232
ID: 1
Value: 1.33.5.232
Type: IP Address
Status: Active
Class: network
Description:
Score: 0
Hash: a53a6ec8cd0ae6af7d0469daeac5574d
Source Count: 1
Whitelisted: N
Last Detected At:
Created At: 2023-10-04 14:28:40
Updated At: 2023-10-04 14:28:41
Touched At: 2023-10-04 17:56:20
Since Deleted: Y
Deleted At:
Deleted: N
```

## **Adversaries Template**

```
{foreach $data as $adversary}
ID: {$adversary.id}
Name: {$adversary.name}
Created At: {$adversary.created}
Updated At: {$adversary.updated_at}
Deleted At: {$adversary.deleted_at}
Deleted: {$adversary.deleted}
{foreach $adversary.Descriptions item=description name=Descriptions}
Source: {$description.source}
Description: {$description.value}
{/foreach}
```



```
Your variables go here
{/foreach}
```

## **Assets Template**

```
{foreach $data as $asset}
ID: {$asset.id}
Name: {$asset.value}
Status: {$asset.status}
Point of Contact: {$asset.point_of_contact}
Created At: {$asset.created_at}
Updated At: {$asset.updated_at}
Deleted At: {$asset.deleted_at}

{foreach $asset.Descriptions item=description name=Descriptions}
Source: {$description.source}
Description: {$description.value}
{/foreach}

Your variables go here

{/foreach}
```

## **Attack Pattern Template**

```
{foreach $data as $attack_pattern}
ID: {$attack_pattern.id}
Name: {$attack_pattern.value}
Status: {$attack_pattern.status}
Point of Contact: {$attack_pattern.point_of_contact}
Created At: {$attack_pattern.created_at}
Updated At: {$attack_pattern.updated_at}
Deleted At: {$attack_pattern.deleted_at}

{foreach $attack_pattern.Descriptions item=description name=Descriptions}
Source: {$description.source}
Description: {$description.value}
{/foreach}

Your variables go here
{/foreach}
```



## **Campaign Template**

```
{foreach $data as $campaign}
ID: {$campaign.id}
Name: {$campaign.value}
Status: {$campaign.status}
Point of Contact: {$campaign.point_of_contact}
Objective: {$campaign.objective}
First Seen: {$campaign.started_at}
Last Seen: {$campaign.ended_at}
Created At: {$campaign.created_at}
Updated At: {$campaign.updated_at}
Deleted At: {$campaign.deleted_at}
{foreach $campaign.Descriptions item=description name=Descriptions}
Source: {$description.source}
Description: {$description.value}
{/foreach}
Your variables go here
{/foreach}
```

## **Course of Action Template**

```
{foreach $data as $course_of_action}
ID: {$course_of_action.id}
Name: {$course_of_action.value}
Status: {$course_of_action.status}
Point of Contact: {$course_of_action.point_of_contact}
Created At: {$course_of_action.created_at}
Updated At: {$course_of_action.updated_at}
Deleted At: {$course_of_action.deleted_at}

{foreach $course_of_action.Descriptions item=description name=Descriptions}
Source: {$description.source}
Description: {$description.value}
{/foreach}

Your variables go here
{/foreach}
```



## **Events Template**

```
{foreach $data as $event}
{\$event.title} ID: {\$event.id}
Title: {$event.title}
Type: {$event.type}
Status: {$event.status}
Point of Contact: {$event.point_of_contact}
Happened: {$event.happened_at}
Created At: {$event.created}
Updated At: {$event.updated_at}
Deleted At: {$event.deleted_at}
Deleted: {$event.deleted}
{foreach $event.Descriptions item=description name=Descriptions}
Source: {$description.source}
Description: {$description.value}
{/foreach}
Your variables go here
{/foreach}
```

## **Exploit Target Template**

```
{foreach $data as $exploit_target}
ID: {$exploit_target.id}
Name: {$exploit_target.value}
Status: {$exploit_target.status}
Point of Contact: {$exploit_target.point_of_contact}
Created At: {$exploit_target.created_at}
Updated At: {$exploit_target.updated_at}
Deleted At: {$exploit_target.deleted_at}

{foreach $exploit_target.Descriptions item=description name=Descriptions}
Source: {$description.source}
Description: {$description.value}
{/foreach}

Your variables go here
{/foreach}
```



## **Identity Template**

```
{foreach $data as $identity}
ID: {$identity.id}
Name: {$identity.value}
Status: {$identity.status}
Point of Contact: {$identity.point_of_contact}
Contact Information: {$identity.contact_information}
Created At: {$identity.created_at}
Updated At: {$identity.updated_at}
Deleted At: {$identity.deleted_at}

{foreach $identity.Descriptions item=description name=Descriptions}
Source: {$description.source}
Description: {$description.value}
{/foreach}

Your variables go here
{/foreach}
```

## **Indicators Template**

```
{foreach $data as $indicator}
{$indicator.value}
ID: {$indicator.id}
Value: {$indicator.value}
Type: {$indicator.type}
Status: {$indicator.status}
Class: {$indicator.class}
Score: {$indicator.score}
Hash: {$indicator.hash}
Source Count: {$indicator.sources_count}
Whitelisted: {$indicator.whitelisted}
Last Detected At: {$indicator.last_detected_at}
Created At: {$indicator.created at}
Updated At: {$indicator.updated_at}
Since Deleted: {$indicator.sincedeleted}
Deleted At: {$indicator.deleted_at}
Deleted: {$indicator.deleted}
{foreach $indicator.Descriptions item=description name=Descriptions}
Source: {$description.source}
Description: {$description.value}
{/foreach}
```



```
Your variables go here
{/foreach}
```

## **Intrusion Set Template**

```
{foreach $data as $intrusion_set}
ID: {$intrusion_set.id}
Name: {$intrusion_set.value}
Status: {$intrusion_set.status}
Point of Contact: {$intrusion_set.point_of_contact}
First Seen: {$intrusion_set.started_at}
Last Seen: {$intrusion_set.ended_at}
Created At: {$intrusion_set.created_at}
Updated At: {$intrusion_set.updated_at}
Deleted At: {$intrusion_set.deleted_at}
{foreach $intrusion_set.Descriptions item=description name=Descriptions}
Source: {$description.source}
Description: {$description.value}
{/foreach}
Your variables go here
{/foreach}
```

## **Malware Template**

```
{foreach $data as $malware}
ID: {$malware.id}
Name: {$malware.value}
Status: {$malware.status}
Point of Contact: {$malware.point_of_contact}
Created At: {$malware.created_at}
Updated At: {$malware.updated_at}
Deleted At: {$malware.deleted_at}

{foreach $malware.Descriptions item=description name=Descriptions}
Source: {$description.source}
Description: {$description.value}
{/foreach}

Your variables go here

{/foreach}
```



## **Report Template**

```
{foreach $data as $report}
ID: {$report.id}
Name: {$report.value}
Status: {$report.status}
Point of Contact: {$report.point_of_contact}
Created At: {$report.created_at}
Updated At: {$report.updated_at}
Deleted At: {$report.deleted_at}

{foreach $report.Descriptions item=description name=Descriptions}
Source: {$description.source}
Description: {$description.value}
{/foreach}

Your variables go here
{/foreach}
```

## **Signatures Template**

```
{foreach $data as $signature}
{$signature.name}
ID: {$signature.id}
Name: {$signature.name}
Value: {$signature.value}
Type: {$signature.type}
Status: {$signature.status}
Hash: {$signature.hash}
Detected At: {$signature.last_detected_at}
Created At: {$signature.created}
Updated At: {$signature.updated_at}
Deleted At: {$signature.deleted_at}
Deleted: {$signature.deleted}
{foreach $signature.Descriptions item=description name=Descriptions}
Source: {$description.source}
Description: {$description.value}
{/foreach}
Your variables go here
{/foreach}
```



## **Tool Template**

```
{foreach $data as $tool}
ID: {$tool.id}
Name: {$tool.value}
Status: {$tool.status}
Point of Contact: {$tool.point_of_contact}
Created At: {$tool.created_at}
Updated At: {$tool.updated_at}
Deleted At: {$tool.deleted_at}

{foreach $tool.Descriptions item=description name=Descriptions}
Source: {$description.source}
Description: {$description.value}
{/foreach}

Your variables go here

{/foreach}
```

## **TTP Template**

```
{foreach $data as $ttp}
ID: {$ttp.id}
Name: {$ttp.value}
Status: {$ttp.status}
Point of Contact: {$ttp.point_of_contact}
Created At: {$ttp.created_at}
Updated At: {$ttp.updated_at}
Deleted At: {$ttp.deleted_at}

{foreach $ttp.Descriptions item=description name=Descriptions}
Source: {$description.source}
Description: {$description.value}
{/foreach}

Your variables go here

{/foreach}
```

### **Vulnerability Template**

```
{foreach $data as $vulnerability}
ID: {$vulnerability.id}
Name: {$vulnerability.value}
```



```
Status: {$vulnerability.status}
Point of Contact: {$vulnerability.point_of_contact}
Created At: {$vulnerability.created_at}
Updated At: {$vulnerability.updated_at}
Deleted At: {$vulnerability.deleted_at}

{foreach $vulnerability.Descriptions item=description name=Descriptions}
Source: {$description.source}
Description: {$description.value}
{/foreach}

Your variables go here

{/foreach}
```

## **Template Variables**

The following is a list of commonly used Adversary and Indicator variables that you can add to the above template examples to expand the data included in an export.

## **Adversary Examples**

#### Adversary Variable

```
{foreach $adversary.Adversaries item=adversary name=Adversaries}
Name: {$adversary.name}
Value: {$adversary.value}
{/foreach}
```

#### Attachment Variable

```
{foreach $adversary.Attachments item=attachment name=Attachments}
Name: {$attachment.name}
Value: {$attachment.value}
{/foreach}
```

#### Attribute Variable

```
{foreach $adversary.Attributes item=attribute name=Attributes}
Name: {$attribute.name}
Value: {$attribute.value}
{/foreach}
```

#### Event Variable



```
{foreach $adversary.Events item=event name=Events}
Name: {$event.name}
Value: {$event.value}
{/foreach}
```

#### Indicator Variable

```
{foreach $adversary.Indicators item=indicator name=Indicators}
Name: {$indicator.name}
Value: {$indicator.value}
{/foreach}
```

## Investigation Variable

```
{foreach $adversary.Investigations item=investigation name=Investigations}
Name: {$investigation.name}
Value: {$investigation.value}
{/foreach}
```

#### Signature Variable

```
{foreach $adversary.Signatures item=signature name=Signatures}
Name: {$signature.name}
Value: {$signature.value}
{/foreach}
```

#### Source Variable

```
{foreach $adversary.Sources item=source name=Sources}{$source.value} {if !
empty($source.tlp)}({$source.tlp}){/if}
{/foreach}
```

## Tag Variable

```
{foreach $adversary.Tags as $tag item=Tags name=Tags}
Value: {$tag}
{/foreach}}
```

#### Task Variable

```
{foreach $adversary.Tasks item=task name=Tasks}
Name: {$task.name}
Value: {$task.value}
{/foreach}
```



## **Indicator Examples**

#### Adversary Variable

```
{foreach $indicator.Adversaries item=adversary name=Adversaries}
Name: {$adversary.name}
Value: {$adversary.value}
{/foreach}
```

#### Attachment Variable

```
{foreach $indicator.Attachments item=attachment name=Attachments}
Name: {$attachment.name}
Value: {$attachment.value}
{/foreach}
```

#### Attack Pattern Variable

```
{foreach $indicator.Attack_pattern item=attack_pattern name=Attack_pattern}
Name: {$attack_pattern.name}
Value: {$attack_pattern.value}
{/foreach}
```

### Campaign Variable

```
{foreach $indicator.Campaign item=campaign name=Campaign}
Name: {$campaign.name}
Value: {$campaign.value}
{/foreach}
```

#### Course of Action Variable

```
{foreach $indicator.Course_of_action item=course_of_action
name=Course_of_action}
Name: {$course_of_action.name}
Value: {$course_of_action.value}
{/foreach}
```

#### Event Variable

```
{foreach $indicator.Events item=event name=Events}
Name: {$event.name}
Value: {$event.value}
{/foreach}
```

### Exploit Target Variable



```
{foreach $indicator.Exploit_Targets item=exploit_target
name=Exploit_Target}
Name: {$exploit_target.name}
Value: {$exploit_target.value}
{/foreach}
```

### **Identity Variable**

```
{foreach $indicator.Identity item=identity name=Identity}
Name: {$identity.name}
Value: {$identity.value}
{/foreach}
```

#### Incident Variable

```
{foreach $indicator.Incident item=incident name=Incident}
Name: {$incident.name}
Value: {$incident.value}
{/foreach}
```

#### *Indicator Variable*

```
{foreach $indicator.Indicators item=indicator name=Indicators}
Name: {$indicator.name}
Value: {$indicator.value}
{/foreach}
```

#### Intrusion Set Variable

```
{foreach $indicator.Intrusion_set item=intrusion_set name=Intrusion_set}
Name: {$intrusion_set.name}
Value: {$intrusion_set.value}
{/foreach}
```

#### Investigation Variable

```
{foreach $indicator.Investigations item=investigation name=Investigations}
Name: {$investigation.name}
Value: {$investigation.value}
{/foreach}
```

#### Malware Variable

```
{foreach $indicator.Malware item=malware name=Malware}
Name: {$malware.name}
Value: {$malware.value}
{/foreach}
```



#### Report Variable

```
{foreach $indicator.Report item=report name=Report}
Name: {$report.name}
Value: {$report.value}
{/foreach}
```

#### Signature Variable

```
{foreach $indicator.Signatures item=signature name=Signatures}
Name: {$signature.name}
Value: {$signature.value}
{/foreach}
```

#### Task Variable

```
{foreach $indicator.Tasks item=task name=Tasks}
Name: {$task.name}
Value: {$task.value}
{/foreach}
```

#### Tool Variable

```
{foreach $indicator.Tool item=tool name=Tool}
Name: {$tool.name}
Value: {$tool.value}
{/foreach}
```

#### TTP Variable

```
{foreach $indicator.Ttp item=ttp name=Ttp}
Name: {$ttp.name}
Value: {$ttp.value}
{/foreach}
```

### Vulnerability Variable

```
{foreach $indicator.Vulnerability item=vulnerability name=Vulnerability}
Name: {$vulnerability.name}
Value: {$vulnerability.value}
{/foreach}
```



# **Specific Indicator Export Configurations**

ThreatQuotient provides several guides with instructions on how to export specific Indicators for use with an external threat detection system. These guides, available in both web and PDF format, can be found under the ThreatQ Integrations section of the Help Center.



# **Integrations Management**

# **About Integrations Management**

The ThreatQ platform allows you install, manage and remove integrations from the My Integrations page.

Topics in this section include:

TOPIC	DESCRIPTION
Integration Types	Learn about the different types of integration available for the ThreatQ platform.
About My Integrations	Learn about managing your installed integrations from the My Integrations page.
Adding an Integration	Learn how to add a new integration to your ThreatQ instance.
Adding A STIX/TAXII Feed	Learn how to add a new STIX/TAXII feed to your ThreatQ instance.
Configuring an Integration	Learn to configure and enable your installed integrations.
Triggering a Manual Run	Learn how to trigger a manual run for your installed CDF integrations.
Running an Operation	Learn how to run an operation against a ThreatQ system object.
Activity Logs (feeds)	Learn about your CDF runs by viewing the Activity Log.
Removing an Integration	Learn how to disable or remove unwanted integrations from your ThreatQ instance.



# **Integration Types**

ThreatQ integrations include Actions, Apps, Configuration-Driven Feeds (CDFs), Custom Connectors, and Operations. This topic will highlight specific information about each type of integration.

## **Actions**

ThreatQ Actions are YAML snippets, utilized by ThreatQ TDR, that you can use to build custom workflows to enrich the data in a specified data collection. See the ThreatQ TDR Orchestrator (TQO) section for more information.

## **Apps**

ThreatQ Apps are designed to operate outside of the ThreatQ platform. The app communicates with third-party applications, such as QRadar and Splunk, and executes user-defined actions. This can result in information being push to and from the third-party application and your ThreatQ instance. Threat intelligence information from these actions can then be ingested back into ThreatQ.

## **Configuration-Driven Feeds (CDFs)**

ThreatQ Configuration-Driven Feeds, CDFs, utilize one or more threat intelligence endpoints for a provider. You can configure what type of information and how you will ingest it into the ThreatQ platform. CDFs fall under one of two categories on the ThreatQ My Integrations page:

- **Commercial** Commercial CDFs are provided by paid feed providers as a service. To enable these integrations in ThreatQ, you will need an API ID or API Key from the provider. Commercial CDFs typically provide highly contextual threat intelligence data. You can learn more about available CDFs on the ThreatQ Marketplace.
- **OSINT** OSINT CDFs are open source threat intelligence feeds. Open source feeds are free to use, but some may require you to register with the feed provider to attain an API Key.



CDFs override indicator statuses to the default status defined in the CDF and override signature statuses to a default value of Active.

## **Custom Connectors**

ThreatQ Custom Connectors are driven by ThreatQuotient's Threat Intelligence Services Team and provides a solution for data ingestion that is not provided by existing CDFs available on the ThreatQ Marketplace.

Custom Connectors are typically installed via the command line interface and usually require a CRON job to be created to manage connector runs.

Once installed, Custom Connectors are located under the **Labs** category dropdown on the My Integrations page.



## **Operations**

ThreatQ Operations enhance your threat intelligence data by allowing you to add attributes, as well as related indicators, from third party security services, both commercial and open source. You accomplish this by creating objects to connect to a desired service, receive threat intelligence, and display that threat intelligence in ThreatQ.

Installed operation will appear under the **Operations** option for the **Type** dropdown in the My Integration filters. You can execute operations from a threat object's details page - see the Running an Operation topic for more details.

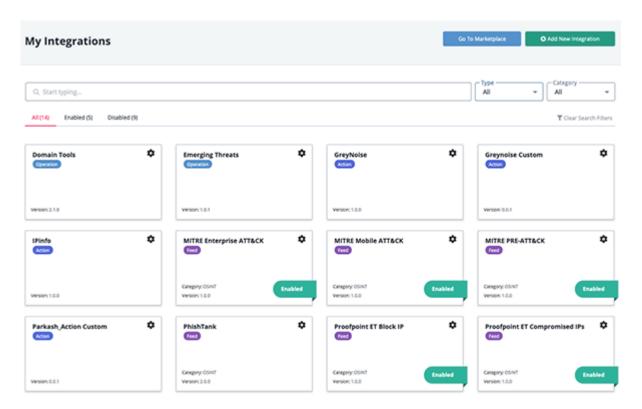


# **About My Integrations**



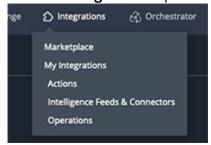
ThreatQuotient does not issue API keys for third-party vendors. Contact the specific vendor to obtain API keys and other integrated-related credentials.

The My Integrations page allows you to add, remove, and configure feeds, actions, custom connectors, and operations that you have downloaded from the ThreatQ Marketplace or are seeded in ThreatQ.



# **Accessing My Integrations**

- 1. Navigate to your ThreatQ instance.
- 2. Click the **Integrations** option in the main navigation and select one of the following options:



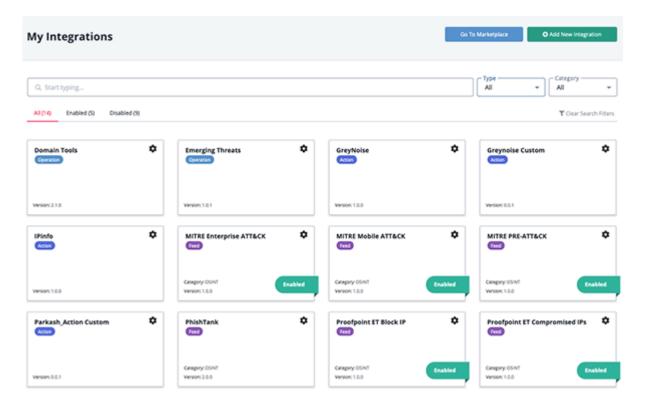
**MENU OPTION** 

**DETAILS** 



Marketplace	Opens the ThreatQ Marketplace in a new tab.
My Integrations	Opens the My Integrations page.
Actions	Opens the My Integrations page filtered to only display actions.
Intelligence Feeds & Connectors	Opens the My Integrations page filtered to only display feeds and connectors.
Operations	Opens the My Integrations page filtered to only display operations.

The My Integrations page loads and defaults to the **All** tab which lists all integrations currently installed on your platform, both enabled and disabled.



# **Filtering Your View**

There are several filters available that allow you to narrow down your integrations. The platform will remember your filter selections for the duration of your session. These filters include:



FILTER DETAILS

#### Keyword

Filter the integrations list by keyword.

### **Type**

Filter the integrations list by integration type. Options include:

- Actions
- Intelligence Feeds and Connectors
- Operations
- All

## **Category**

Filter the list by the category of integration:

- OSINT OSINT feeds are open source threat intelligence feeds. Open source feeds are free to use, but some may require you to register with the feed provider to attain an API Key.
- Commercial Commercial feeds are provided by paid feed providers as a service. To enable these feeds in ThreatQ, you will need an API ID or API Key from the provider. Commercial feeds typically provide highly contextual threat intelligence data. You can learn more about these feeds on their vendor's websites.
- **STIX TAXII** STIX stands for Standard Threat Information Expression, it is an emerging standard for the sharing of machine readable intelligence and incident data. A STIX package is an XML document that can contain many indicators and related context information. For the automated sharing of STIX packages, a protocol called TAXII (Trusted Automated eXchange of Indicator Information) is used to provide a feed to consumers.
- Labs Labs are driven by ThreatQuotient's Threat Intelligence Services
   Team. Labs feeds provide a solution for data ingestion that is not provided
   by the feeds pre-configured with the ThreatQ platform. You should inquire
   with a Threat Intelligence Engineer to see what Labs are available.

Status (All/ Enabled/ Disabled tabs) Filter the list of installed integrations by status: enabled or disabled. A count of integrations appears next to each tab and reflects any filter that is selected.



The **All** tab, which displays both enabled and disabled integrations, is selected by default.

## Clear Search Filters

Clears the current search filters that are currently in use.



# **Adding an Integration**



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

The steps for upgrading an integration are the same as adding a new integration. You can use the steps below to install CDFs (.yml) and Operations (.whl). Steps for installing TQO Actions differ slightly in that you can install using a zip file (actions are the only integration type that can be installed by uploading a zip file) - see the Installing an Action topic in the ThreatQ Orchestrator guide for more details. Custom connectors and Apps can not be installed using the method described below (UI install) - see the individual user guide for installation steps.

- 1. Log into https://marketplace.threatg.com.
- 2. Locate and download the desired integration file.

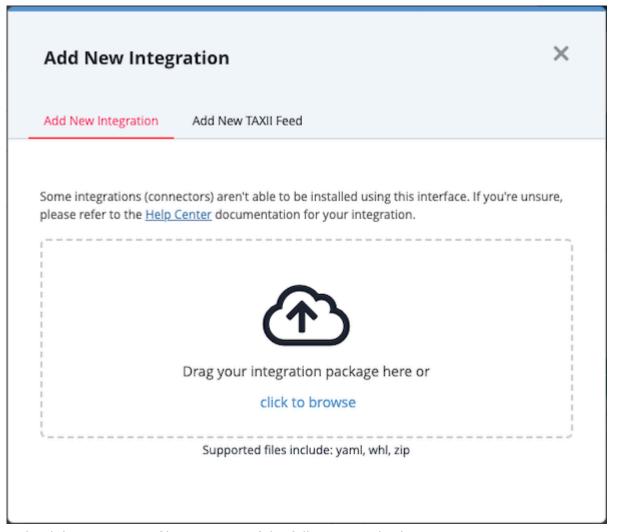


CDF or Operation downloads that are in a zip format indicate that additional dependencies, other than the standard whl or yaml, are required. Extract the files from the zip and refer to the integration's individual guide on how to install them.

- 3. Navigate to My Integrations page on your ThreatQ instance.
- 4. Click the **Add New Integration** button.

The Add New Integration dialog box opens with the **Add New Integration** option selected by default.





- 5. Upload the integration file using one of the following methods:
  - Drag and drop the integration file into the dialog box
  - Select the **click to browse** link to locate the integration file on your local machine



For CDFs, you will upload the yaml file only. For Operations, you will upload the whl file only. Custom connectors, which are typically in a whl format, **can not** be installed using the UI and require installation via CLI. TQO Actions are the only integrations that support installation using the zip format - see the Installing an Action topic in the ThreatQ Orchestrator guide for more details.

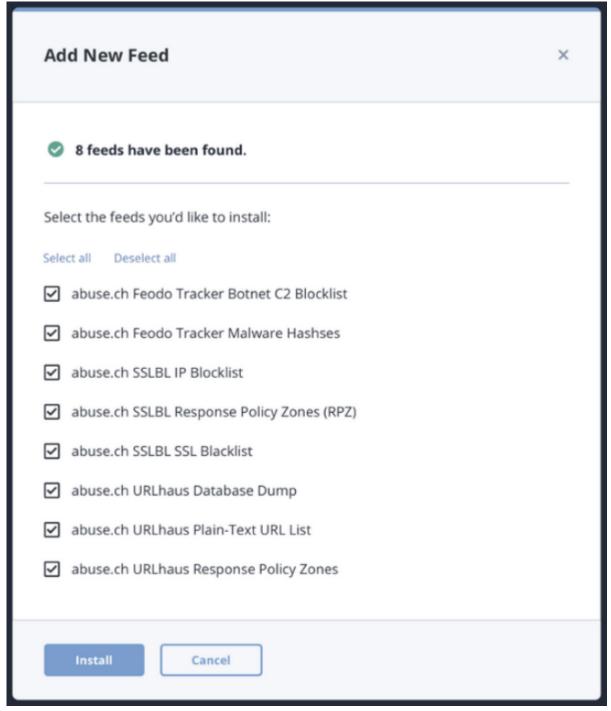
If the ThreatQ Marketplace download for a CDF or Operation is in zip format, that indicates that a separate dependency or custom object is required by the integration and therefor was included in the download. These additional files cannot be installed via the UI uploader nor can you upload the zip file to install. See the integration's user guide for steps on how to install these additional files.





If the integration already exists on the platform, ThreatQ informs you and requires user confirmation before proceeding. If the new version of the integration contains changes to the user configuration and requires user confirmation before overwriting the existing configuration.

6. If the integration file contains multiple feeds, you are prompted to select which feeds to install. Select the feeds to include and click **Install**.



7. When the install is complete, you must configure and enable the integration before it can be used.





Actions will automatically be enabled upon install/upgrade.



# Adding A STIX/TAXII Feed

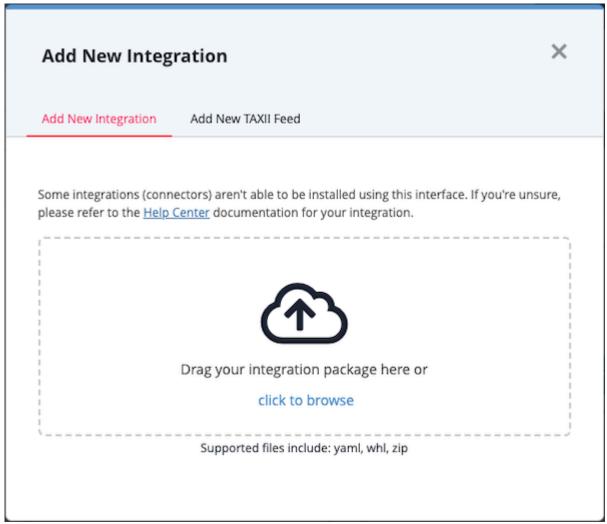


ThreatQuotient does not issue API keys for third-party vendors. Contact the specific vendor to obtain API keys and other integrated-related credentials.

#### From the My Integrations page:

1. Click the **Add New Integration** button.

The Add New Integration dialog box opens with the **Add New Integration** option select by default.



2. Click the **Add New TAXII Feed** option.



The Add New TAXII Feed form is displayed. × Add New Integration Add New Integration Add New TAXII Feed What would you like to name this feed? ow often would you like to pull new data from this feed? — **TAXII Connection Settings** - TAXII Server Version 2.0 Path to the TAXII Server's Discovery Service Poll URL (Optional) Optional URL specifying a specific endpoint on the TAXE Server to poll for data. If not supplied, the TAXE Client will attempt to determine the appropriate path via the Collections Service. Collection Name / Title Name of the collection to poll data from ☐ Disable Proxies Login Credentials (if applicable) Username Basic Authentication Username • Basic Authentication Password Certificates/Keys (if applicable) Certificate Client Certificate for authentication with the TAXXI Server. Private Key Verify SSL Specifies whether the TAXII client should verify a provider's SSL certificate Host CA Certificate Bundle Used to specify a provider's CA Certificate Bundle to verify SSL against. This denotes that Verify SSL is True.



## 3. Complete the following fields:

FIELD	INSTRUCTIONS
What would you like to name this feed?	Enter the feed name to be displayed throughout ThreatQ. The name must be at least five characters long. It does not need to match the <b>Collection Name</b> .
How often would you like to pull new data from this feed?	Choose <b>Every Hour</b> or <b>Every Day</b> .
TAXII Connection Settings	
TAXII Server Version	Options include: 1.0, 1.1, 2.0. This field is required.
Discovery URL	This is where the TAXII server can be reached. This field is required.
Poll URL	An optional URL that specifies a specific endpoint on the TAXII Server to poll for data.
Collection Name/Title	The name of the collection of data in the feed you will access. This field is required.
Login Credentials	
Username	If required, enter a username for the feed.
Password	If required, enter a password.
Certificates/Keys	
Certificate	If required, enter a certificate if required for the feed.
Private Key	If required, enter a private key if required for the feed.



FIELD INSTRUCTIONS

Server Authentication	
Verify SSL	Leave the checkbox checked to require that the TAXII client verify the provider's SSL certificate.
Host CA Certificate Bundle	The provider's CA Certificate used to verify SSL.  The Host CA Certificate Bundle will not be honored if the Verify SSL option is not selected.

#### 4. Click **Add TAXII** Feed.

The TAXII/STIX feed is added to the Integrations page. You must configure and enable the integration before it can be used.



## **Configuring an Integration**

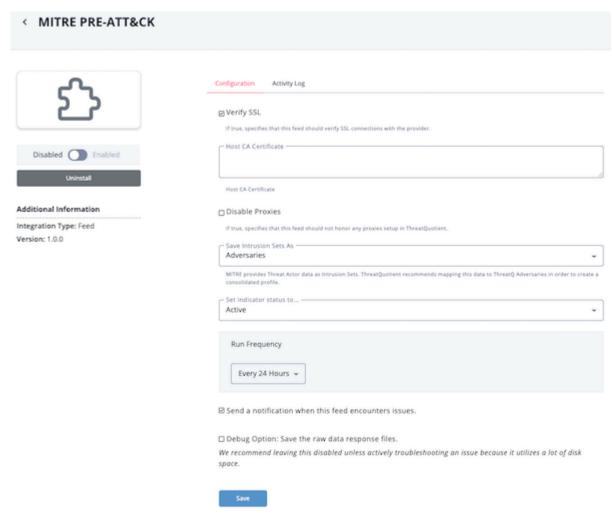
The integration must already be installed in order to access its configuration. See the Adding an Integration topic for more details.



Configuration parameters will differ based on individual integrations. See the individual integration's user guide for configuration and other requirements. Additionally, certain configuration options in the ThreatQ UI will be available for certain types of integrations. **Example:** The Run Frequency option will only be accessible for CDFs.

#### From the My Integrations page:

1. Locate and click the integration to load its details page.



The integration details page displays and lists the following:

- Integration Information details such as the author, required ThreatQ version and targeted object types.
- **Configuration Tab** Integration-specific configuration parameters for the integration.



- **Activity Log tab** Display run information such as time stamps, data ingested, and any error messages. The Activity Log on this page only applies to CDFs.
- 2. Enter the required configuration parameters for your integration in the Configuration Tab. These configuration parameters will differ based on the integration. See the individual integration's user guide for more information.



Any configurations set on this form for an Action will be applied by default when adding a new instance of the action to an orchestration workflow. If you edited an action's configuration fields in a specific workflow's view, those settings will honored instead for that specific workflow.

Select a Run Frequency for the integration (CDFs only).Periodic Options

# Hourly Run the integration every hour. Every 6 Hours Run the integration every six hours. Every 24 Hours Run the integration every day. Every 2 Days Run the integration every two days. Every 14 Days Run the integration every two weeks. Every 30 Days Run the integration every month.

#### **Schedule Options**

SELECTION	DESCRIPTION	
Daily	Allows you to run the integration at a specific time every day.	
Weekly	Allows you to run the integration at a specific time, on a specific day, every week.	

4. Select a default **Status** if the integration ingests indicator or signature types.

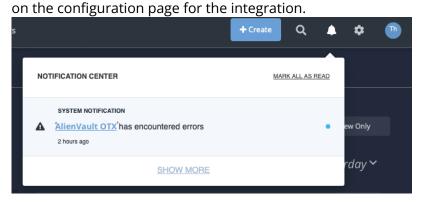


This configuration option will only be available if the integration ingests indicator or signature types.

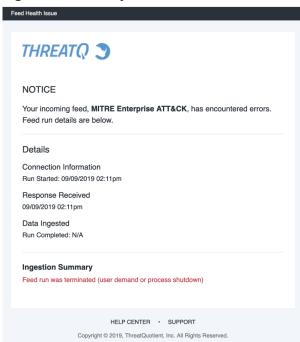


5. Enable or disable **Feed Health Notifications** (CDFs only) for the integration. Feed Health Notifications allow the ThreatQ application to send you, and other designated users, email and in-app notifications when a feed encounters an issue.

The in-app notifications appear in Notification Center for users with an administrator or maintenance account. These notifications include a link that redirects you to the Activity Log tab



The emails contain useful information such as connection information, data ingested, and an ingestion summary.





See the Notifications topic for more information.

- 6. Enable or disable the **Debug option** (for CDFs only) The Debug Option checkbox gives you the option to save raw data response files for troubleshooting purposes. Since this option uses a large amount of disk space, it defaults to unchecked. We recommend temporarily enabling the option when you are troubleshooting a feed issue.
- 7. Click Save.



8. Click the **Enable/Disable** toggle switch to enable the integration.



If the integration is a CDF, a run will be start automatically after the integration is enabled.



# Triggering a Manual Run

The steps provided below are for performing manual runs for a CDF. See the Managing Workflows section of the ThreatQ Orchestrator TDR guide for steps on performing manual runs for CDWs.

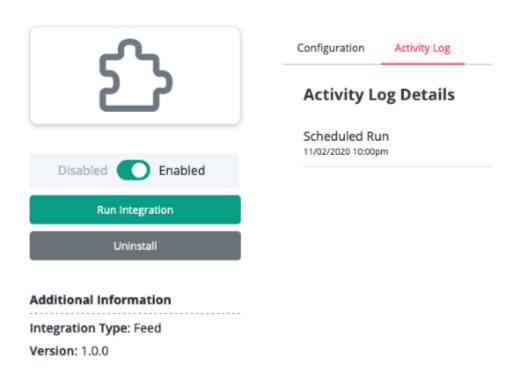


Not every CDF integration allows you to perform a manual run. If your CDF does not support manual runs, the Run Integration option will not load on the integration's details page.

#### From the My Integrations page:

1. Locate and click the integration to load its details page.

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To locate an integration, you can filter the list by keyword, integration category, and/or status (enabled or disabled).

- 2. Confirm that the integration is enabled.
- 3. Click the **Run Integration** button located beneath Enable/Disable toggle switch.



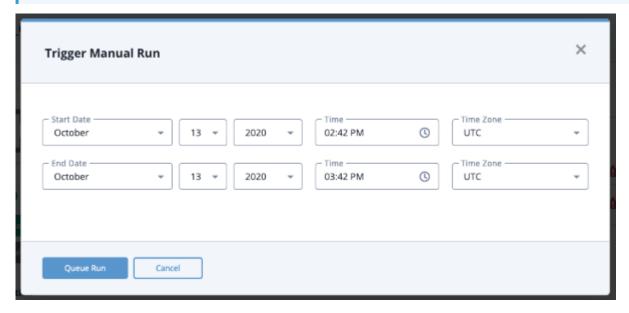


If the **Run Integration** button is not visible, the integration does not support manual runs.

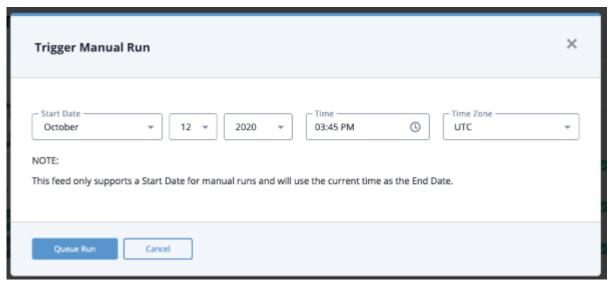
The Trigger Manual Run window will be displayed.



The Start and End dates will tell the ThreatQ platform to pull new and updated information published by the feed provider for that time range.



Some feeds only support a Start Date.



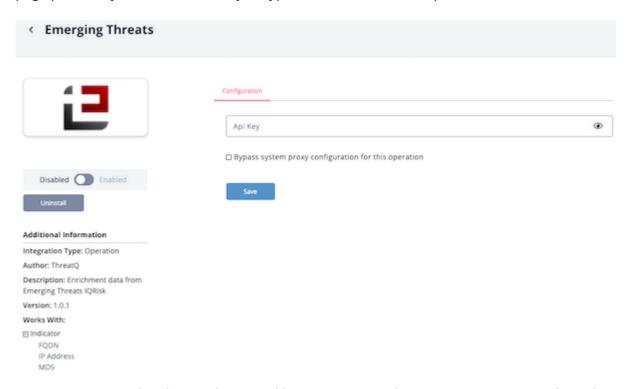
4. Enter values into the Start and End Date fields and click the **Queue Run** button.



# **Running an Operation**

The following steps may differ based on the individual operation. See the operation's individual user guide for specific details.

Operations are designed to work with specific object types and sub-types. The operation's details page provides you with a list of object types that work with the operation.

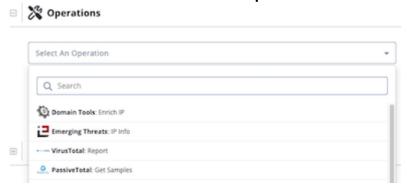


- 1. Navigate to the Threat Library and locate a system object your operation works with.
- 2. Click the object to access its details page.
- 3. Scroll to the **Operations** pane on the details page. You can also click the Operations heading located in the left-hand menu to jump to the operations pane.
- 4. Expand the **Operations** pane by clicking the plus sign (+).





5. Click the arrow next to the **Select An Operation** field.



- 6. From this field you can:
  - Browse a list of all available operations.
  - Type the full or partial operation name in the Search field.
- 7. Click on an operation.

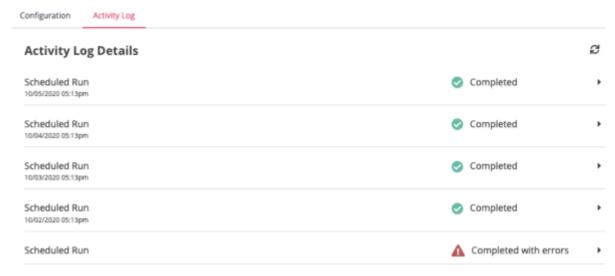


Applicable configuration parameters are displayed below the operation name. After you update these fields, click the Run button to run the operation. If there are no configuration parameters for the operation, the operation will run automatically.



# **Activity Logs (feeds)**

The Activity Log provides you with details regarding recent runs performed by a CDF integration.



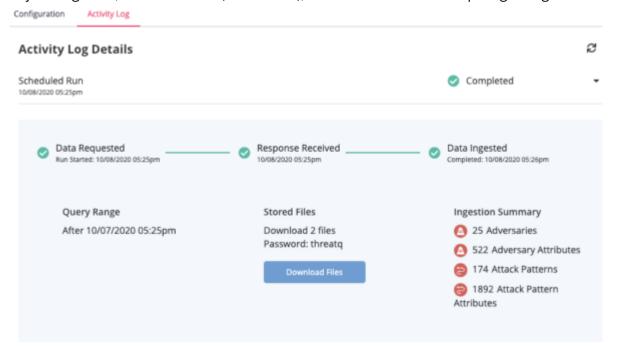
The Log Details section displays run details that include:

LOG DATA	DETAILS
Type of Run	Whether the run was scheduled or triggered manually.
Date and Time	When the run, data and time, was initiated.
Outcome	Whether the run completed successfully or if it encountered errors.



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You can click on the arrow icon next to the output to view run details such as an ingestion summary of objects ingested, download files (stored files), and additional timestamps regarding the run.



FIELD	DESCRIPTION
Run Started	The timestamp of when the run was initiated.
Response Received	The timestamp when the feed endpoint responded.
Data Ingested	The timestamp when the run was completed and intel data was ingested.
Query Range	The time frame for the data ingested.
Store Files	Zipped password-locked file(s) of the ingested data.
Ingested Summary	A summary of ingested object types.

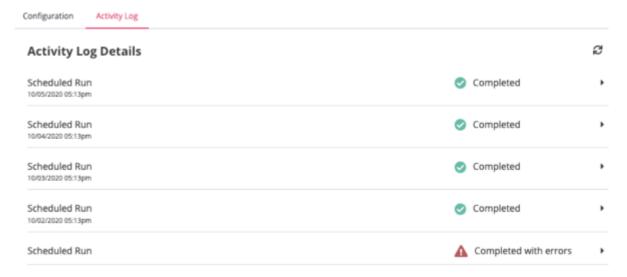
**DESCRIPTION** 

## **Accessing a CDF's Activity Log**

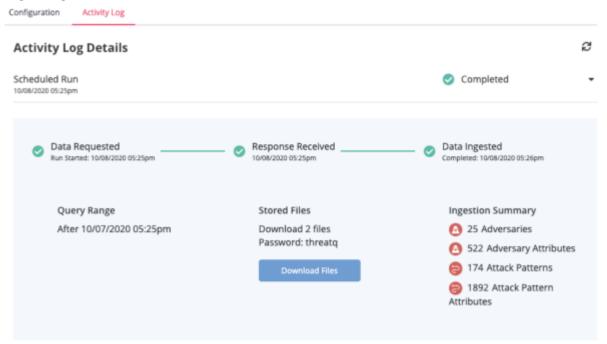
You can access CDF's activity log from the My Integrations page.



Locate and click on the integration to load its details page.
 The integration details page will load.



- 2. Select the **Activity Log** tab if not already selected.
- 3. Click on the arrow icon located next to a run's outcome status to view additional details regarding the run.





# **Removing an Integration**

You can remove or disable an installed integration for the integration's details page. The key difference between these two actions is that removing an integration removes the integration from your instance (and UI) while disabling an integration deactivates an integration.



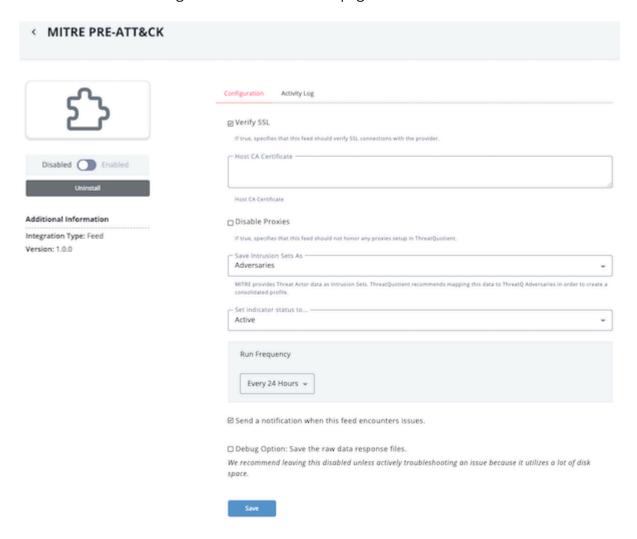
Neither action will affect the threat data that you have already ingested into your ThreatQ instance.

## **Removing an Integration**

Removing an integration will be remove the integration from the My Integrations UI. You can also disable an integration to deactivate it without completely removing the integration from your instance.

#### From the My Integrations page:

1. Locate and click the integration to load its details page.



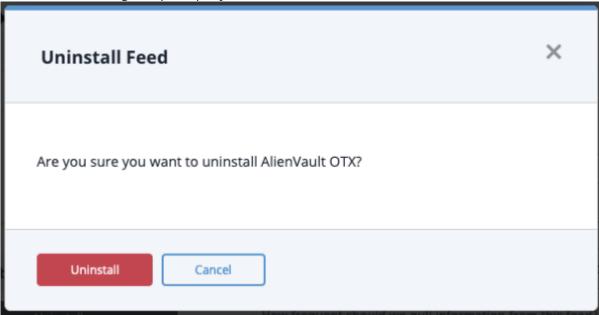




To locate an integration, you can filter the list by keyword, integration category, and/or status (enabled or disabled).

2. Click the **Uninstall** button located below the Enable/Disable toggle.

The Uninstall dialog box prompts you to confirm the uninstall selection.



3. Click **Uninstall** to confirm and remove the integration.

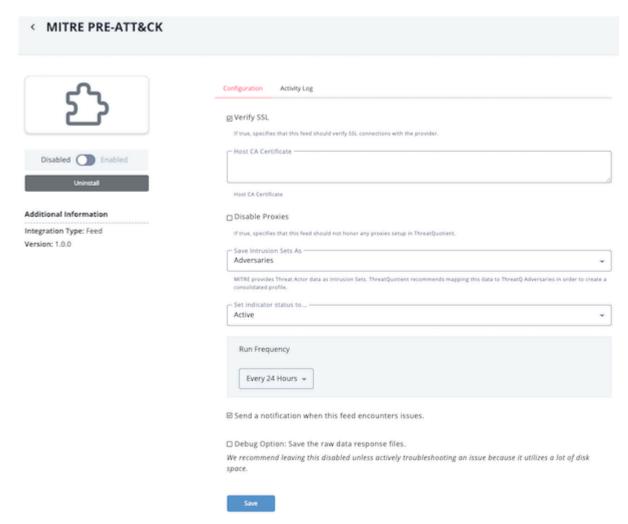
## **Disabling an Integration**

Perform the following steps to disable an integration installed on your ThreatQ instance:

From the My Integrations page:



1. Locate and click on the integration to load its details page.



2. Click the **Enable/Disable** toggle switch to disable the integration.



# **Job Management**



The Job Management page is only accessible to users with Administrator or Maintenance accounts.

The Job Management page allows you to view the status and outcome of Bulk Actions, Data Retention Policies, and consume-generated attribute deletions. See the Bulk Actions and Data Retention Policy sections for more details.

A process runs each day at 2 AM to archive user-initiated jobs 90 days after their creation date and system-initiated jobs 365 days after their creation date. The archived jobs no longer display in the Job Management page but are stored in a historical partition that can be queried.

## **Tips and Tricks**

- Click the refresh icon in the upper right corner to refresh the job information displayed.
- Click a row to expand/collapse job details. The expanded/detailed view varies by job type:



If a Delete, Update, or Relationship job includes system objects filtered by TLP, the job details view includes a Global filters section in the Search Criteria column.

#### **JOB TYPE**

#### **DETAILED VIEW INCLUDES...**

Delete	<ul> <li>Object Type</li> <li>Search Criteria</li> <li>Activity - Lists Start Time and Completed or Failed At timestamps</li> <li>Error Message</li> </ul>
Update	Object Type    Search Criteria
Relationship	<ul> <li>Update - Attribute names displayed in this field are truncated after fifty characters.</li> </ul>
	<ul> <li>Activity - Lists Start Time and Completed or Failed At timestamps</li> <li>Error Message</li> </ul>
Retention Policy	<ul> <li>Data Collection - Lists the name of the Data Collection assigned to your Data Retention Policy.</li> </ul>
Toney	<ul> <li>Total Objects by Type - Lists the number of system objects deleted by object type.</li> </ul>



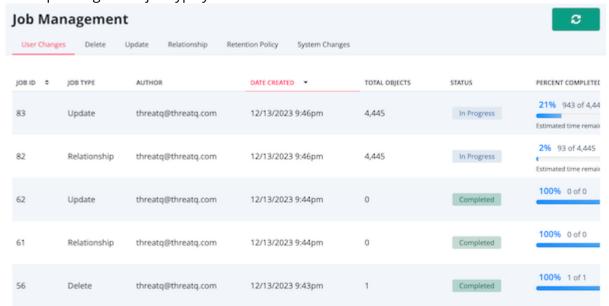
• Activity - Lists Start Time and Completed or Failed At timestamps

System Change

• Bulk action jobs applied to a selected subset of objects list the following message in the Search Criteria field: **No search data to display.** 

# **Accessing the Job Management page:**

Navigate to Settings > Job Management.
 By default, the User Changes tab is displayed. This tab lists all bulk action jobs. Click the tab corresponding to the job type you want to access.



The Job Management page allows you to view the following details about Bulk Action, Data Retention, and System Change jobs:

DESCRIPTION

FILLD	DESCRIPTION
Job ID	The unique ID assigned to the job.
Job Type	The job type of the Bulk Action such as Delete, Update, or Relationship. Data Retention Policy jobs list a job type of Retention Policy. Attribute deletions initiated by an integration update list a job type of System.
Author	The user or integration that initiated the job.

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## **FIELD DESCRIPTION Date** The timestamp the job was created and queued. Created **Total** The total number of system objects included in the job. **Objects** Status The current status of the job including: • Created - The job has been queued. • In Queue - The job is running. • **Error** - The job failed. • Waiting - The job is waiting for indexing to be complete. This only applies to the Bulk Change process. • **Completed** - The job has completed.

### Percent Completed

The Percent Completed column displays three indications of the job's progress:

- A progress bar with the overall percentage completed.
- A count of the number of objects that have been processed from the total number of objects (e.g., 300 of 3,400).
- · The estimated time remaining.



If a data retention policy does not find any objects that match its parameters and as a result did not delete any objects, its job details display a Percent Completed value of 100% and 0 of 0 objects.



If a data retention policy does not delete any objects due to an error, its job details display a Percent Completed value of 0% and 0 of X objects.



# Licensing

Your ThreatQ deployment requires a license to initialize the platform. ThreatQ Support provides the initial license and any subsequent licenses provided to maintain the platform. You apply the initial ThreatQ license during first boot, as described in the Installation. Any subsequent license updates can be applied in the ThreatQ user interface.

Access to additional ThreatQ products, such ThreatQ Investigations and ThreatQ Data Exchange, are tied to your ThreatQ Platform (TQ) license. Adding these features will result in ThreatQ Support issuing a new license to apply to your platform.



ThreatQ licenses are not perpetual.

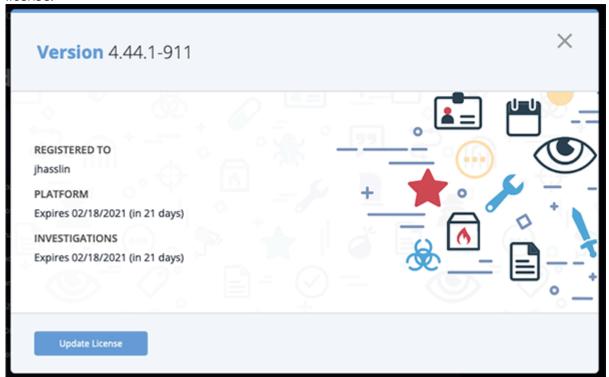
## **Managing Your ThreatQ License**

You can view and update your ThreatQ license using the ThreatQ user interface.

## **Viewing License Status**

1. Click on the **Settings** icon and select **About**.

The License information window loads. You can also view additional licensing-based ThreatQ products, such as ThreatQ Investigations (TQI) and ThreatQ Data Exchange (TQX) - Publisher license.





## **Updating a License**

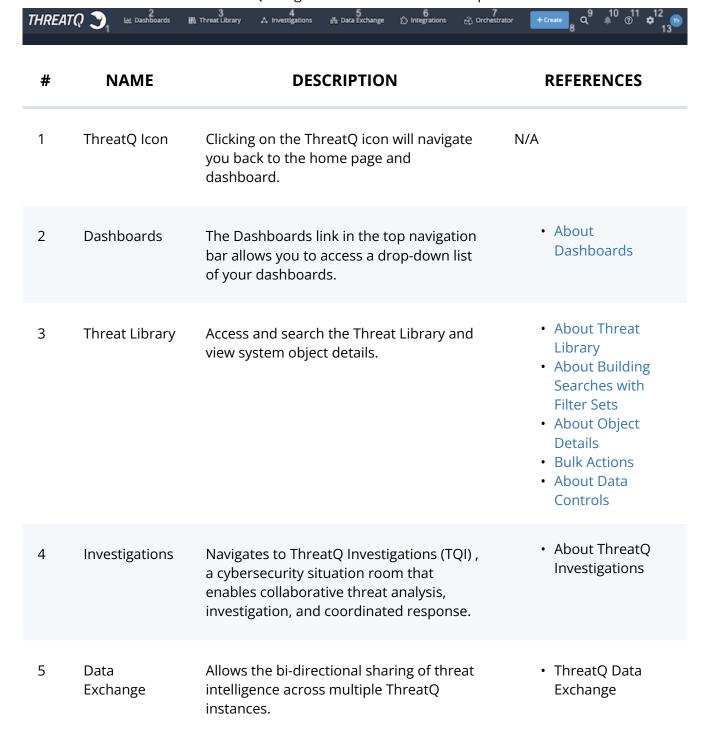
If you receive a new license from Support, apply the new license by accessing the About page.

- 1. Click on the **Settings** icon and select **About**. The License information window loads.
- 2. Select the **Update License** option.
- 3. Enter the new license key.
- 4. Click on **Submit**.



# **Navigation Menu**

The table below outlines the ThreatQ navigation menu and its related processes.





#	NAME	DESCRIPTION	REFERENCES
6	Integrations	Allows you to access the Marketplace as well as you integrations.	<ul> <li>About Integrations Management</li> </ul>
7	Orchestrator	Opens the ThreatQuotient TDR Orchestrator (TQO) which includes enhanced automation, analysis and reporting capabilities that accelerate threat detection and response across disparate systems.	About TQO
8	Create Button	Create system objects.	<ol> <li>Adversaries</li> <li>About Events</li> <li>Files</li> <li>About Indicators</li> <li>Signatures</li> <li>About STIX</li> </ol>
9	Search lcon	Perform a basic search for a system object.	<ul> <li>About Building Searches with Filter Sets</li> </ul>
10	Message Center Icon	Receive in-app notifications of system job processes such as Bulk Actions . Administrator and Maintenance account users will also receive feed health notifications.	• Notification Center
11	Help Icon	Click the Help icon to quickly access the Help Center, Product Updates, Getting Started Guides, and Video Demos. The search field at the top of the menu also gives you the option to search the Help Center.	<ul><li>Product Updates</li><li>Installation</li><li>Videos</li></ul>



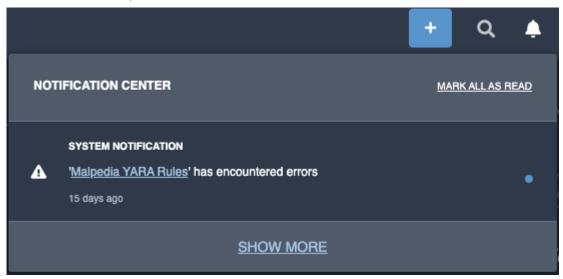
#	NAME	DESCRIPTION	REFERENCES
12	Site Settings	Allows you to manage your ThreatQ application settings as well as view your version and licenses.	<ul> <li>About Exports</li> <li>Job Management</li> <li>About Object Management</li> <li>Reports</li> <li>Server Administration</li> <li>About System Configuration</li> <li>About User Management</li> <li>Licensing</li> </ul>
13	User Icon	Access your user profile.	<ol> <li>About User Management</li> </ol>



# **Notifications**

## **About Notifications**

The ThreatQ Platform (TQ) offers platform-related alerts in the form of in-app notifications, via the Notification Center, and feed health emails.



#### In-app notifications include:

- Bulk Actions updates
- Data Retention Policy notifications
- Feed health alerts
- Task assignment notifications
- Sharing notifications



Only users with Administrator and Maintenance roles receive in-app feed health alerts via the Notification Center.

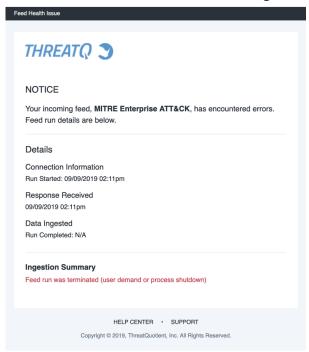
Administrators and Maintenance account users can subscribe users to Feed Health Email Notifications . These users will receive an email when a feed encounters an error when preforming a run.



## **Feed Health Email Notifications**

Feed Health Notifications allows the ThreatQ Platform (TQ) to send you, and other designated users, email notifications when a Configuration Driven Feed (CDF) or Configuration Driven Workflow (CDW) encounters an issue.

The emails, sent to users designated on the Notification Settings page, will contain useful information such as connection information, data ingested, and an ingestion summary.



## **Configuring Mail Server**

You must enter your mail server information on the Mail Server Configuration tab before enabling Feed Health Notifications.



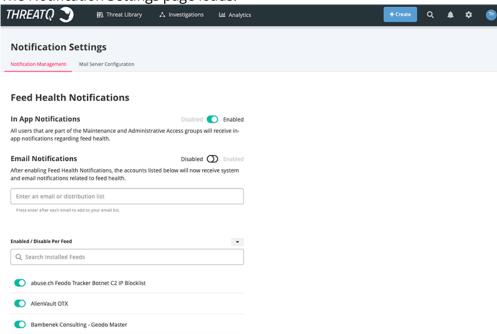
In the event that you have completed the mail server configuration and are still not receiving emails, your email provider may have marked the activity as suspicious. Some services, such as Gmail, will require you to confirm the activity, via an email message, before allowing the ThreatQ application to continue to use the server to send emails. A common symptom found in the error log is that you will receive an "incorrect password" error. If you are certain that the password you provided is correct, your mail service is likely blocking the service and requires your confirmation to proceed.

#### **To Configure Mail Server:**

1. Click on the **System Settings** gear icon and select the **Notification Settings** option.

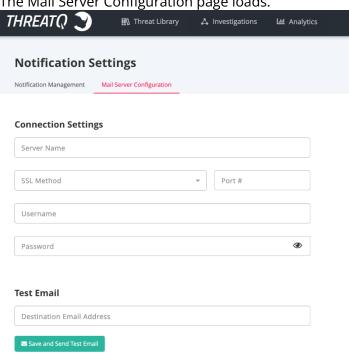


The Notification Settings page loads.



2. Click on the Mail Server Configuration tab.

The Mail Server Configuration page loads.



3. Complete the following fields:

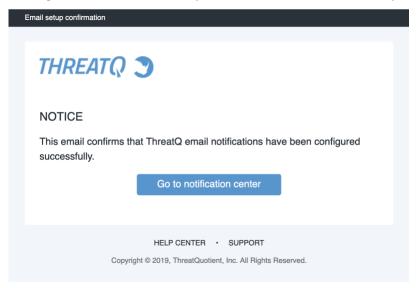
**FIELD DESCRIPTION** 

**Server Name** The address of your mail server.



FIELD	DESCRIPTION
SSL Method	The SSL method used. There are three options:  O SSL  O TLS  O None
Port #	The mail server port.
User name	The mail server account username.
Password	The mail server account password.

4. Enter an email in the **Test Email** field and click **Save and Send Test Email** to confirm that the settings are correct - this is optional. You will receive a setup confirmation email.



5. If you did not use the **Save and Send Test Email** option, click on **Save Changes** to save your settings.

## **Enabling Feed Health Notifications**

There are two different types of Feed Health Notifications that can be enabled on this page: In-App and Email. While you can enter the email address for a user to receive Email Notifications, only users with administrator and maintenance roles will receive In-App Notifications.

If using Email Notifications, the Mail Server Configuration tab must completed before you enable the feature.

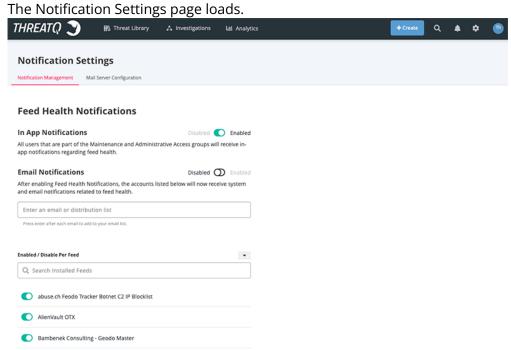




In the event that you have completed the mail server configuration and are still not receiving emails, your email provider may have marked the activity as suspicious. Some services, such as Gmail, will require you to confirm the activity, via an email message, before allowing the ThreatQ application to continue to use the server to send emails. A common symptom found in the error log is that you will receive an "incorrect password" error. If you are certain that the password you provided is correct, your mail service is likely blocking the service and requires your confirmation to proceed.

#### **To Enable Feed Health Notifications:**

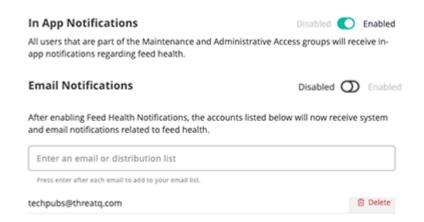
1. Click on the **System Settings** gear icon and select the **Notification Settings** option.



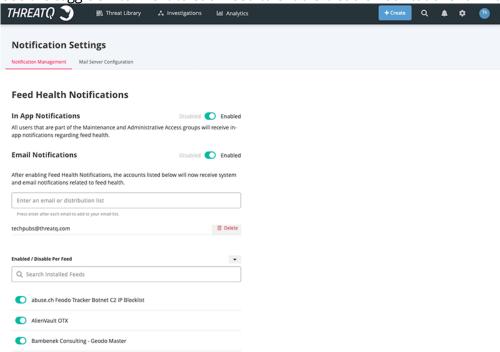
- 2. Perform the following steps to enable email and in-app notifications:
  - Enable In-App Feed Health Notifications
    - 1. Click on the **Enable** toggle switch for **In App Notifications**.
  - Enable Feed Health Email Notifications



Enter an email address in the account field and press the **<Enter>** or **<Return>** key.
 Feed Health Notifications



- 2. Click on the **Enable** toggle switch for **Email Notifications**.
- 3. Use the toggle switch next to each feed to enable/disable notifications for individual feeds.





You can also enable/disable individual CDF feed notifications by clicking on the feed under Integrations and checking/unchecking the notifications checkbox.



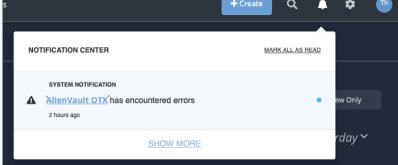
## **Notification Center**

The icon is located on the navigation menu for the platform. This allows you to monitor system processes while working within ThreatQ.

The Notification Center alerts you, via an in-app notification icon, when a platform process, such as a Bulk Actions job, has been queued and/or completed.



Administrator and maintenance accounts can also receive feed health notifications via the Notification Center. See Enabling Feed Health Notifications section in the Feed Health Email Notifications topic.





# **Sharing Notifications**

The ThreatQ Notification Center alerts you about data collection, dashboard, or investigation permission changes that affect you. For instance, it notifies you when another user shares a data collection, dashboard, or investigation with you or when a data collection, dashboard, or investigation you own is shared with another user.

The following table describes the actions that trigger a sharing notification and the content of these notifications. The data collection, dashboard, or investigation name included in a sharing notification also includes a hyperlink to the corresponding object.

SCENARIO	VIEWER	EDITOR	OWNER
A user shares a data collection, dashboard, or investigation with you.	You have been added as a Viewer to <i><name></name></i>	You have been added as an Editor to <name></name>	N/A
A user changes your permissions to editor or viewer.			
A user changes your permissions to owner.	You have been	assigned as the Ow	ner of <i><name></name></i>
A data collection, dashboard, or investigation you own has been shared with another user.	N/A	N/A	<pre><name> has been shared</name></pre>
Your permissions to a data collection, dashboard, or investigation have been removed.	You have been rem	noved from <i><name></name></i>	N/A



A user request access to an investigation via an object details page.

N/A

N/A

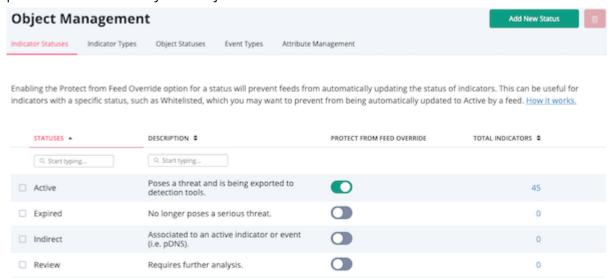
User <User Name>
has requested
access to <Name>



# **Object Management**

# **About Object Management**

The Object Management page consists of five tabs, Indicator Statuses, Indicator Types, Object Statuses, Event Types, and Attribute Management. These tabs allow you to create and manage data points used to enrich system objects.



These tabs allow Maintenance and Admin users to work with:

SECTION DETAILS

Indicator Statuses	Create and edit custom indicator statuses.
Indicator Types	View your platform's indicator types.
Object Statuses	Create and edit custom and seeded object statuses.
Event Types	Create and edit custom event types.
Attribute Management	Update attribute keys and values associated with system objects.



## **Indicator Statuses Management**

The Indicator Statuses page allows you to view, duplicate, add, edit, and delete available system-wide indicator statuses. You cannot edit or delete indicator statuses provided by ThreatQ (Active, Expired, Indirect, Review, Whitelisted), but you can add, edit, and delete your custom statuses.

#### **Indicator Status Assignment**

Multiple factors affect the indicators created from the relations on an individual object in a request. When using API/Indicators/Consume, each individual object in the request JSON is an indicator, and each indicator can have additional indicator relations stored under an indicators field in that object. As a result, the status of an indicator depends on the configuration of the request JSON.

#### **Indirect Indicator Status**

When you set up a default status of Indirect, the system assigns this status to indicators in the following scenarios:

- A status or status id field is not provided for the parent object.
- A status or status ID is not provided for the additional indicator relations of the object.
- The JSON request body includes duplicate indicators and one of the duplicates has a default status ID. If none of the duplicates has a default status ID, the system uses the status ID of the last duplicate.

Currently, the Indirect Indicator status only applies to IOCs related to a main indicator.

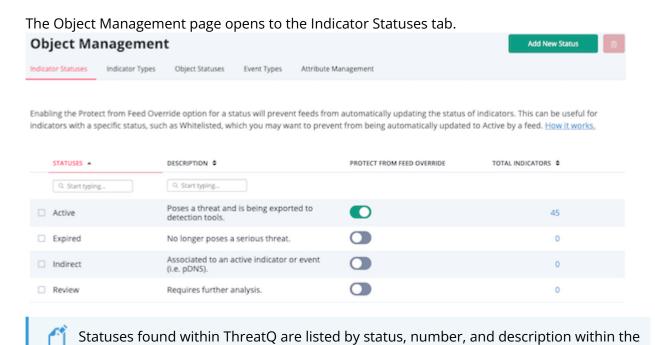
#### **Protected Indicator Statuses**

When doing insertions, ThreatQ determines if the indicator already exists and the Indicator status is a protected status, If so, the system retains the status.

## **Viewing Indicator Statuses**

1. Navigate to Settings > Object Management.





Indicator Statuses table.

2. Optionally, to sort the table by a column, click the column header. To reverse the column sorting order, click the header a second time.

#### **Indicator Statuses Table Functions:**

FUNCTION	DESCRIPTION
Status Filter	Enter a keyword in the text field to filter the table by status name. You can click on the Statuses header to sort the table by alphabetical order.
Description Filter	Enter a keyword in the text field to filter the table by status description. You can click on the Description header to sort the table by alphabetical order.
Protect from Feed Override	Clicking on the toggle switch in this column will enable/disable the Protect from Feed Override option for that status. See the Suppressing Indicator Status Updates section below for more details on this feature.
Total Indicators	The number of indicators currently using the status. Clicking on the value will open the Threat Library filtered to that status. Clicking on the Total Indicators heading will sort the table in ascending/descending order.



#### **Suppressing Indicator Status Updates**

Enabling the **Protect from Feed Override** option for a status, prevents feeds from automatically updating indicators with this status to another. Any status with a green toggle switch is currently protected from status updates. Those with grey toggle switches are not.



**Use Case:** You have a well-vetted set of whitelisted indicators that you do not want to update without internal review and discussion. To protect these indicators from automatic status updates from feeds, toggle the **Protect from Feed Override** switch for the **Whitelisted** status to green (active). After you make this change, ThreatQ retains the status of **Whitelisted** for any indicator to which it is assigned and suppresses any updated status information received from a feed.

- Navigate to Settings > Object Management.
   The Object Management page opens to the Indicator Statuses tab.
- 2. In the Protect From Feed Override column, click the toggle switch corresponding to the status to change it from grey (status updates allowed) to green (status updates suppressed).

## **Adding an Indicator Status**

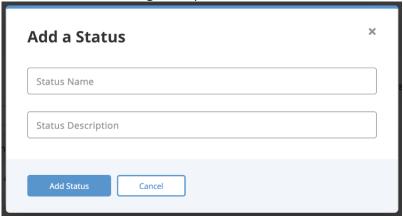
1. Navigate to Settings 💽 > Object Management.

The Object Management page opens to the Indicator Statuses tab. Object Management Add New Status Object Statuses Event Types Attribute Management Enabling the Protect from Feed Override option for a status will prevent feeds from automatically updating the status of indicators. This can be useful for indicators with a specific status, such as Whitelisted, which you may want to prevent from being automatically updated to Active by a feed. How it works. STATUSES . DESCRIPTION 0 PROTECT FROM FEED OVERRIDE TOTAL INDICATORS & Q. Start typing Q. Start typing... Poses a threat and is being exported to □ Active detection tools Expired No longer poses a serious threat. Associated to an active indicator or event Indirect Review Requires further analysis.

2. Click Add New Status.



The Add a Status dialog box opens.



- 3. Enter a **Status Name**.
- 4. Optionally, enter a **Status Description**.
- 5. Click Add Status.

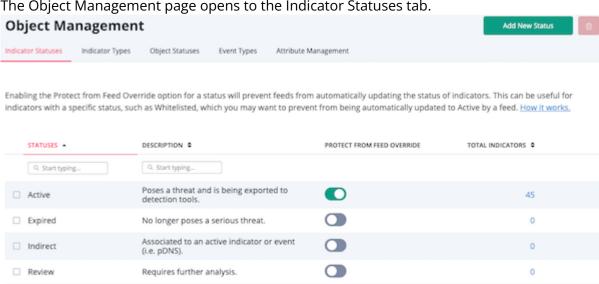
## **Editing an Indicator Status**



You cannot edit an indicator status provided by ThreatQ.

1. Navigate to Settings > Object Management.

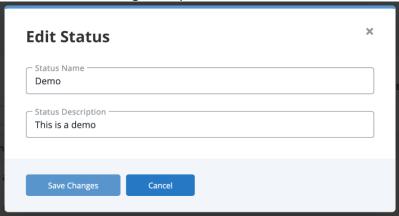
The Object Management page opens to the Indicator Statuses tab.



2. Determine the indicator you want to edit and click **Edit** in the far right column.



The Edit Status dialog box opens.



- 3. Optionally, enter a new **Status Name**.
- 4. Optionally, enter a new **Status Description**.
- 5. Click Save Changes.

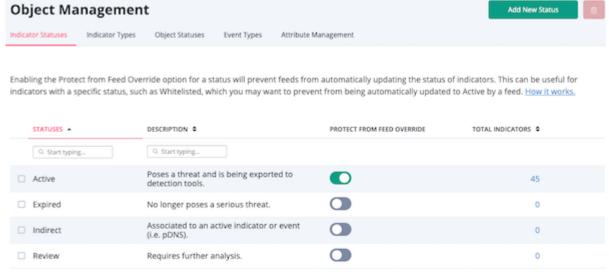
## **Deleting an Indicator Status**



You cannot delete indicator statuses provided by ThreatQ. Custom statuses can only be deleted if there are no indicators using that status.

1. Navigate to Settings > Object Management.

The Object Management page opens to the Indicator Statuses tab.



- 2. Determine the indicator you want to delete and select the corresponding checkbox in the first column.
- 3. Click the **Delete icon** in the upper right hand corner.



A confirmation dialog box appears.



4. Click **Delete Statuses**.



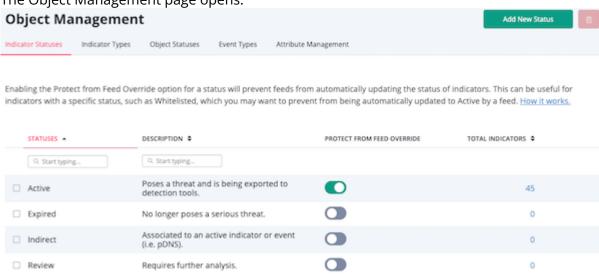
# **Indicator Types**

The Indicator Types table allows you to view a list of indicator types found in ThreatQ and the total number of indicators associated with each type.

To view Indicator Types found within ThreatQ:

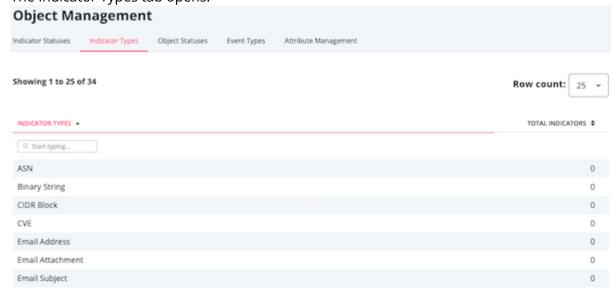
1. Navigate to Settings > Object Management.

The Object Management page opens.



2. Click the **Indicator Types** tab.

The Indicator Types tab opens.



**Indicator Types Table Functions:** 



FUNCTION	DESCRIPTION
Changing the number of entries displayed in the table	Click the dropdown menu at the top right of the table and select the desired option.
Filter table by Indicator Type	Enter a keyword in the text field provided to filter the table by indicator type.
Sort table by Total Indicators	Click the Total Indicators column header to sort the table by ascending/descending order.

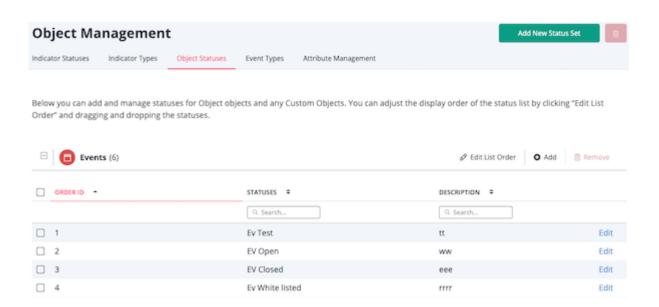


## **Object Statuses**

The Object Statuses tab allows you to create and maintain statuses for custom objects and all seeded system objects except for Adversaries, Files, Signatures, and Tasks objects.

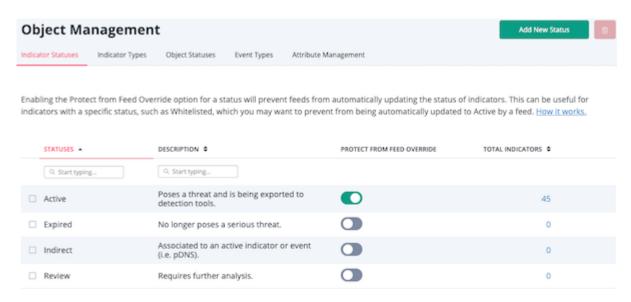


The display of the status field in an object's add modal, object details page, and preview panel is triggered by the creation of at least one status for the object type.



## **Viewing Object Statuses**

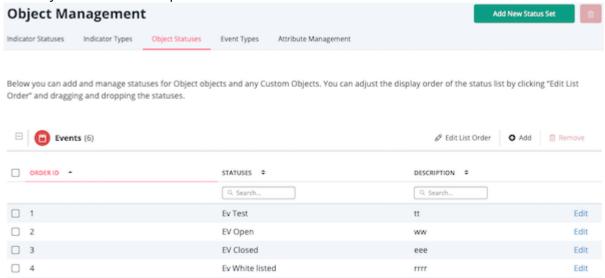
Navigate to Settings ■ > Object Management.
 The Object Management page opens.





2. Click the **Object Statuses** tab.

The Object Statuses tab opens.



The Object Statuses tab contains a section for each object type. Within each section, you can use the following functions to locate a status:

FUNCTION	DESCRIPTION
Filter table by Object Status	Enter a keyword in the Statuses search field to filter by status.
Filter list by Description	Enter a keyword in the Description search field to filter by status description.
Sort table by Order ID, Status name, or Description	Click the arrow to the left of a column to sort the status list by that column. For instance, click the arrow next to the Statuses column to sort the list of statuses alphabetically (ascending/descending) by status name.

#### **Adding an Object Status**

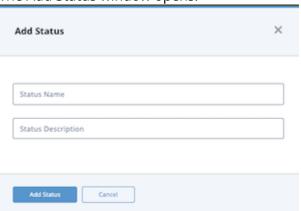
The Object Statuses tab gives you the option to add a single status at a time or to add multiple statuses at a time.

To add a single status for an object type:

1. In the **Object Statuses** tab, locate the object type to which you want to add a status.



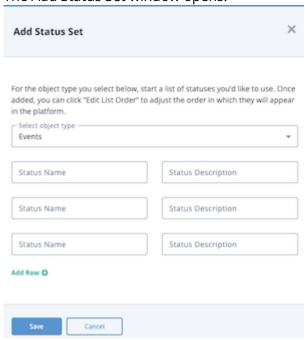
2. Click the Add option located above the object type section. The Add Status window opens.



- 3. Enter the status name and description (optional).
- 4. Click the Add Status button.

To add multiple statuses for an object type:

1. From **Object Statuses** tab, click the **Add New Status Set** button. The Add Status Set window opens.



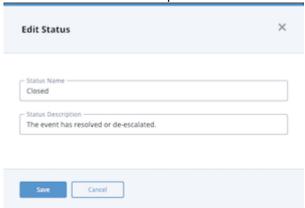
- 4. Select the object type for which you want to add statuses.
- 5. Enter the the name and description (optional) for each status.
- 6. To enter more than three statues, click the Add Row option to display additional fields.
- 5. Click the **Save** button.

## **Editing an Object Status**

1. From the **Object Statuses** tab, click the **Edit** option next to the status you want to update.



2. The Edit Status window opens.

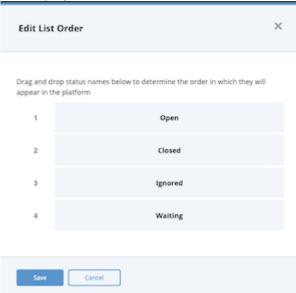


- 3. Enter your changes.
- 4. Click the **Save** button.

#### **Editing Object Status Order**

Status order controls the order in which statuses are displayed in drop down fields such as the Status field on the object details page. The **Edit List Order** option allows you to modify this order.

- 1. In the Object Statuses tab, locate the object type status you want to update.
- 2. Click the **Edit List Order** option for the object type.
- 3. From the Edit List Order window, drag and drop status names to change the order in which they are displayed in ThreatQ.



4. Click the Save button.

## **Deleting an Object Status**



You cannot delete a status that is currently assigned to an object. You must remove the status from all objects before you can delete it.

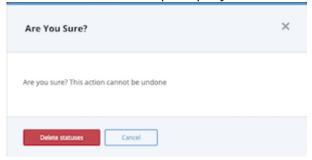


The Object Statuses tab allows you to delete a single status as well as multiple statuses associated with the same object type, or multiple statuses associated with different object types.

- 1. In the **Object Statuses** tab, check the box next to the status you want to delete.
- 2. If you are deleting a single status or a group of statuses associated with the same object type, you can click the Remove option above the object type section or you can click the Delete icon in the upper right corner.

If you are deleting statuses for more than one object type, click the Delete icon in the upper right corner.

A confirmation window prompts you to confirm the deletion.

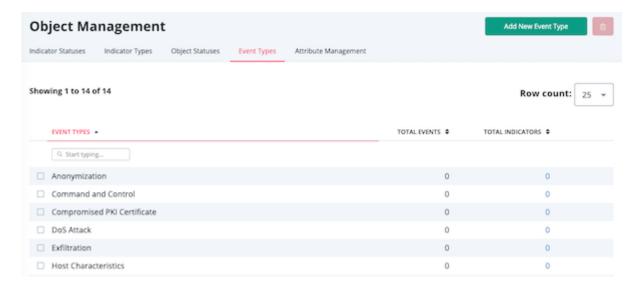


3. Click the **Delete statuses** button.



# **Event Types**

The Event Types page allows you to view, add, edit, and delete system Events.





Event Types provided by ThreatQ cannot be edited or deleted, but you can add, edit, and delete your own custom event types.

System provided Event Types include:

- Anonymization
- Command and Control
- Compromised PKI Certificate
- DoS Attack
- Exfiltration

- Host Characteristics
- Incident
- Login Compromise
- Malware
- Sighting

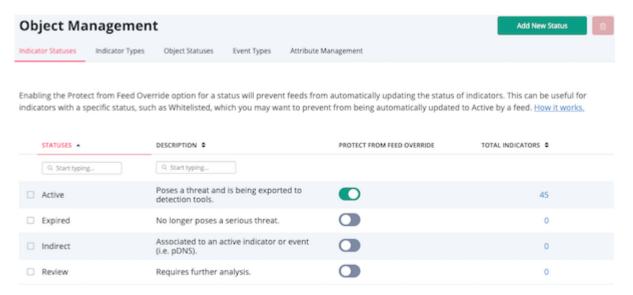
- Spearphish
- SQL Injection Attack
- Watchlist
- · Watering Hole

## **Viewing Event Types**

1. Navigate to Settings ■ > Object Management.

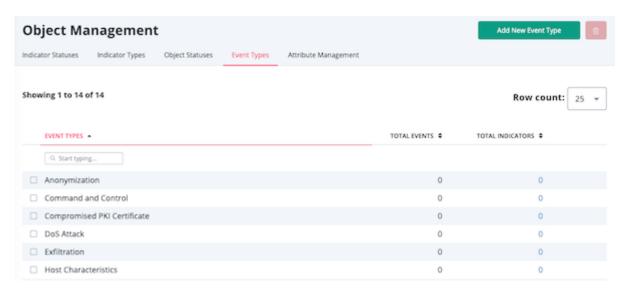


The Object Management page opens.



2. Click the **Event Types** tab.

The Event Types tab opens.



#### **Event Types Table Functions:**

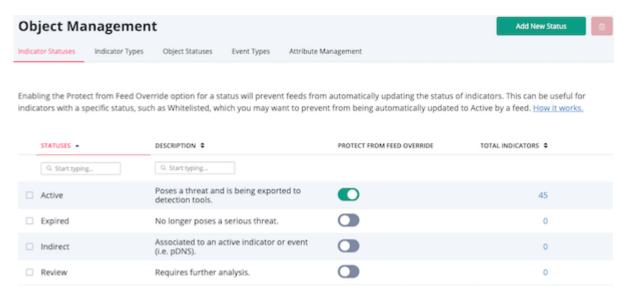
FUNCTION	DESCRIPTION
Changing the number of entries displayed in the table	Click the dropdown menu at the top right of the table and select the desired option.
Filter table by Event Type	Enter a keyword in the text field provided to filter the table by event type.



FUNCTION	DESCRIPTION
Sort table by Total Events	Click on Total Events column header to sort the table by ascending/descending order.
Sort table by Total Indicators	Click the Total Indicators column header to sort the table by ascending/descending order. Clicking on the value will open the Threat Library filtered to indicators linked to the event type as a related object.  User-created Event Types will have an Edit link located to the right of the Total Indicator value. Clicking on the Edit link will open the Edit Event Type dialog box.

## **Adding an Event Type**

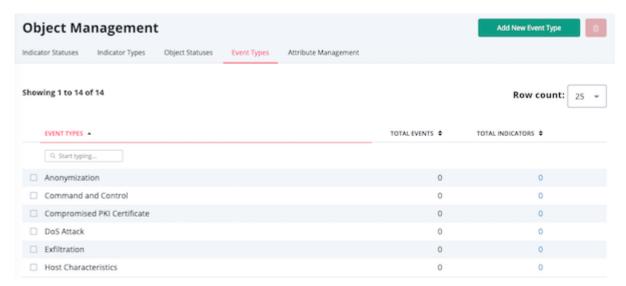
From the main menu, select Settings ■ > Object Management.
 The Object Management page opens to the Indicator Statuses tab.



2. Click the **Event Types** tab.

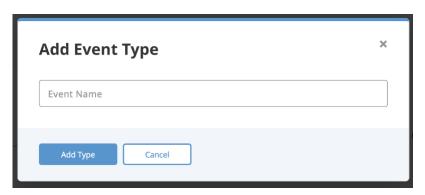


The Event Types tab opens.



3. Click Add New Event Type.

The Add Event Type dialog box opens.



- 4. Enter a **Event Name**.
- 5. Click Add Type.

## **Editing an Event Type**

You can edit user-generated event types.

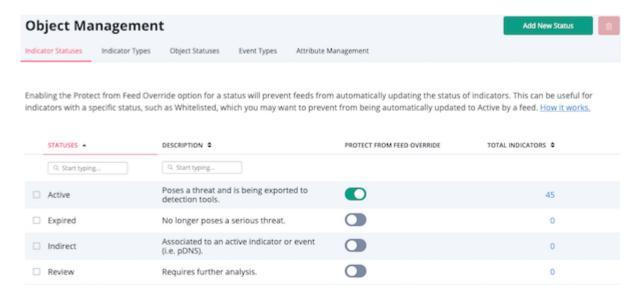


You cannot edit an Event Type provided by ThreatQ.

1. Navigate to Settings ■ > Object Management.

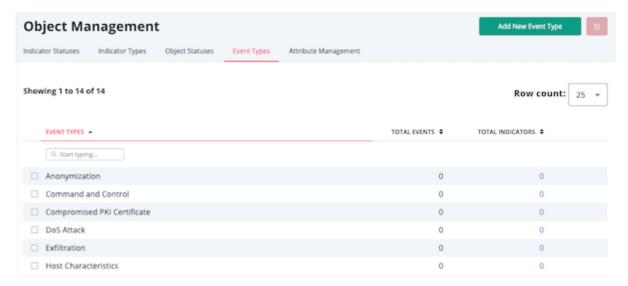


The Object Management page opens to the Indicator Statuses tab.

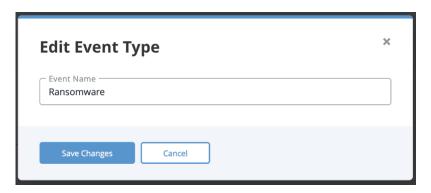


2. Click the **Event Types** tab.

The Event Types tab opens.



3. Determine the Event Type you want to edit and click **Edit** in the far right column. The Edit Event Type dialog box opens.





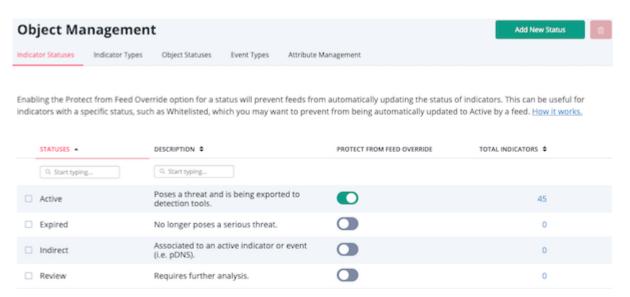
- 4. Enter a new **Event Name**.
- 5. Click **Save Changes**.

#### **Deleting an Event Type**



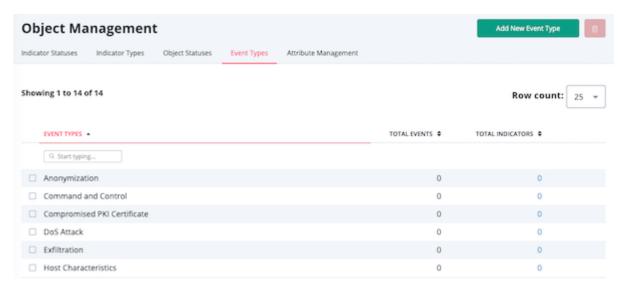
You cannot delete an Event Type provided by ThreatQ. Custom Event Types can only be deleted if there are no events using that event type.

Navigate to Settings ■ > Object Management.
 The Object Management page opens to the Indicator Statuses tab.



2. Click the **Event Types** tab.

The Event Types tab opens.



- 3. Determine the event type you want to delete and select the corresponding checkbox in the first column.
- 4. Click the **Delete icon** in the upper right hand corner.



A confirmation dialog box appears.



5. Click **Delete Types**.

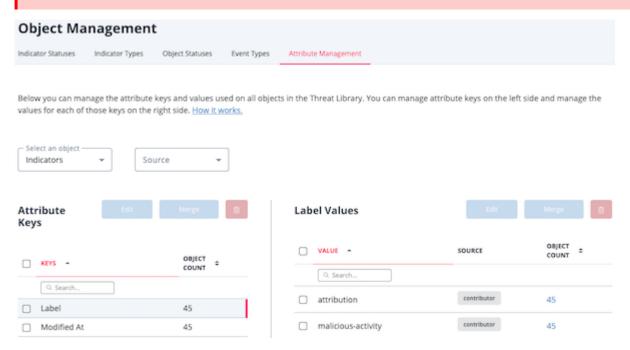


# **Attribute Management**

The Attribute Management page provides you with an overview of attribute data across the Threat Library and allows you to filter this data by Source. In addition, this page allows you to refine and consolidate your Threat Library by editing, merging, and deleting attribute keys and values associated with system objects.



Mhen you edit, merge, or delete an attribute key or value, it may take up to one minute for your changes to be reflected in the Attribute Management page and/or Threat Library.



#### **Examples:**

- If you have two attribute keys, "Country" and "Cuontry", you can use the merge attribute key option to merge both attributes and their associated values into an attribute key of "Country".
- If your Country attribute key contains values of "US", "U.S.", and "America", you can merge all of these into an attribute value of "US".

#### **Selecting an Attribute Key or Value**

To make it easier to locate the attribute you want to update, the Attribute Management page allows you to filter your view by object type, source, attribute key, and attribute value.

#### **Tips and Tricks**

- Click the up/down arrows next to a column name to sort a list in ascending/descending order.
- Click the left/right arrows and page numbers below the attribute keys or values lists to view additional list items.
- Use the Rows per page field to select the number of attribute keys or values displayed on each
- You can click on an attribute's object count to access the corresponding Threat Library object(s).



- 1. By default, the Attribute Management page lists indicator attributes. To select another object type, click the **Select an object** field and use one of the following methods to specify the object type:
  - Select the object type from the dropdown list.
  - Begin typing the object type and click it when it is displayed below the field.
- 2. To filter the attributes listed by source, click the **Source** field and use one of the following methods to specify the object source:
  - Select the source from the dropdown list.
  - Begin typing the source and click it when it is displayed below the field.
- 3. Repeat step 2 to select additional sources.
  - Each time you select a source, it is displayed to the right of the Source field. You can remove a source by clicking the X to the right of the source name.
- 4. From the Attribute Keys list, use one of the following methods to locate the attribute type you want to work with: The values for this attribute are displayed to the right of the Attribute Keys list.
  - Browse the list of attribute keys and click the attribute key.
  - Begin typing the attribute key in the Search box and click it when it is displayed below the field.
- 5. From the attribute values list, use one of the following methods to locate the value you want to work with: The values for this attribute are displayed to the right of the Attribute Keys list.
  - Browse the list of attribute values and click the attribute key.
  - Begin typing the attribute value in the Search box and click it when it is displayed below the field.

## **Editing Attribute Keys**

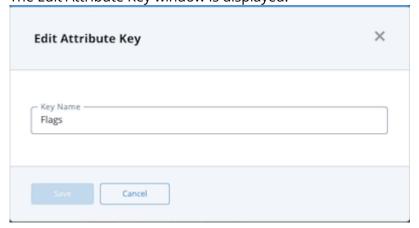
1. From the Attribute Keys list, click the checkbox next to the attribute type you want to edit.



You can only edit one attribute type at a time. If you select more than one attribute type, the Edit button is inactive.

2. Click the Edit button.

The Edit Attribute Key window is displayed.



3. Enter your changes to the attribute key.

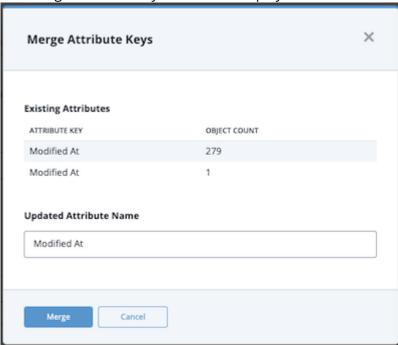


4. Click the Save button.

## **Merging Attribute Keys**

- 1. From the Attribute Keys list, click the checkbox next to the attribute types you want to merge.
- 2. Click the Merge button.

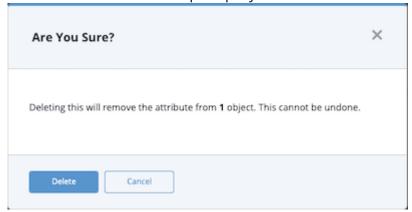
The Merge Attribute Keys window is displayed.



- 3. If desired, enter a new attribute name for the merged attributes.
- 4. Click the Merge button.

## **Deleting Attribute Keys**

- 1. From the Attribute Keys list, click the checkbox next to the attribute(s) you want to delete.
- 2. Click the trash can button.
- 3. The Are You Sure? window prompts you to confirm the deletion.



4. Click the Delete button.



## **Editing Attribute Values**

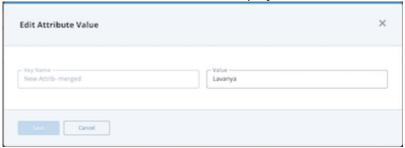
1. From the attribute values list, click the checkbox next to the attribute value you want to edit.



You can only edit one attribute value at a time. If you select more than one attribute value, the Edit button is inactive.

2. Click the Edit button.

The Edit Attribute Value window is displayed.

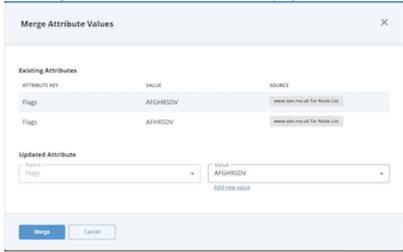


- 3. Enter your changes to the attribute value.
- 4. Click the Save button.

#### **Merging Attribute Values**

- 1. From the attribute values list, click the checkbox next to the attribute values you want to merge.
- 2. Click the Merge button.

The Merge Attribute Values window is displayed.

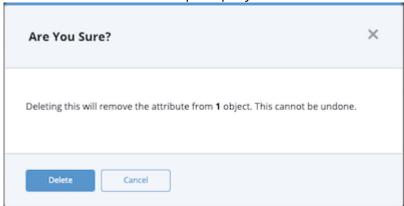


- 3. To specify a new attribute value name for the merged values , use one of the following methods:
  - Click the Value field and use the Search for attribute values field to locate an existing value
  - Click the Add new value link and enter the new value in the Type new value field.
- 4. Click the Merge button.



## **Deleting Attribute Values**

- 1. From the attribute values list, click the checkbox next to the attribute value(s) you want to delete.
- 2. Click the trash can button.
- 3. The **Are You Sure?** window prompts you to confirm the deletion.



4. Click the Delete button.



# Reports

You can export a PDF Summary of an object from an object's details page or preview panel.



Regardless of the alignment you select in the Descriptions pane, images in an object's description PDF report are displayed as left aligned.

# **Generating Reports**

Complete the following steps to export a PDF summary of an object from an object's details page.

- 1. Access the system object's details page.
- 2. Click the **Actions** button.
- 3. Click the Generate PDF option.
- 4. In the Generate PDF window, select the information you want to include in the PDF.

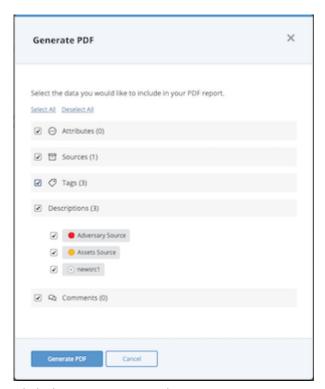


If your object has multiple descriptions, you can select all descriptions by checking the Descriptions checkbox or select specific descriptions by checking the checkbox next to the corresponding description source(s). If the object does not have a description, the Descriptions section is not displayed.



The Generate PDF modal only displays sections that have contents. For instance, if an object does not have any comments, the Comments section is not displayed.





5. Click the Generate PDF button.

The PDF summary downloads and opens in a new browser tab.



**Google Chrome Users**: Google Chrome's pop-up blocker prevents object PDF summary reports from downloading. We recommend changing your browser settings to allow pop-ups from your ThreatQ instance. See Turning Off the Pop-up Blocker in Chrome for more information.



The generated PDF may contain active links to internal and external locations. Related objects in the PDF link to an internal ThreatQ instance that may require authentication. Please be aware of potential impacts before distribution of the generated report.

## **Turning Off the Pop-Up Blocker in Chrome**

By default, Google Chrome blocks pop-ups from automatically showing up on your screen. When a pop-up is blocked, the address bar will display a pop-up blocked alert. This pop-up blocker will prevent your PDF from being downloaded. Complete the following steps to allow pop-ups from ThreatQ.

#### **Procedure:**

- 1. Go to ThreatQ where pop-ups are blocked.
- 2. In the address bar, click the **Pop-up blocked** alert icon.
- 3. Click the link for the pop-up you want to see.
- 4. To always see pop-ups for the site, select Always allow pop-ups from [your ThreatQ instance].
- 5. Click **Done**.



#### **Report Options**

You can navigate to **Settings > Report Options** to customize the PDF reports that are generated. Report options apply to all reports generated platform-wide. You can make the following customizations:

#### **Customizing the Report Header**

- 1. Select the **Settings** icon > **Report Options**.
- 2. Under **Header Banner**, complete one of the following steps:
  - Drag and drop the image you want to use as the header.
  - Click **Browse** and navigate to the image you want to use as the header.
- 3. Optionally, click Restore header banner to defaults.
- 4. Click Save.

#### **Customizing Report Text Colors**

- 1. Select the **Settings** icon > **Report Options**.
- 2. Under **Colors**, use the drop down menus to select:
  - Header Text
  - Heading Text
  - Body Text
- 3. Click **Save**.

#### Adding a Custom Disclaimer to a Report

You can add a custom disclaimer to include with your report to communicate any liabilities or limitations to the end users of the report.

- 1. Select the **Settings** icon > **Report Options**.
- 2. Under **Disclaimer**, enter your disclaimer text and then use the formatting tools to customize your message.
- 3. Click Save.

#### **Previewing Report Customization**

You can preview report customization to view a representation of a report's output.

- 1. Select the **Settings** icon > **Report Options**.
- 2. Under Customized PDF Reports, click Preview.

The sample report downloads to your computer.



# **Server Administration**

The Server Administration dropdown link is only accessible to users with Administrative and Maintenance Accounts. Clicking on this option, found under the Settings, will open the **ThreatQ Monitoring Platform** in a new tab/window.

# **ThreatQ Monitoring Platform**



The Server Administration dropdown link is only accessible to users with **Administrative** and **Maintenance** roles.

The ThreatQ Monitoring Platform provides a way for users with Administrative and Maintenance roles to monitor system resources and logs.

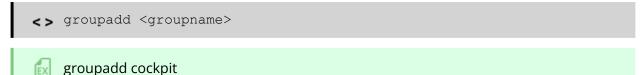
This feature is built upon Cockpit, a web-based interface that allows you to view the health of your server, system resources, as well as adjust configurations. You can access the full documentation on its operations at:

https://access.redhat.com/documentation/en-us/red\_hat\_enterprise\_linux/7/html-single/getting\_started\_with\_cockpit/index#using\_cockpit

# Creating a User Account for the ThreatQ Monitoring Platform

Since you cannot use a root user account to access the Server Administration console, you may need to use the About the Command Line Interface (CLI) to create a second non-root user account for access. Depending on your business processes, you may decide to assign ThreatQ user accounts to a specific group. However, you are not required to do so.

1. **Optional Step. You do not have to create a group for non-root users.** However, you can create one by entering the following command::



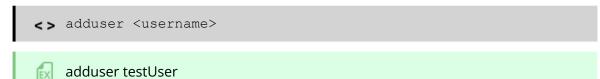
- 2. Use one of the following methods to create a user:
  - Create a user as a part of a group:

<> adduser -G <groupname> <username>

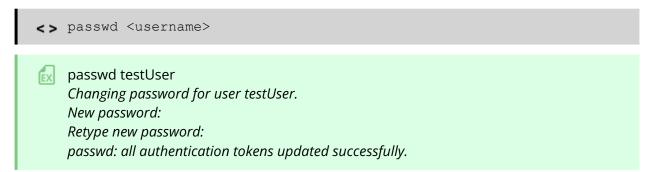




• Create a user not assigned to a group:



3. Enter the following command to create a password for the user:



4. **Optional Step.** Enter the following command to create an admin user by adding the user account to the wheel group:

```
<> adduser -G wheel <username>
```

5. Use the new user account to log into the server administrator console.

# **Accessing the ThreatQ Monitoring Platform**



Root user access is disabled for the ThreatQ Monitoring Platform.

1. Navigate to **Settings** > **Server Administration**.

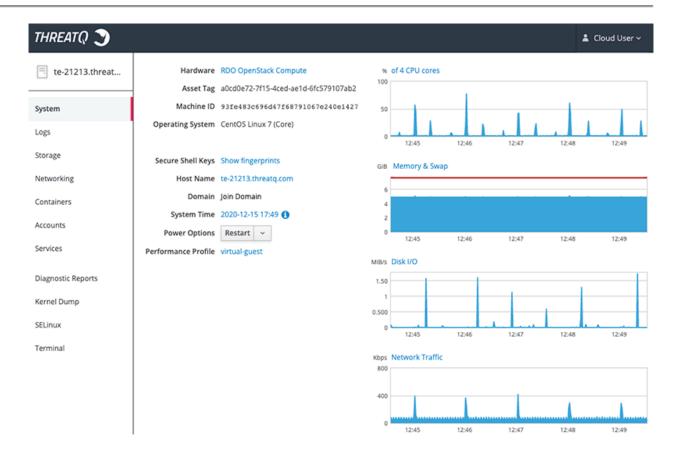


THREAT() THREATQ MONITORING PLATFORM User name Server: te-21213.threatq.com Log in with your server user account. Password Reuse my password for privileged tasks Log In

The ThreatQ Monitor Platform will load in a new tab/window.

- 2. Log into the platform using your user server credentials.
  - These credentials are not the same credentials that you use to log into the ThreatQ UI.
- 3. You will now be logged into the ThreatQ Monitoring Platform.







# **Sharing**

ThreatQ's sharing functionality allows you to control access to data collections, dashboards, and investigations at the user level or give view-only access to all users. You can assign permissions when you create a data collection, dashboard, or investigation and then update them at any time.

## **User Permission Levels**

You can assign each user one of the following permission levels:

#### PERMISSION LEVEL

#### **DESCRIPTION**

#### **Owner**

By default, the user who creates a data collection, dashboard, or investigation is designated as the owner. However, ownership can be reassigned by the owner at any time. If an owner selects a new owner, the original owner becomes an editor. In addition, if you delete an owner's user record, the system requires you to either reassign ownership to another user or delete the owner's data collections, dashboards, and investigations.

Users with owner-level permission can:

- Reassign ownership.
- Change user and group permissions for the data collection, dashboard, or investigation.
- Remove a user's permissions.
- Modify or delete the data collection, dashboard, or investigation.
- Change the name of the data collection, dashboard, or investigation.
- Pin an investigation to the Investigations menu.

#### **Editor**

Editors have similar permissions to owners but cannot re-assign ownership of or delete the data collection, dashboard, or investigation. In addition, they cannot change owner permissions.

Users with editor-level permissions can:

- Change or remove user and group permission-levels for the shared data collection, dashboard, or investigation.
- Modify the data collection, dashboard, or investigation.
- Pin an investigation to the Investigations menu.



Viewer	Viewers can access the data collection, dashboard, or investigation but cannot change it. In addition, they can view user permissions for data collections and investigations.
Private	If a user creates a data collection, dashboard, or investigation and does not assign permissions to a user or group, only that user (now the owner) can access it.

### **User Permission Levels and User Roles**

A user can assign any permission level to user accounts with the following user roles:

- Maintenance Account
- · Administrative Access
- Primary Contributor Access

However, the only permission level a user can assign to a Read Only Access user account is viewer permission.



Ownership and public viewing permissions are applied to all data collections created before upgrading to version 4.54. Any data collections created by custom integrations (instead of Threat Library) are assigned ownership permissions for the custom integration client, but are not shareable. If you want to manage a data collection used by a custom integration in Threat Library in the future, you must first create it in Threat Library and then reference it in the custom integration.

# **View-Only Permissions for All Users**

ThreatQ allows you to assign view-only permissions to all users. To do this, select a permission-level of **Everybody (Public)**. This assigns viewer permissions to all users unless they are assigned user-level permissions that are greater. For example, if I have editor permissions for the Adversary Hunt data collection and the other users have viewer permissions, when Bella (the owner) grants **Everybody** (**Public**) permissions, I retain my editor permissions. Each individual viewer is now grouped together as **Everybody** (**Public**) and no longer listed individually in the Sharing modal's **Who has access** list.

# **Sharing Notifications**

The ThreatQ Notification Center alerts you about data collection, dashboard, or investigation permission changes that affect you. As such, you receive a notification when:

- A user shares a data collection, dashboard, or investigation with you.
- A user changes your permissions to owner, editor, or viewer.
- A data collection, dashboard, or investigation you own has been shared with another user.
- Your permissions to a data collection, dashboard, or investigation have been removed.



• A user requests access to an investigation you own.

See the Sharing Notifications topic for more details.

## **Permission Conversion**

When you upgrade to version 4.54, ThreatQ updates your existing permissions as follows:

- **Data Collections** For an existing data collection, the creator is automatically assigned owner permissions. All other users are assigned **Everybody (Public)** permissions.
- **Dashboards** All users are assigned viewer permissions for ThreatQ's default dashboards and these permissions cannot be changed. All other user-created dashboards are assigned permissions based on the previous permission model. Dashboard creators have owner permissions. If a dashboard was shared with a user, the user retains the previously granted editor or viewer permissions.
- **Investigations** Maintenance Account, Administrative Access, and Primary Contributor Access users are given editor permissions for all existing investigations that have a Visibility of Shared. Read Only Access users receive viewer permissions.

If a user that created a data collection, dashboard, or investigation was deleted prior to your upgrade to 4.54/4.55, the corresponding object is assigned to the most recently created admin or super user.

# **Permission Levels and Integrations**

User-managed integrations use data collections created and maintained in the Threat Library. As such, user and group permission levels control access to these data collections.

Client-managed integrations are managed through the API. As such, user and group permissions do not control a client's ability to view, add, update or delete these data collections.

### Legacy, Client-Managed Data Collections

For existing, client-managed data collections, the user who created it is assigned owner-level permissions. All other users are assigned view-only access through **Everybody (Public)** group permissions.

### **Client-Managed Integrations**

Through the API, clients have full access to all data collections (view, add, update, and delete). As a result, the new permission levels (owner, editor, viewer) only apply when authenticating with username and password credentials (for example, as a user accessing the user interface) as opposed to authenticating with client credentials.

### **Legacy, User-Managed Data Collections**

For each existing saved data collection, the user who created it has owner-level permissions. All other users have view access through the **Everybody (Public)** group permission.

# Air Gapped Data Sync (AGDS) and Investigation Sharing

The AGDS export process does not include data collections or dashboards, but it can include investigations if the following command is included and set to Y:



--include-investigations=Y

See the Air Gapped Data Sync (AGDS) section for more information.



# **System Configuration**

# **About System Configuration**

The System Configurations page consists of the Proxy, Account Security, and General Settings tabs. These tabs allow you to enable, disable, and update multiple system-level settings. When you access the System Configurations page, the Account Security tab is displayed by default.

# System Configurations Account Security Proxy General

ТАВ	DESCRIPTION
Account Security	Configure the number of failed login attempts before a user is locked out and the number of minutes a user will be locked out before being able to reattempt login. You can also configure and enable/disable custom login banners.
Proxy	Enable and disable proxy settings.
General Settings	Configure the date and time format, indicator parsing checkbox defaults, and enable/disable the sharing of analytics data with ThreatQuotient.



# **Setting Account Lockout**

The **Enhanced Security** section of the Account Security tab allows you to specify the number of failed login attempts before a user is locked out and the number of minutes a user will be locked out before he can attempt to log in again. By default, failed login attempts are set to five and the timeout period is set to thirty minutes.

### **Configuring User Lockout Settings**

Navigate to Settings > System Configurations.
 The System Configuration page loads with the Account Security tab selected by default.



### Enhanced Security



3. Enter your changes to the following fields:

### FUNCTION DESCRIPTION

Login Attempts	The number of consecutive failed login attempts before a user's account is temporarily locked.
Account Timeout	The number of minutes an account is locked after the specified number of failed log in attempts.

4. Click the Save button to save your changes.



# **Managing Custom Login Banners**

The Require Disclaimer Acceptance section of the **Account Security** tab allows system administrators to enable a custom message displayed to all users when logging into the ThreatQ Platform. When enabled, ThreatQ users are required to review and accept the message.



In order to comply with government regulations, a customer could configure a custom banner to display a message during login requiring users to accept additional privacy and security terms.

### **Banner Behavior**

The **Require Disclaimer Acceptance** toggle allows you to enable/disable the display of the custom banner.

### Require Disclaimer Acceptance



Once enabled, all users will be required to accept the disclaimer text provided below in order to log in to their account.

### When the toggle is disabled:

- The banner title and body are visible to administrators in the **Account Security** tab, but the banner is not displayed to users upon log in.
- Users can access to the platform using only their credentials

### When the toggle is enabled:

- After a user enters their login and password, the custom banner displays. Users must click the **Accept and Continue** button to access the platform.
- If a user closes the banner without clicking the **Accept and Continue** button, he is returned to the login screen and cannot access the platform until he clicks the **Accept and Continue** button.



Users are required to click the **Accept and Continue** button each time they log into platform.

• If a user is logged out and enters a URL for a specific page in the platform, the custom banner is displayed and he must click the **Accept and Continue** button to access the specified page.

### **Enabling a Custom Banner**



Only administrators have access to enable the custom banner configuration fields in the **Account Security** tab on the *System Configuration* page.



Navigate to Settings > System Configurations.
 The System Configuration page loads with the Account Security tab selected by default.



# **System Configurations**

Account Security

Proxy

General

### **Enhanced Security**



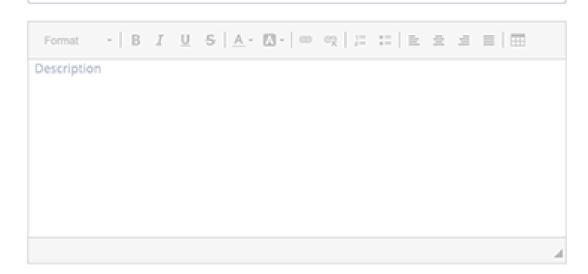
# Require Disclaimer Acceptance





Once enabled, all users will be required to accept the disclaimer text provided below in order to log in to their account.

Disclaimer Title Disclaimer Title



Save



- 2. Click the toggle switch in the Require Disclaimer Acceptance section to enable the display of the custom banner.
- 3. Enter the banner title to be displayed at the top of the banner in the Disclaimer Title field.
- 4. Enter the body of the message in the Description field.



The Description field supports standard text formatting as well as the use of links and tables.

5. Click the Save button.

The next time a user logs in, he is prompted to review and accept the custom banner before proceeding to the platform.



# **Proxy**

The Proxy configuration page allows you to enable or disable proxies.



Users are required to set their proxy server settings to use http: for their https: traffic.

# **Accessing Proxy Configuration**

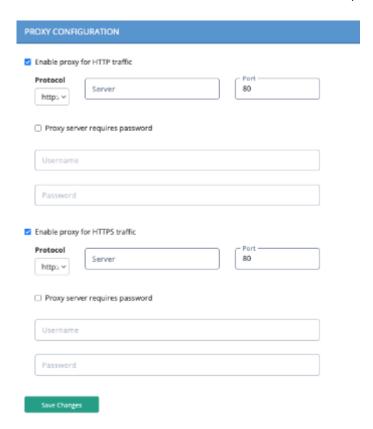
- Navigate to Settings > System Configurations.
   The System Configurations page opens to the Account Security tab selected by default.
- 2. Click the **Proxy** tab.

The Proxy Configuration tab loads.





3. Select the checkboxes for **HTTP** and **HTTPS** traffic options to expand those fields.



- 4. Enter your proxy server IP Address and Port in the field provided for both HTTP and HTTPS sections.
- 5. Optional Select the **Proxy Server Requires Password**, if your server requires a username and password, and complete the **Username** and **Password** fields. Leave the checkboxes unselected and the username and password fields blank if your server does not require this information.
- 6. Click on **Save Changes**.

### **Setting Proxy Server Settings for Commands and Custom Connectors**

PIP and YUM upgrade commands, as well as custom connectors and associated cron jobs, require that you set your proxy information in your environment files. This does not replace the process above but must be performed in addition in order to use custom connectors and the commands. Before you begin, you should collect a list of proxy exceptions. These are entries that you do not want to add to the proxy. The exceptions can be hostnames or FQDNs. In the case where DNS is not available, you can use the /etc/hosts to ensure hostname resolution is recommended.

- 1. SSH into your ThreatQ instance.
- 2. Open the environment file using the vi command:
  - vi /etc/environment
- 3. Press the **i** character to enter insert mode. Enter your following entry into the file while replacing the placeholders with your information. These settings are case-sensitive so you must include both the lowercase, ex: http, and uppercase, ex: HTTP, versions.





You can add exceptions to the no\_proxy strings to prevent specific entries that should not be forwarded to the proxy. The minimal value for no\_proxy should be the loopback IP address and "localhost" plus the TQ entry for itself "threatq". Do not use CIDR notation or wildcards with no\_proxy entries as they are not accepted formats. In that situation, list the IP addresses.

### If Proxy Server Requires a Password

```
http_proxy=http://<username>:<password>@<Proxy IP>:<Proxy Port>
HTTP_PROXY=http://<username>:<password>@<Proxy IP>:<Proxy Port>
https_proxy=http://<username>:<password>@<Proxy IP>:<Proxy Port>
HTTPS_PROXY=http://<username>:<password>@<Proxy IP>:<Proxy Port>
no_proxy=localhost,127.0.0.1,threatq,<ThreatQ IP>, <ThreatQ Hostname>
NO_PROXY=localhost,127.0.0.1,threatq,<ThreatQ IP>, <ThreatQ Hostname>
```

### If Proxy Server Does Not Require a Password

```
http_proxy=http://<Proxy IP>:<Proxy Port>
HTTP_PROXY=http://<Proxy IP>:<Proxy Port>
https_proxy=http://<Proxy IP>:<Proxy Port>
HTTPS_PROXY=http://<Proxy IP>:<Proxy Port>
no_proxy=localhost,127.0.0.1,threatq,<ThreatQ IP>, <ThreatQ Hostname>
NO_PROXY=localhost,127.0.0.1,threatq,<ThreatQ IP>, <ThreatQ Hostname>
```

4. Press the **ESC** key and enter the following command to close the editor:

```
:wq <Enter Key>
```

The next several steps will show you how to ensure that custom connector CRON jobs are able to use the proxy settings. This is achieved by sourcing the environment script so that it is available to all child sessions and applications.

5. Open the proxy.sh file using the vi command:

```
vi /etc/profile.d/proxy.sh
```

6. Press the i key to enter Insert mode and enter the following lines:

```
set -a
source /etc/environment
set +a
```

This will ensure the automatic export of any variables created.

7. Press the ESC key and enter the following command to close the editor:

```
:wq <Enter Key>
```

- 8. Log out of your session and then log back in.
- 9. Run the following command to confirm your settings:



printenv | grep -i proxy

10. Remove any other proxy-related files from the /etc/profile.d directory.

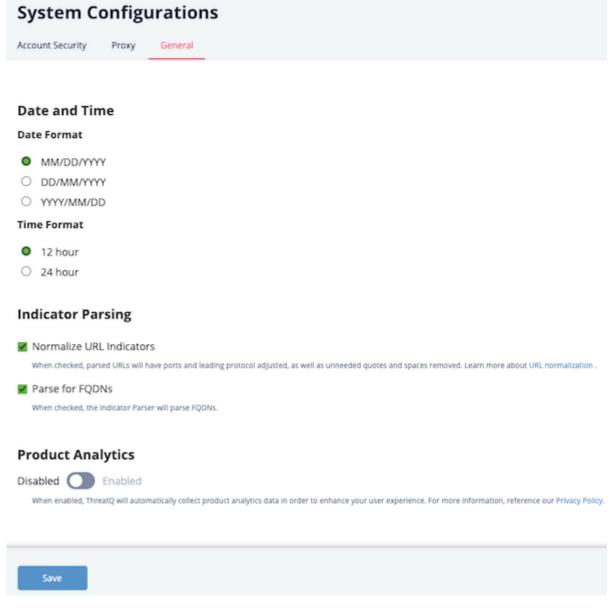


# **Configuring Time and Date Settings**



If you make changes to the date and time format while another user is working in the same ThreatQ installation, that user must refresh his browser for the changes to take effect.

- 1. Navigate to **Settings** > **System Configurations**.
- 2. Click the **General** tab.



- 3. Select the desired Date Format. Options include: MM/DD/YYYY, DD/MM/YYYY, YYYY/MM/DD
- 4. Select the desired **Time Format**. Options include: 12 hour, 24 hours.
- 5. Click the **Save** button.



# **Configuring Indicator Parsing Presets**

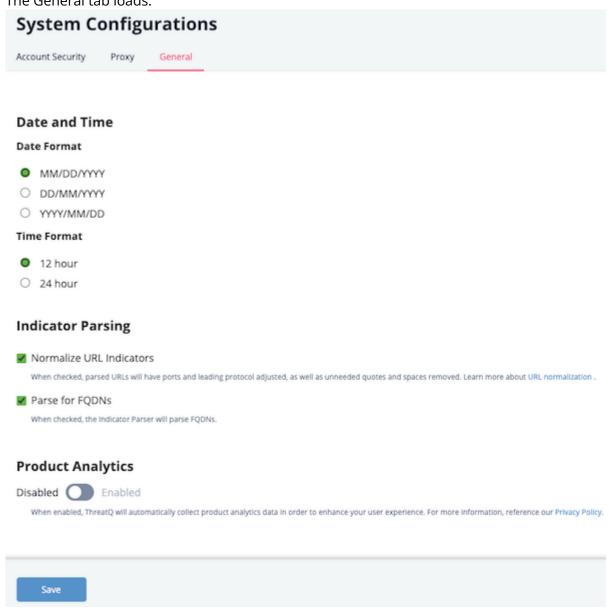
Users with Maintenance and Administrator roles can configure the default state of the **Normalize URL Indicator** and **Parse for FQDNs** checkboxes for the **Parse for Indicators** option of the Add Indicators dialog box.



Setting these default states does not lock the checkboxes. Users can select and deselect each option when parsing for an indicator in the Parse for Indicators dialog box.

- 1. Navigate to **Settings** > **System Configurations**.
- 2. Click the **General** tab.

The General tab loads.



3. In the Indicator Parsing section, set the following options:



OPTION	DESCRIPTION
Normalize URL Indicators	When checked, parsed URLs will have ports and leading protocol adjusted, as well as unneeded quotes and spaces removed.
Parse for FQDNs	When checked, the Indicator Parser will parse FQDNs from the text and derive FQDN indicators from URLs in the text.  Example (checked): URL: https://tqexample.com/table.jspa? query_string_example Indicators created:  o tqexample.com/table.jspa (the URL)  tqexample.com (the derived FQDN from the URL) When unchecked, the Indicator Parser will not generate FQDN indicators from the parsed text.  Example (unchecked): URL: https://tqexample.com/table.jspa? query_string_example Indicator created:  tqexample.com/table.jspa (the URL)

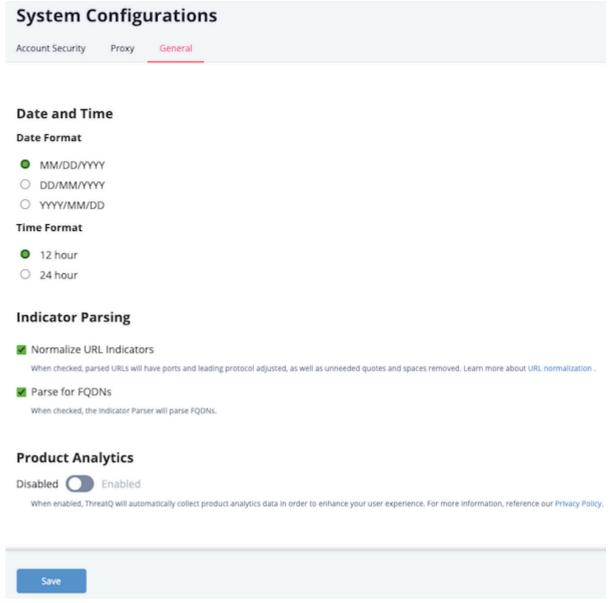
4. Click the **Save** button.



# **Opt In/Out of Product Analytics**

The Product Analytics toggle allows you to disable/enable the sharing of analytics data with ThreatQuotient. Enabling analytics allows ThreatQuotient to collect anonymized data on user actions to improve the overall user experience.

- 1. Navigate to **Settings** > **System Configurations**.
- 2. Click the **General** tab.



- 3. In the Product Analytics section, click the toggle button to change the setting from Disabled to Enabled or vice versa.
- 4. Click the **Save** button.



# **System Objects**

# **About System Objects**

System objects are threat data ingested or manually added to your Threat Library. ThreatQ is seeded with the following system object types:

SYSTEM OBJECT	DESCRIPTION	RELATED TOPICS
Adversaries	Individuals or groups that attempt to perform malicious actions against other individuals or organizations.	Adversaries
Assets	Tangible or intangible items of value to stakeholders.	Assets
Attack Patterns	Descriptions of methods used to exploit software.	Attack Patterns
Campaigns	Groups of behaviors that describe malicious activities taken against specific targets over a period of time.	Campaigns
Courses of Action	A combination of risk response measures taken to address or prevent malicious attacks.	Courses of Action
Events	Objects that focus on temporal incidents that have significant security impact.	About Events
Exploit Targets	Identified vulnerabilities in a system, software, or network that can be targeted by tactics, techniques, and procedures (TTP).	Exploit Targets
Files	Received from various intelligence providers and may contain technical cybersecurity data such as Indicator , Adversary , and Malware samples.	Files



SYSTEM OBJECT	DESCRIPTION	RELATED TOPICS
Identities	Contain basic identifying information for targeted groups such as information sources, threat actor identities, and targets of attack.	Identities
Incidents	Records of any violation of an organization's established security/network policy that may compromise security, integrity, or general access.	Incidents
Indicators	Information that describes or identifies methods used to defeat security controls, exploit vulnerabilities, and gain unauthorized access to an internal network. Indicators can also describe malicious reconnaissance to gather technical information, malicious cyber command and control, and any other attribute of cyber security whose disclosure is prohibited by law.	About Indicators
Intrusion Sets	Grouped sets of adversarial behaviors and resources, sometimes referred to as attack packages, used to target an individual organization.	Intrusion Sets
Malware	Targets devices, services, and networks with the intent to gain unauthorized access or damage a network or programmable device.	Malware
Notes	STIX 2.1 objects that provide further context and/or additional analysis.	Notes
Reports	Contain information and related details for a specific threat such as Malware .	Reports
Signatures	Contain the blueprints or patterns associated with a malicious attack on a network or system.	Signatures
STIX	Refers to data in the STIX (Structured Threat Information eXpression) format. STIX is a standardized XML programming language for conveying data about cybersecurity threats.	About STIX



SYSTEM OBJECT	DESCRIPTION	RELATED TOPICS
Tasks	Allow you to create and assign tasks to yourself or other users in the platform.	Tasks
Tools	A legitimate application that can be leveraged to perform malicious activities.	Tools
TTP	Describes how an intruder may attempt to access your system.	TTP
Vulnerabilities	Applications that can be exploited to infiltrate systems/ networks.	Vulnerabilities



### **Adversaries**

An Adversary is an individual or group that attempts to perform malicious actions against another individual or organization.

Use the steps below to create, edit and delete an Adversary.

### **Adding Adversaries**

1. Go to **Create > Adversary**.

The Add an Adversary window is displayed. Add An Adversary Add new source Description V B I U S A V M V Ø ☐ ☐ ■ V □ ■ V □ Paragraph Related Objects (optional) All Objects

- 2. Enter a name.
- 3. Select a **Source** from the dropdown provided.



You can also click the **Add a New Source** option if the desired source is not listed in the drop-down list. If administrators have enabled TLP view settings, you can select a TLP label for the new source in the dropdown list provided. See the Traffic Light Protocol (TLP) topic for more information on TLP schema.

4. Enter a description.



Any description you add during object creation defaults to a Source value of ThreatQ System.

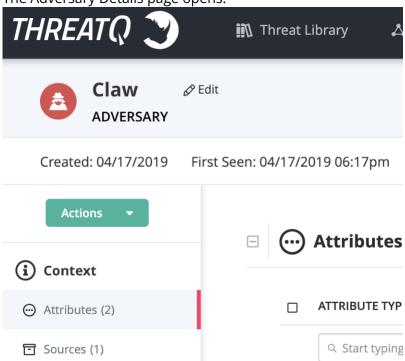
- 5. Select any **Related Objects** you need to link to the adversary. This field is optional.
- 6. Click the **Add Adversary** button.

### **Adding Context**

See the About Object Details section and its topics for details on adding context to an object such as adding sources, attributes, and related objects.

### **Editing Adversaries**

Locate and click the adversary.
 The Adversary Details page opens.





2. Click on **Edit** next to the Adversary name. The Edit Adversary dialog box opens.

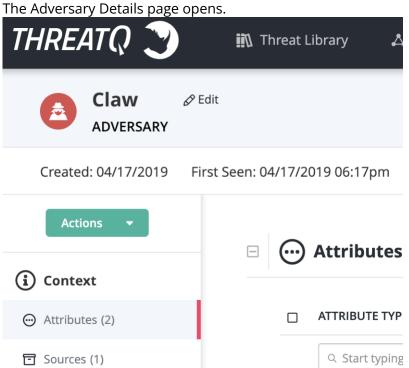


- 3. Make the desired change to the Adversary name.
- 4. Click the Save Adversary button.

### **Deleting Adversaries**

1. Locate and click the adversary.

The Adversary Details page one



2. Click the **Actions** menu and select **Delete Adversary**. A confirmation dialog box appears.





3. Click the **Delete Adversary** button.



### **Assets**

Assets are tangible or intangible items of value to stakeholders. An asset's value is usually based on the impact of the loss of use of the asset. For instance, a company's billing application is a high value asset since the loss of access to this application impacts revenue.

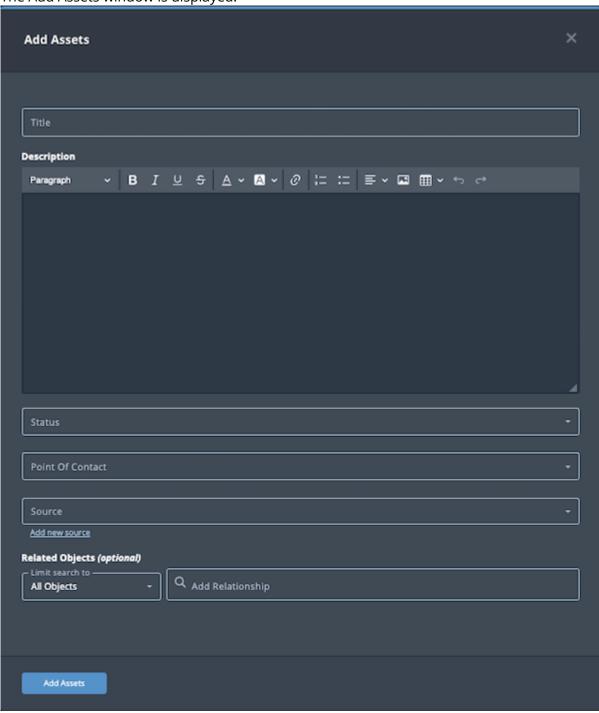
Use the steps below to create, edit and delete Assets.



# **Adding Assets**

1. Go to **Create > Assets**.

The Add Assets window is displayed.



2. Populate the following fields:



FIELD	DESCRIPTION
Title	Add an asset title.
Description	Enter a brief description of the asset.  Any description you add during object creation defaults to a Source value of ThreatQ System.
Status	Optional field. Click the Status field to assign a status to the assets object.
	Asset statuses are configured in the Object Statuses tab in the Object Management page. If none are configured, this field is not displayed.
Point of Contact	Optional field. Click the field to select the ThreatQ display name of the point of contact for the asset.
Source	Select a <b>Source</b> from the dropdown list provided. You can also click the <b>Add a New Source</b> option if the desired source is not listed in the drop-down list. If administrators have enabled TLP view settings, you can select a TLP label for the new source in the dropdown list provided. See the Traffic Light Protocol (TLP) topic for more information on TLP schema.

- 3. Select any **Related Objects** you need to link to the asset. This field is optional.
- 4. Click **Add Assets**.

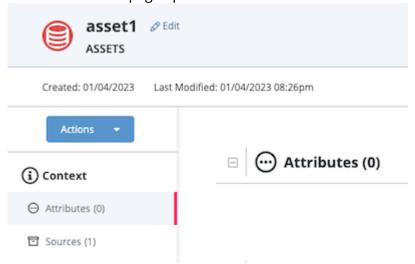
# **Adding Context**

See the About Object Details section and its topics for details on adding context to an object such as adding sources, attributes, and related objects.



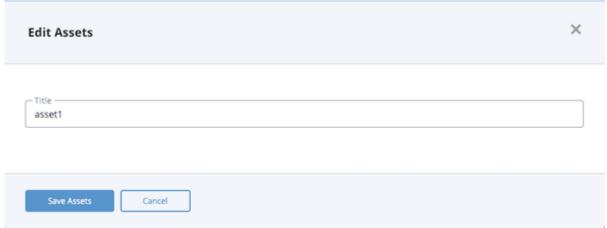
# **Editing Assets**

1. Locate and click the assets object. The Assets Details page opens.



2. Click the **Edit** option next to the Assets object name.

The Edit Assets window is displayed.

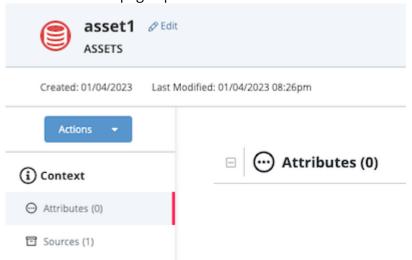


- 3. Make the desired change to the Asset name.
- 4. Click the **Save Assets** button.



# **Deleting Assets**

1. Locate and click the assets object. The Asset Details page opens.



2. Click the **Actions** menu and select **Delete Assets**. The Are You Sure window prompts you confirm the deletion.



3. Click the **Delete Assets** button.



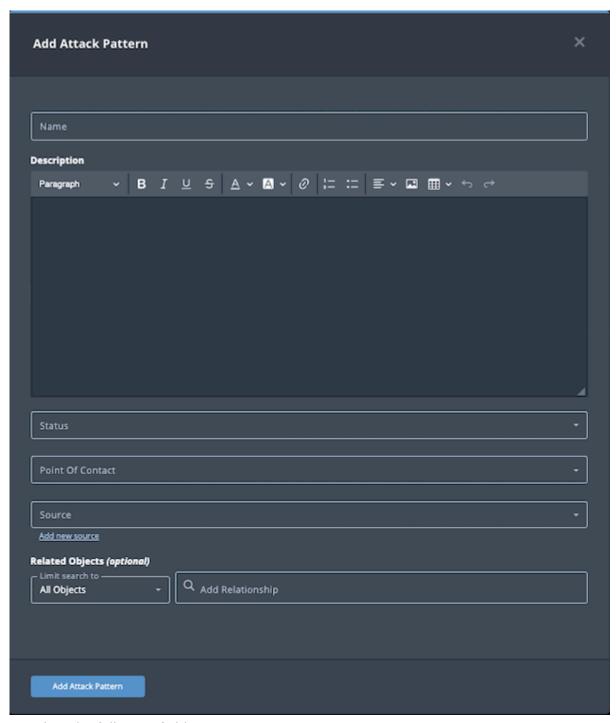
# **Attack Patterns**

Attack Pattern are descriptions of methods used to exploit software. Use the steps below to create, edit and delete an Attack Pattern.

# **Adding an Attack Patterns**

Go to Create > Attack Pattern.
 The Add Attack Pattern window is displayed





2. Populate the following fields:

# FIELDDESCRIPTIONNameAdd an attack pattern name.DescriptionEnter a brief description of the attack pattern.



FIELD	DESCRIPTION
	Any description you add during object creation defaults to a Source value of ThreatQ System.
Status	Optional field. Click the Status field to assign a status to the attack pattern object.
	Attack pattern statuses are configured in the Object Statuses tab in the Object Management page. If none are configured, this field is not displayed.
Point of Contact	Optional field. Click the field to select the ThreatQ display name of the point of contact for the attack pattern.
Source	Select a <b>Source</b> from the dropdown list provided. You can also click the <b>Add a New Source</b> option if the desired source is not listed in the drop-down list. If administrators have enabled TLP view settings, you can select a TLP label for the new source in the dropdown list provided. See the Traffic Light Protocol (TLP) topic for more information on TLP schema.

- 3. Select any **Related Objects** you need to link to the attack pattern. This field is optional.
- 4. Click Add Attack Pattern.

# **Adding Context**

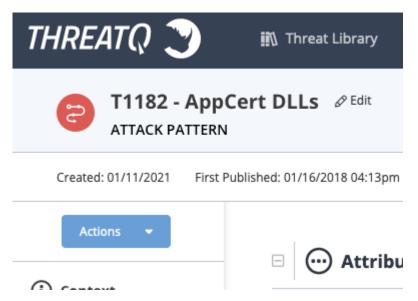
See the About Object Details section and its topics for details on adding context to an object such as adding sources, attributes, and related objects.

# **Editing an Attack Pattern**

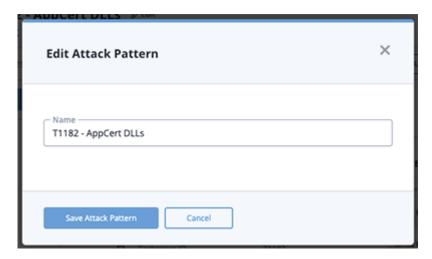
1. Locate and click on the attack pattern.



The Attack Pattern's detail page opens.



2. Click on **Edit** next to the Attack Pattern's name. The Edit Attack Pattern dialog box opens.



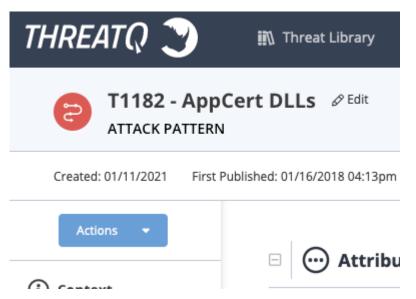
3. Make the desired change to the Attack Pattern name and click **Save Attack Pattern**.

# **Deleting an Attack Pattern**

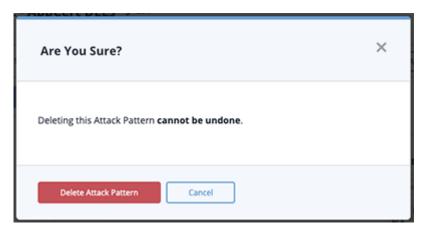
1. Locate and click on the Attack Pattern.



The Attack Pattern's details page opens.



2. Click on the **Actions** menu and select **Delete Attack Pattern**. A confirmation dialog box appears.



3. Click on **Delete Attack Pattern**.



# Campaigns

A Campaign is a group of behaviors that describes malicious activities taken against specific targets over a period of time.

Use the steps below to create, edit and delete a Campaign.



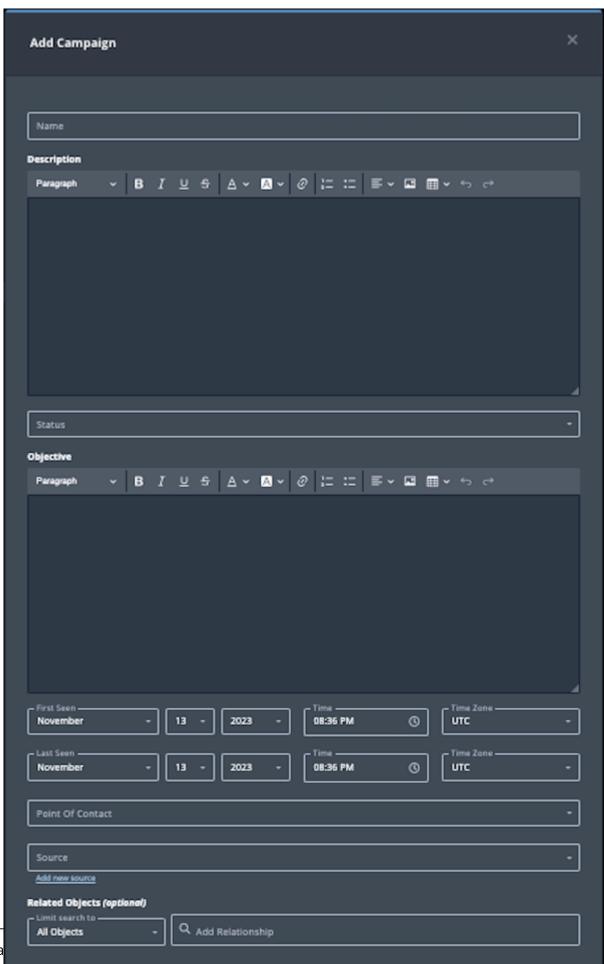
# **Adding a Campaign**



1. Go to **Create > Campaign**.

The Add Campaign window is displayed.







### 2. Populate the following fields:

FIELD	DESCRIPTION
Name	Add a campaign name.
Description	Enter a brief description of the campaign.  Any description you add during object creation defaults to a Source value of ThreatQ System.
Status	Optional field. Click the Status field to assign a status to the campaign object.
	Campaign statuses are configured in the Object Statuses tab in the Object Management page. If none are configured, this field is not displayed.
Objective	Add a summary of the campaign's objective.
First Seen/Last Seen	Select the first and last seen dates and times.
Point of Contact	Optional field. Click the field to select the ThreatQ display name of the point of contact for the campaign.
Source	Select a <b>Source</b> from the dropdown list provided. You can also click the <b>Add a New Source</b> option if the desired source is not listed in the drop-down list. If administrators have enabled TLP view settings, you can select a TLP label for the new source in the dropdown list provided. See the Traffic Light Protocol (TLP) topic for more information on TLP schema.

3. Select any **Related Objects** you need to link to the campaign. This field is optional.



4. Click the Add Campaign button.

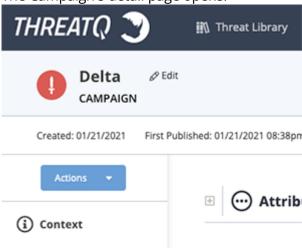
## **Adding Context**

See the About Object Details section and its topics for details on adding context to an object such as adding sources, attributes, and related objects.

## **Editing a Campaign**

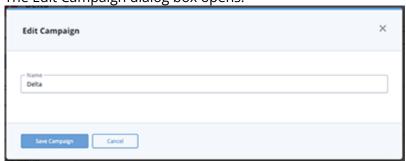
1. Locate and click on the Campaign.

The Campaign's detail page opens.



2. Click on **Edit** next to the Campaign's name.

The Edit Campaign dialog box opens.



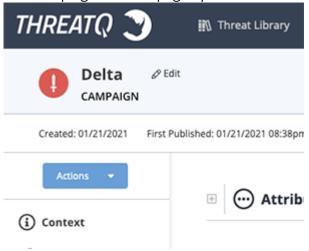
3. Make the desired change to the Campaign name and click **Save Campaign**.

## **Deleting a Campaign**

1. Locate and click on the Campaign.



The Campaign's details page opens.



2. Click on the **Actions** menu and select **Delete Campaign**.

A confirmation dialog box appears.



3. Click on **Delete Campaign**.



# **Courses of Action**

Courses of Action are a combination of risk response measures taken to address or prevent malicious attacks.

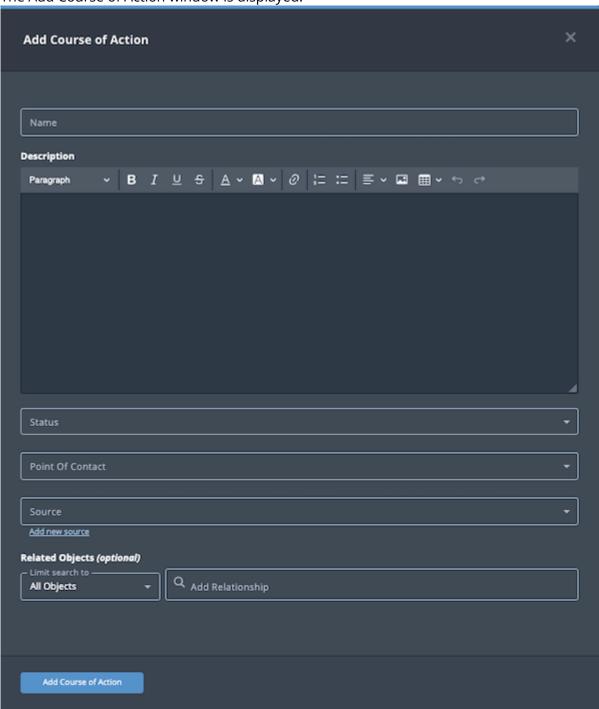
Use the steps below to create, edit and delete a Course of Action.



# **Adding a Course of Action**

1. Go to **Create > Course of Action**.

The Add Course of Action window is displayed.



2. Populate the following fields:



FIELD	DESCRIPTION
Name	Add the course of action's name.
Description	Enter a brief description of the course of action.
	Any description you add during object creation defaults to a Source value of ThreatQ System.
Status	Optional field. Click the Status field to assign a status to the course of action.
	Course of action statuses are configured in the Object Statuses tab in the Object Management page. If none are configured, this field is not displayed.
Point of Contact	Optional field. Clink the field to coloot the
Point of Contact	Optional field. Click the field to select the ThreatQ display name of the point of contact for the course of action.
Source	Select a <b>Source</b> from the dropdown list provided. You can also click the <b>Add a New Source</b> option if the desired source is not listed in the drop-down list. If administrators have enabled TLP view settings, you can select a TLP label for the new source in the dropdown list provided. See the Traffic Light Protocol (TLP) topic for more information on TLP schema.

- 3. Select any **Related Objects** you need to link to the Course of Action. This field is optional.
- 4. Click Add Course of Action.



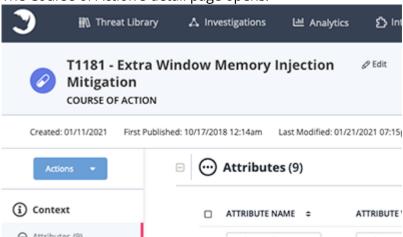
## **Adding Context**

See the About Object Details section and its topics for details on adding context to an object such as adding sources, attributes, and related objects.

### **Editing a Course of Action**

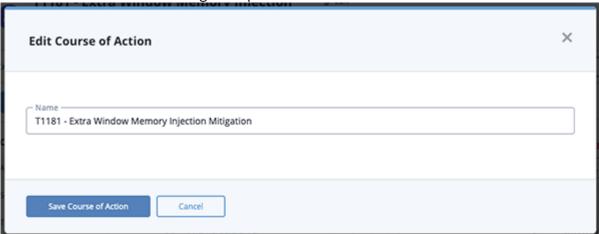
1. Locate and click on the Course of Action.

The Course of Action's detail page opens.



2. Click on **Edit** next to the Course of Action's name.

The Edit Course of Action dialog box opens.



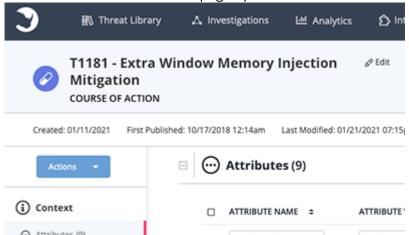
3. Make the desired change to the Course of Action's name and click **Save Course of Action**.

### **Deleting a Course of Action**

1. Locate and click on the Course of Action.

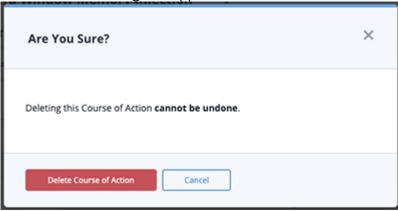


The Course of Action's details page opens.



2. Click on the **Actions** menu and select **Delete Course of Action**.

A confirmation dialog box appears.



3. Click on **Delete Course of Action**.



# **Events**

#### **About Events**

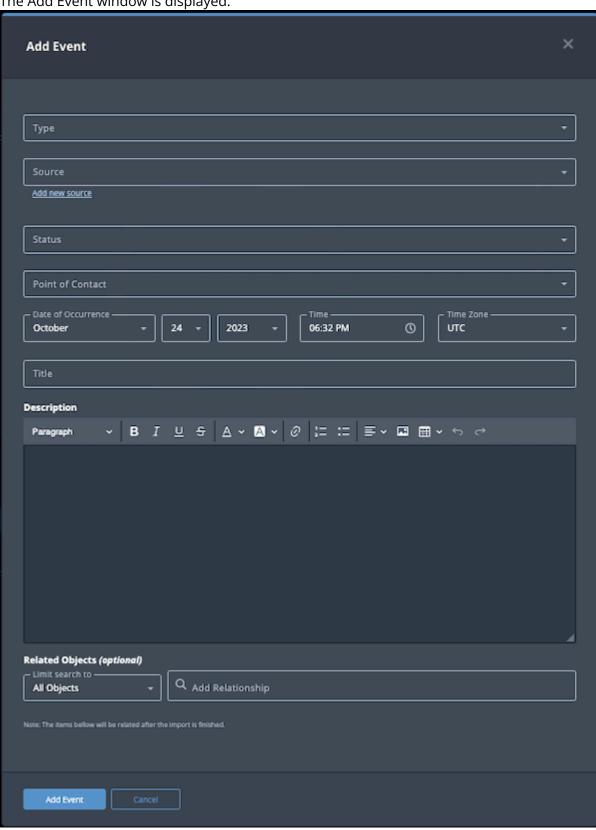
Events are objects that focus on temporal incidents that have significant security impact. Use the steps below to create, edit and delete an Event.



### **Adding Events**

1. Go to **Create > Event**.

The Add Event window is displayed.





# 2. Populate the following fields:

FIELD	DESCRIPTION
Туре	Click this field to select the event type from the dropdown list.
Source	Select a <b>Source</b> from the dropdown list provided. You can also click the <b>Add a New Source</b> option if the desired source is not listed in the drop-down list. If administrators have enabled TLP view settings, you can select a TLP label for the new source in the dropdown list provided. See the Traffic Light Protocol (TLP) topic for more information on TLP schema.
Status	Optional field. Click the Status field to assign a status to the event.  Event statuses are configured in the Object Statuses tab in the Object Management page. If none are configured, this field displays a value of None.
Point of Contact	Optional field. Click the field to select the ThreatQ display name of the point of contact for the event.
Date of Occurrence/Time/Time Zone	Use these fields to add the date and time of the event.
Title	Add an Event Title.
Description	Enter a brief description of the event.



FIELD DESCRIPTION



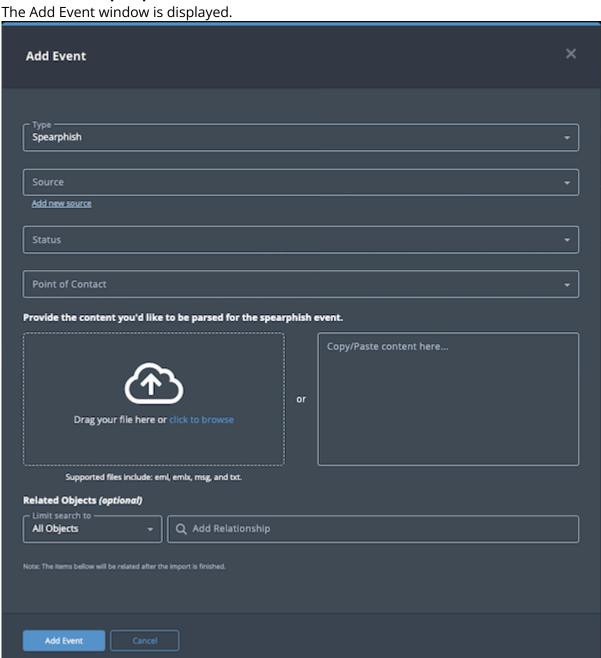
Any description you add during object creation defaults to a Source value of ThreatQ System.

- 3. Select any **Related Objects** you need to link to the event. This field is optional.
- 4. Click **Add Event**.



#### Importing Events with the Spearphish Parser

1. Go to **Create > Spearphish Parser**.



2. Populate the following fields:

**FIELD** 

**DESCRIPTION** 

Type

This field defaults to a value of Spearphish.



**FIELD** 

11220	DESCRIPTION
Source	Select a <b>Source</b> from the dropdown list provided. You can also click the <b>Add a New Source</b> option if the desired source is not listed in the drop-down list. If administrators have enabled TLP view settings, you can select a TLP label for the new source in the dropdown

Status

Optional field. Click the Status field to assign a status to the event.

list provided. See the Traffic Light Protocol (TLP) topic for more information on TLP

DESCRIPTION



schema.

Event statuses are configured in the Object Statuses tab in the Object Management page. If none are configured, this field is not displayed.

Point of Contact

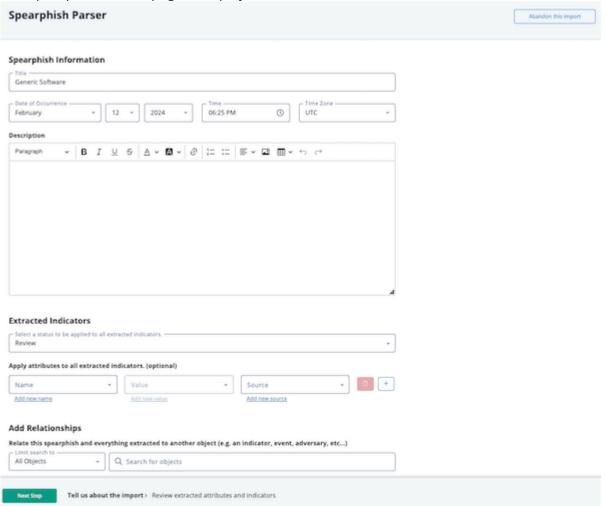
Optional field. Click the field to select the ThreatQ display name of the point of contact for the event.

- 3. Use one of the following methods to upload the file to be parsed:
  - O Drag the file to the window.
  - Click the click to browse link to access your File Finder/File Explorer and select the file.
  - Paste the email content into the text box on the right.
- 4. Select any **Related Objects** you need to link to the event. This field is optional.



5. Click Add Event.

The Spearphish Parser page is displayed.

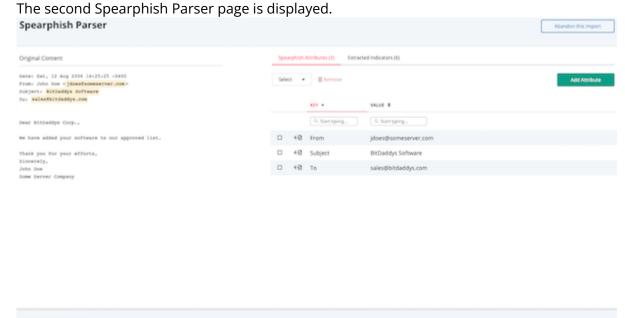


- 6. The Spearphish Parser page consists of three sections that allow you to review and update the following information:
  - Spearphish Information Allows you to review and update the event information extracted from the file you uploaded.
  - Extracted Indicators Allows you to specify the status and attributes to be applied to all extracted indicators.
  - Add Relationships Allows you to add relationships to the spearphish event and any other extracted object.



7. Click the **Next Step** button.

Tell us about the import > Review extracted attributes and indicators



8.

#### **Adding Context**

See the About Object Details section and its topics for details on adding context to an object such as adding sources, attributes, and related objects.

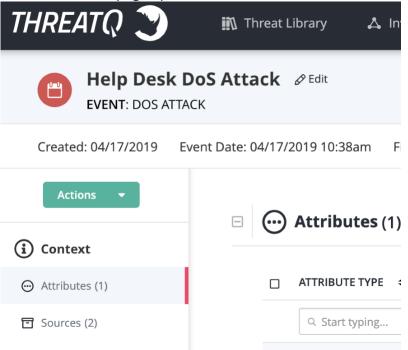
#### **Editing Events**

The Edit Even window allows you to update an Event's title, type and date. You can also update the Event's point of contact, status and type by clicking the corresponding fields located in the top-right of the Event's Object Details page.

1. Locate and click on the event.

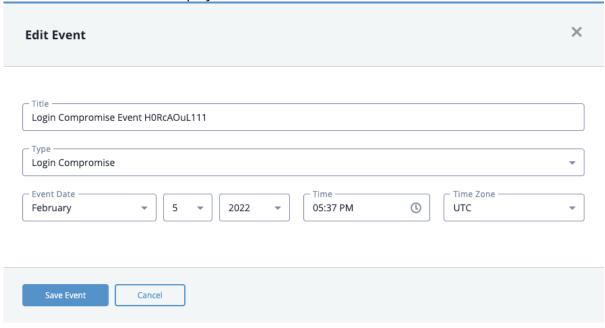


The Event Details page opens.



2. Click on **Edit** next to the Event name.

The Edit Event window is displayed.

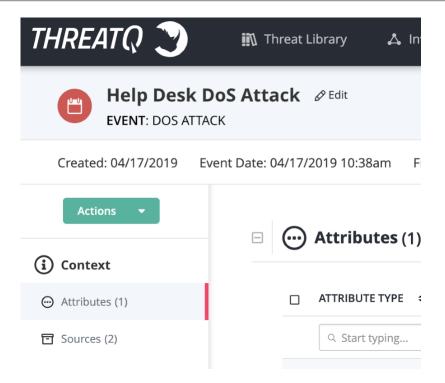


- 3. Enter your changes.
- 4. Click the **Save Event** button.

#### **Deleting Events**

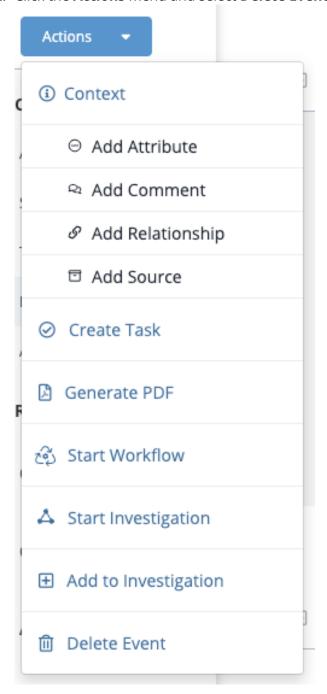
Locate and click the event.
 The Events Details page opens.



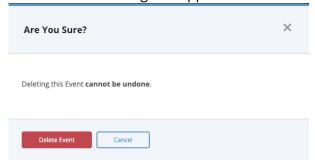




2. Click the **Actions** menu and select **Delete Event**.



A confirmation dialog box appears.





3. Click the **Delete Event** button.



### **Parsing for Events**

ThreatQ gives you the option to import a file, parse it for events, and add those events to your Threat Library. During the import process you can assign a source, status, point of contact and a relationship to the imported events.

#### **Importing Events with the Spearphish Parser**

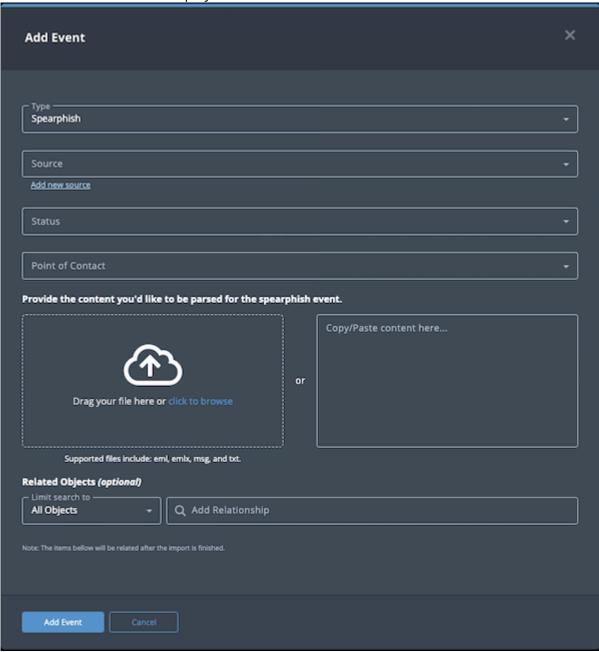


During the import process you can click the **Abandon this Import** button to stop the import process without adding any of the import file data.



1. Go to **Create > Spearphish Parser**.

The Add Event window is displayed.



2. Populate the following fields:

FIELD	DESCRIPTION
Туре	This field defaults to a value of Spearphish.
Source	Select a <b>Source</b> from the dropdown list provided.



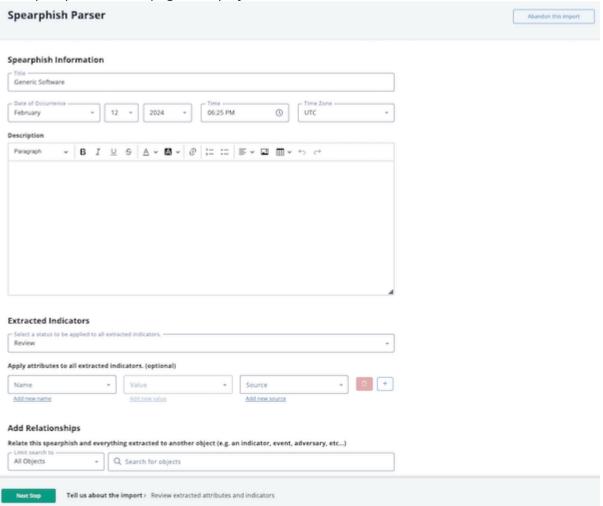
FIELD	DESCRIPTION
	You can also click the <b>Add a New Source</b> option if the desired source is not listed in the drop-down list. If administrators have enabled TLP view settings, you can select a TLP label for the new source in the dropdown list provided. See the Traffic Light Protocol (TLP) topic for more information on TLP schema.
Status	Optional field. Click the Status field to assign a status to the event.
	Event statuses are configured in the Object Statuses tab in the Object Management page. If none are configured, this field is not displayed.
Point of Contact	Optional field. Click the field to select the ThreatQ display name of the point of contact for the event.

- 3. Use one of the following methods to upload the file to be parsed:
  - O Drag the file to the window.
  - Click the click to browse link to access your File Finder/File Explorer and select the file.
  - Paste the email content into the text box on the right.
- 4. Select any **Related Objects** you need to link to the event. This field is optional.



5. Click Add Event.

The Spearphish Parser page is displayed.



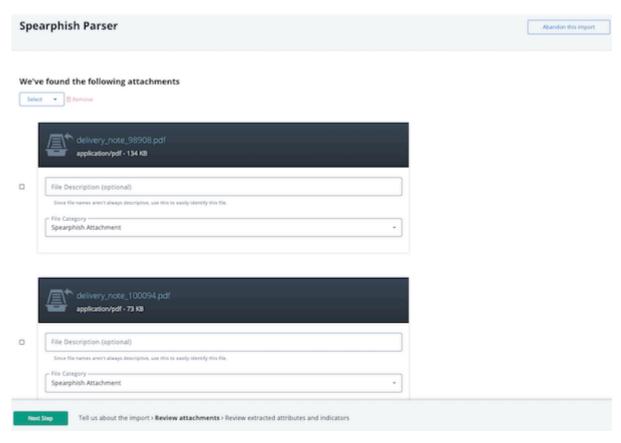
- 6. The Spearphish Parser page consists of three sections that allow you to review and update the following information:
  - **Spearphish Information** Allows you to review and update the event information extracted from the file you uploaded.
  - **Extracted Indicators** Allows you to specify the status and attributes to be applied to all extracted indicators.
  - Add Relationships Allows you to add relationships to the spearphish event and any other extracted object.
- 7. Click the **Next Step** button.

The second Spearphish Parser screen displays any attachments associated with the imported email. You can import these attachments or remove them from the import by checking the checkbox to the left of the attachment and clicking the Remove option.



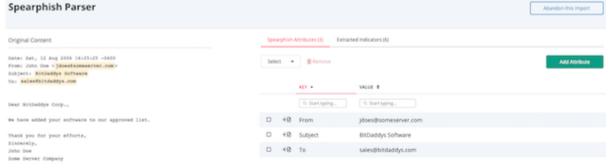
If the imported email did not include attachments, ThreatQ bypasses this screen and takes you directly to the third Spearphish Parser page.





8. Click the **Next Step** button.

The third Spearphish Parser page is displayed.





- 9. The third Spearphish Parser page allows you to review the attributes and indicators to be imported. From this page, you can:
  - Add/remove an attribute From the Spearphish Attributes tab, click the Add Attribute
    button and enter the attribute details in the Add Attribute window. To remove an
    attribute, check the checkbox located to the left of the attribute key. Then, click the
    Remove option.



- Add/remove an indicator From the Extracted Indicators tab, click the Add Indicator button and enter the indicator details in the Add Indicator window. To remove an indicator, check the checkbox located to the left of the indicator value. Then, click the Remove option.
- Add information to an indicator Check the checkbox located to the left of the indicator you want to update. Then, click the Add Info option to access the Add Info window. Enter your changes in the Set Status or Add Comment tab and click the Add Attributes button.
- 10. Click the **Create Spearphish** button.

The spearphish event is ingested into the Threat Library.



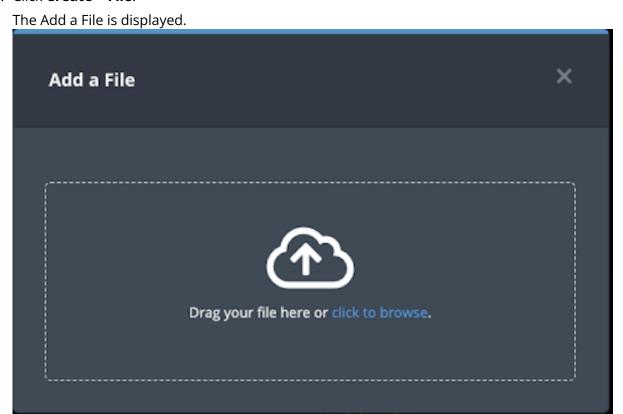
# **Files**

Files are received from various intelligence providers and may contain technical cybersecurity data such as Indicator , Adversary , and Malware samples.

Use the steps below to create, edit and delete a File.

## **Adding Files**

1. Click Create > File.

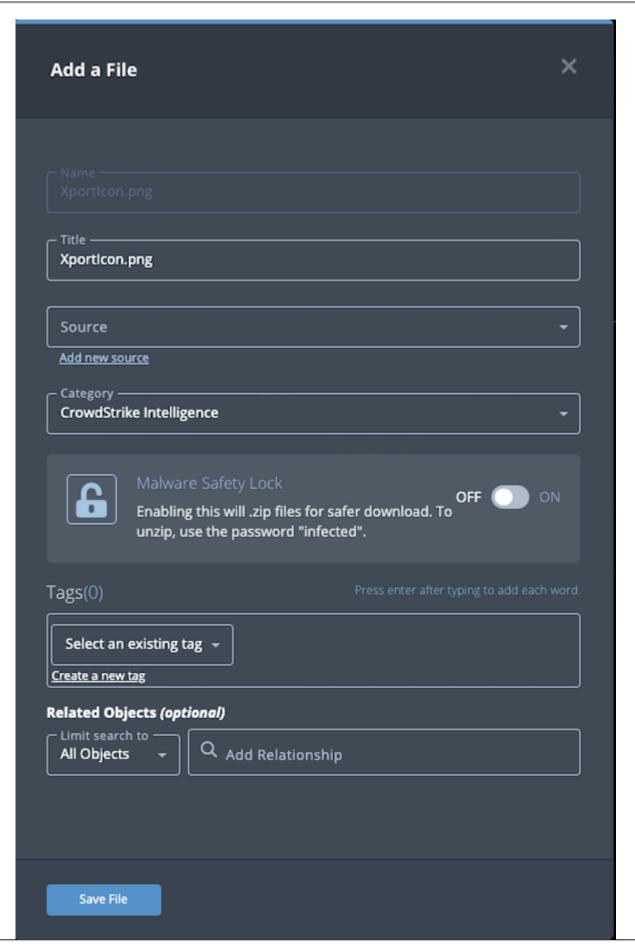


2. Drag the file into the dialog box or browse and locate the file.



The Add a File window displays additional fields.







- 3. Update the **Title** if desired.
- 4. Select a **Source** from the dropdown list provided.

You can also click the **Add a New Source** option if the desired source is not listed in the drop-down list. If administrators have enabled TLP view settings, you can select a TLP label for the new source in the dropdown list provided. See the Traffic Light Protocol (TLP) topic for more information on TLP schema.

- 5. Select a **Category**.
- 6. Select whether to have the Malware Safety Lock on or off.



Enabling the safety lock will create a password-protected .zip file so any malware is safer for download. The system default password is "**infected**."

7. Add any desired tags.



Tags added will appear on the File's Details page.

- 8. Select any **Related Objects** you need to link to the file. This field is optional.
- 9. Click Save File.

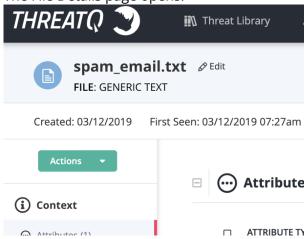
### **Adding Context**

See the About Object Details section and its topics for details on adding context to an object such as adding sources, attributes, and related objects.

## **Editing Files**

1. Locate and click on the file.

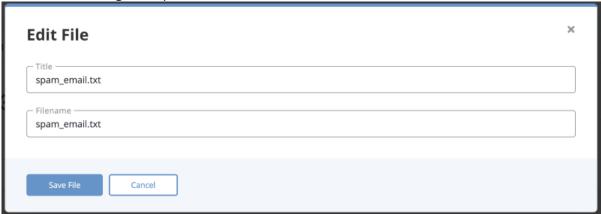
The File Details page opens.



2. Click on **Edit** next to the File name.



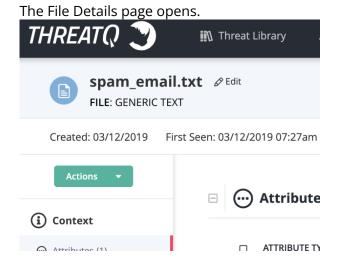
The Edit File dialog box opens.



- 3. Make the desired change to the File Name.
- 4. Click on Save File.

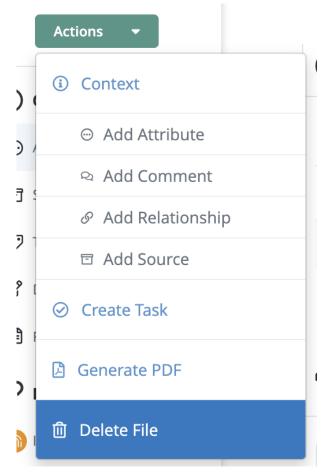
## **Deleting Files**

1. Locate and click on the file.





2. Click on **Actions** menu and select **Delete File**.



A confirmation dialog box appears.



3. Click on **Delete File.** 



# **Identities**

An Identity contains basic identifying information for targeted groups such as information sources, threat actor identities, and targets of attack.

Use the steps below to create, edit and delete an Identity.

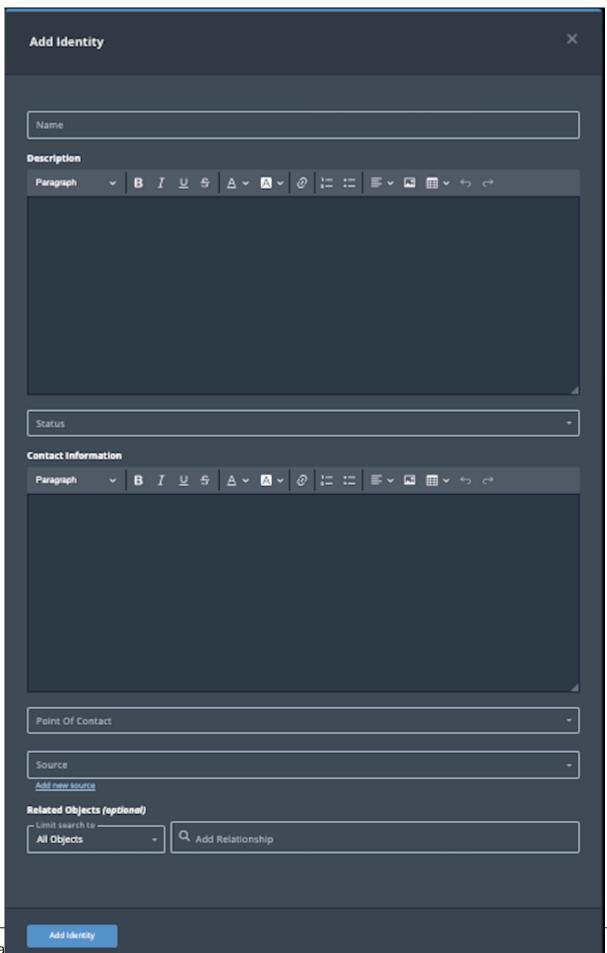


# **Adding an Identity**



Go to Create > Identity.
 The Add Identity window is displayed.





Threa Version 5.27.0



## 2. Populate the following fields:

FIELD	DESCRIPTION
Name	Add an identity name.
Description	Add a brief description of the identity object.
Status	Optional field. Click the Status field to assign a status to the identity.
	Indentity statuses are configured in the Object Statuses tab in the Object Management page. If none are configured, this field is not displayed.
Contact Information	Enter any contact information for the identity.
Point of Contact	Optional field. Click the field to select the ThreatQ display name of the point of contact for the identity.
Source	Select a <b>Source</b> from the dropdown list provided. You can also click the <b>Add a New Source</b> option if the desired source is not listed in the drop-down list. If administrators have enabled TLP view settings, you can select a TLP label for the new source in the dropdown list provided. See the Traffic Light Protocol (TLP) topic for more information on TLP schema.

- 3. Select any **Related Objects** you need to link to the Identity. This field is optional.
- 4. Click the **Add Identity** button.

# **Adding Context**

See the About Object Details section and its topics for details on adding context to an object such as adding sources, attributes, and related objects.



# **Editing an Identity**

1. Locate and click on the Identity.

The Identity's detail page opens.

THREATQ

NSOC

Bedit

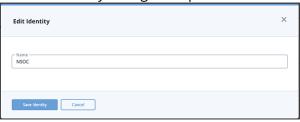
IDENTITY

Created: 01/22/2021 First Published: 01/22.

Actions

2. Click on **Edit** next to the Identity's name.

The Edit Identity dialog box opens.



3. Make the desired change to the Identity's name and click **Save Identity**.

# **Deleting an Identity**

1. Locate and click on the Identity.

The Identity's details page opens.





2. Click on the **Actions** menu and select **Delete Identity**.

A confirmation dialog box appears.



3. Click on **Delete Identity**.



# **Incidents**

Incident are records of any violation of an organization's established security/network policy that may compromise security, integrity, or general access.

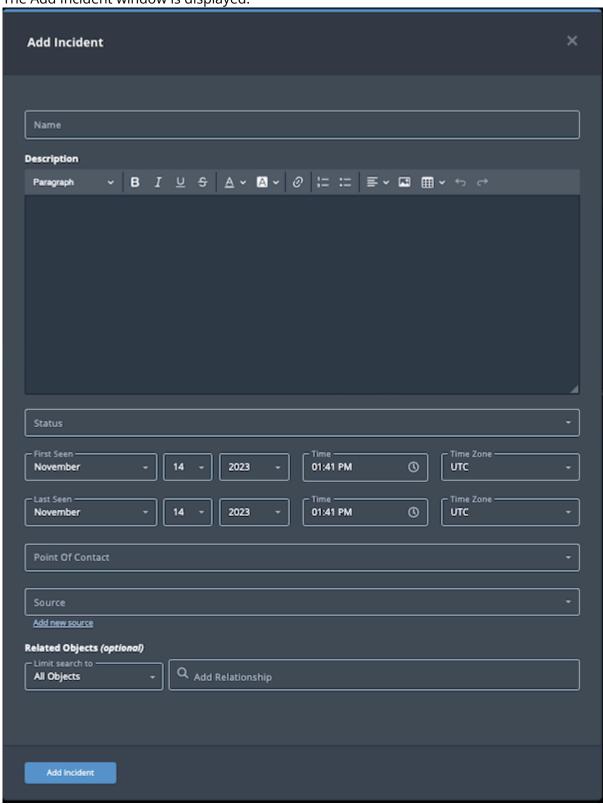
Use the steps below to create, edit and delete an Incident.



# **Adding an Incident**

1. Go to **Create > Incident**.

The Add Incident window is displayed.



2. Populate the following fields:



FIELD	DESCRIPTION
Name	Add an incident name.
Description	Enter a brief description of the incident.  Any description you add during object creation defaults to a Source value of ThreatQ System.
Status	Optional field. Click the Status field to assign a status to the status object.  Incident statuses are configured in the Object Statuses tab in the Object Management page. If none are configured, this field is not displayed.
First Seen/Last Seen	Select the first and last seen dates and times.
Point of Contact	Optional field. Click the field to select the ThreatQ display name of the point of contact for the incident.
Source	Select a <b>Source</b> from the dropdown list provided. You can also click the <b>Add a New Source</b> option if the desired source is not listed in the drop-down list. If administrators have enabled TLP view settings, you can select a TLP label for the new source in the dropdown list provided. See the Traffic Light Protocol (TLP) topic for more information on TLP schema.

- 3. Select any **Related Objects** you need to link to the Incident. This field is optional.
- 4. Click **Add Incident**.



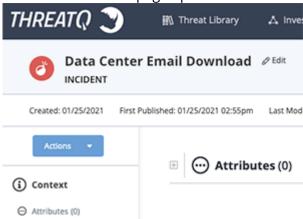
# **Adding Context**

See the About Object Details section and its topics for details on adding context to an object such as adding sources, attributes, and related objects.

# **Editing an Incident**

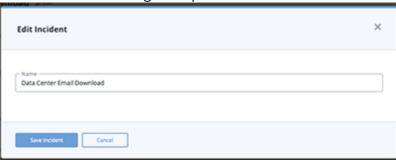
1. Locate and click on the Incident.

The Incident's detail page opens.



2. Click on **Edit** next to the Incident's name.

The Edit Incident dialog box opens.



3. Make the desired change to the Incident's name and click **Save Incident**.

# **Deleting an Incident**

1. Locate and click on the Incident.



The Incident's details page opens.



2. Click on the **Actions** menu and select **Delete Incident**.

A confirmation dialog box appears.



3. Click on **Delete Incident**.



# **Indicators**

#### **About Indicators**

An Indicator is information that describes or identifies methods used to defeat security controls, exploit vulnerabilities, and gain unauthorized access to an internal network. Indicators can also describe malicious reconnaissance to gather technical information, malicious cyber command and control, and any other attribute of cyber security whose disclosure is prohibited by law.

Indicators can be scored to allow you to apply weighting using contextual information, such as sources, attributes, and indicator types, as they are added to ThreatQ. You can also set a manual score per indicator.

You can also apply expiration dates to an indicator to when it is determined to pose less of a threat to your infrastructure than other indicators.

#### **Adding an Indicator**

1. Click on Create > Indicator.

The Add Indicators window is displayed.

Add Indicators

Parse For Indicators

Add Indicator

Value

Type

Source

Add new source

Status

Related Objects (optional)

Llimit search to

All Objects

Add Indicator

2. Enter a value in the Value field.



- 3. Select the **Type** of Indicator.
- 4. Select a **Source** from the provided dropdown list.

You can also click the **Add a New Source** option if the desired source is not listed in the drop-down list. If administrators have enabled TLP view settings, you can select a TLP label for the new source in the dropdown list provided. See the Traffic Light Protocol (TLP) topic for more information on TLP schema.

- 5. Select a **Status** for the indicator.
- 6. Select any **Related Objects** you need to link to the indicator. This field is optional.
- 7. Click **Add Indicator**.

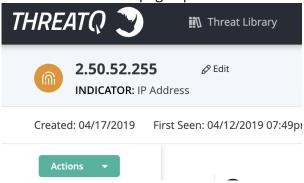
#### **Adding Context**

See the About Object Details section and its topics for details on adding context to an object such as adding sources, attributes, and related objects.

#### **Editing Indicators**

1. Locate and click on the indicator.

The Indicator Details page opens.



2. Click on **Edit** next to the Indicator name.

The Edit Indicator dialog box opens.



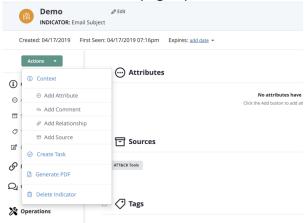
- 3. Make the desired change to the indicator **Value** and **Type**.
- 4. Click on **Save Indicator**.

#### **Deleting an Indicator**

1. Locate and click on the Indicator.



The Indicator Details page opens.



2. Click on **Delete this Indicator** located to the top right of the page.

A confirmation dialog box appears.



3. Click on **Delete Indicator**.



# **Parsing for Indicators**

ThreatQ gives you the option to import a file, parse it for indicators, and add those indicators to your Threat Library. During the import process you can assign a source, tag, and a relationship to the imported indicators.



See the Importing Indicators via CSV topic for specific instructions and examples on parsing indicators from a .csv file.

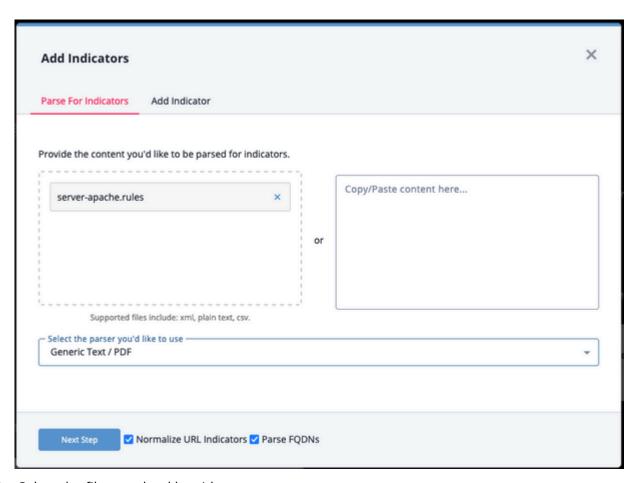
#### Selecting a File to Parse

1. Click the **Create** button, located at the top-right of the menu bar, and select the **Indicator Parser** option.



You can also click on **Create > Indicator** and then select the **Parse for Indicators** option at the top of the **Add Indicators** dialog box.

The Add Indicators dialog box will open.



- 2. Select the file to upload by either:
  - Dragging and dropping the file into the dialog window



- Clicking on the Click to Browse option and locating the file on your local device
- Copying and pasting the file's contents in the text field provided.
- 3. Select the type of parser to use. Options include
  - Cuckoo
  - Trellix Analysis
  - Generic Text / PDF
  - Palo Alto Networks WildFire XML
  - ThreatAnalyzer Analysis
  - ThreatQ CSV File see the Importing Indicators via CSV topic for specific instructions on using this parser.
- 4. Use the checkboxes to select your parsing options:

#### **OPTION**

#### DESCRIPTION

# Normalize URL Indicators

When checked, parsed URLs will have ports and leading protocol adjusted, as well as unneeded quotes and spaces removed.



Normalization also adds attributes for protocol and query string.

See the Indicator URL Normalization topic for more details.

#### **Parse FQDNs**

When checked, the Indicator Parser will parse FQDNs from the text and derive FQDN indicators from URLs in the text.

**Example (checked)**: URL: https://tqexample.com/table.jspa? query\_string\_example

Indicators created:

- o tgexample.com/table.jspa (the URL)
- o tgexample.com (the derived FQDN from the URL)

When unchecked, the Indicator Parser will not generate FQDN indicators from the parsed text.

**Example (unchecked)**: URL: https://tqexample.com/table.jspa? query\_string\_example

Indicator created:

tgexample.com/table.jspa (the URL)

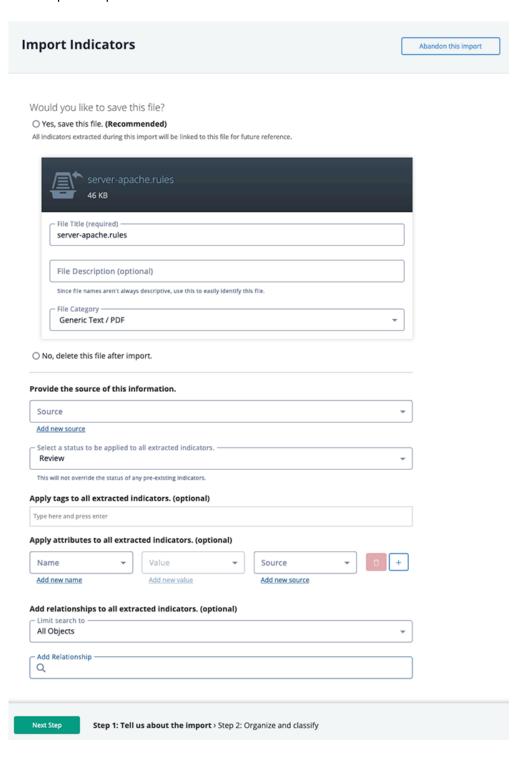


Administrators can configure the default setting for these options under the General Tab on the System Configurations page. See the Indicator Parsing Presets topic for more details.

5. Click on **Next Step**.



The Step 1 - Import Indicators form will load.



# **Step 1 - Import Indicators Settings**

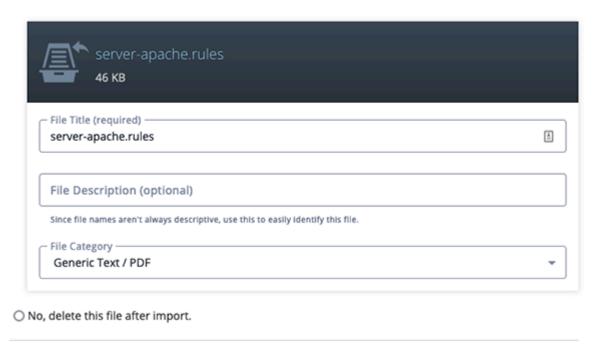
6. Select whether or not to save the import file. Saving the file will result in all extracted indicators being linked to the file for reference. If you select **Yes**, review the **File Title** and **File Category**. You can also add an option **File Description**.



Would you like to save this file?

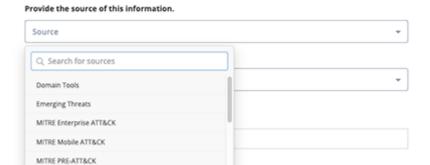
Yes, save this file. (Recommended)

All indicators extracted during this import will be linked to this file for future reference.



7. Select a **Source** for the extracted indicators.

You can also click the **Add a New Source** option if the desired source is not listed in the dropdown list . If administrators have enabled TLP view settings, you can select a TLP label for the new source in the dropdown list provided. See the Traffic Light Protocol (TLP) topic for more information on TLP schema.



8. Select a **Status** for the extracted indicators.



- 9. Enter any **Tags** to apply to the extracted indicators. This field is optional.
- 10. Select any attribute, attribute value, and attribute source to apply to the extracted indicators.
- 11. Add **Relationships** for the extracted indicators.

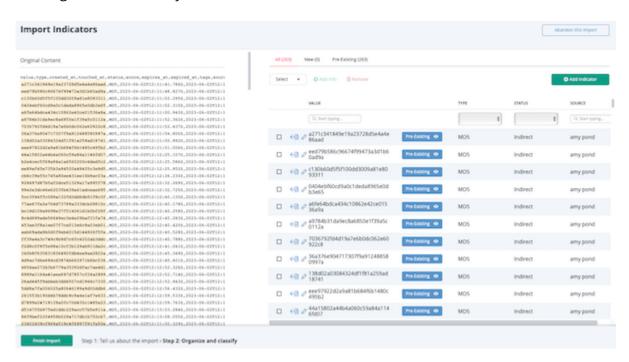




If you enter an object name that is not found, you can click the **Create** link to add the new object. If you limited your search to a specific object type, you are linked to the corresponding form. For example, if you limit your search to Adversaries, the **Create** link opens the Add An Adversary form. If you leave the **Limit search to** field set to All Objects, you can select the object type you want to create from a drop-down list.

#### 12. Click on **Next Step**.

The Organize and Classify form will load.



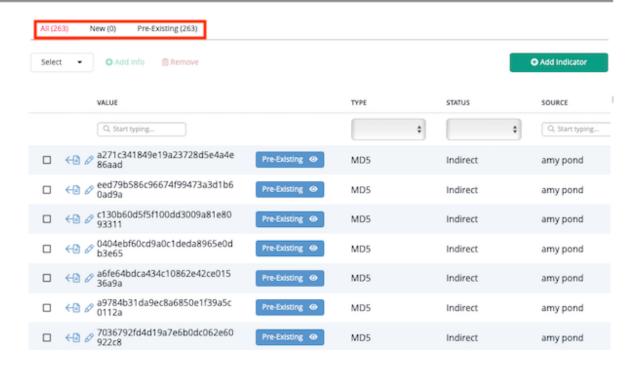
# Step 2 - Organize and Classify

13. You can review the original content of the file and the extracted indicators' information.

#### **Filtering Extracted Indicators List**

 The top tabs allow you to filter the list of indicators by New and Pre-existing. This allows you isolate any indicators that already exist in the platform.

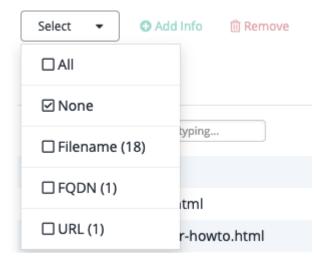




Pre-existing indicators will also be marked with a Pre-existing label in the list. You can click this label to view the preview panel for the object.



• You can click on the **Select** dropdown to automatically select indicators by sub-type.



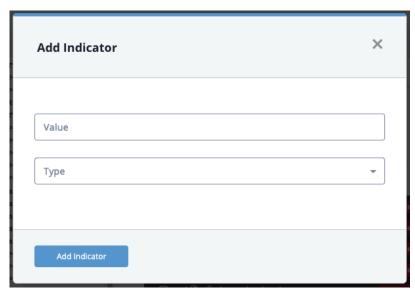
A

Selecting **All** will select all extracted indicators, not just the ones in your current filtered view (New, Pre-Existing).

#### **Adding Indicators**

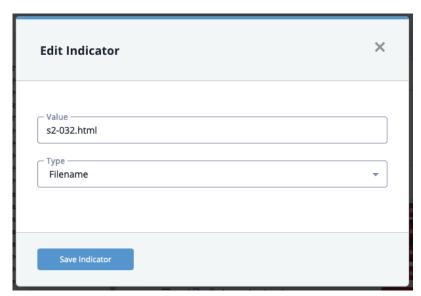
You can click on the **Add Indicator** option, located to the top-right of the list, to add an
indicator to the extracted list. You can add further context to the new indicator using the
Editing Extracted Indicators actions listed below.





#### **Editing Extracted Indicators**

- Clicking on the icon will show you where the indicator appeared in the Original Content window.
- Clicking on the icon will open the **Edit Indicator** dialog box and allow you to edit the indicator value and indicator sub-type.



 Selecting one or more indicators and clicking on **Add Info** option allows you to perform the following actions:

ACTION DETAILS

Add Attribute You can add an attribute to one or more extracted indicators. Select the checkbox next to the indicator(s) to update and then click on the **Add Info** option. The Add Attributes tab will be



#### ACTION DETAILS

selected by default. Select an **Attribute Name**, **Value**, and **Source** to apply to the selected indicator(s).

#### Set/Update Status

You can update the status of one or more extracted indicators. Select the checkbox next to the indicator(s) to update and then click on the **Add Info** option. Click on the **Set Status** tab and select your new status.

#### Create Relationship

You can link one or more extracted indicators to another system object. Select the checkbox next to the indicator(s) to update and then click on the **Add Info** option. Click on the **Set Relationship** tab and set the relationship. When you add a relationship, it is displayed in the indicator list and you can click it to view its details in a preview panel.

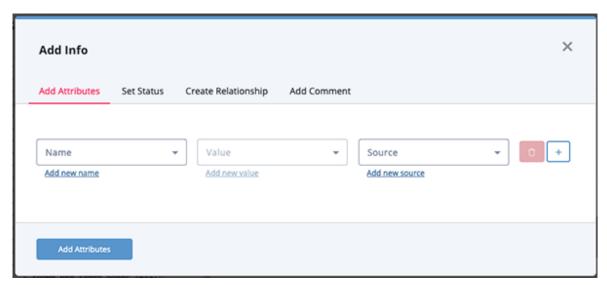


If the object you want to link is not found, you can you can click the **Create** link to add the new object. If you limited your search to a specific object type, you are linked to the corresponding form. For example, if you limited your search to Adversaries, the **Create** link opens the Add An Adversary form. If you leave the **Limit search to** field set to All Objects, you can select the object type you want to create from a drop-down list. In the Add form, the indicators you selected in the second step of the import process are listed in the Create Relationship section.

## Add Comment

You can add a comment to one or more extracted indicators. Select the checkbox next to the indicator(s) to update and then click on the **Add Info** option. Click on the **Set Comment** tab and enter your comment.





#### **Removing Extracted Indicators**

o You can delete one or more extracted indicators. Select the checkbox next to the indicator(s) to delete and then click on the **Remove** icon.



Selecting **All** from the Select dropdown will select all extracted indicators, not just the ones in your current filtered view (New, Pre-Existing).

14. When finished editing the extracted indicators list, click **Finish Export** to complete the process.



# Importing Indicators via CSV

You can parse a CSV file for indicators using the ThreatQ CSV File Parser.



A CSV example file is available for download to serve a reference as you build your own CSV.

**Download CSV Example** 

#### CSV Files with 1000+ Rows

- Attempt to break the file into smaller parts and import.
- If you cannot break down the file, contact ThreatQ Customer Success about implementing a dedicated parser using the Configuration Driven Feed (CDF) framework.

#### **CSV Columns**

The column headers marked with an \* in the table below are required for the CSV file. Failure to include these required columns will result in the import process failing. All other column headers are optional and will not cause the import process to fail if not included.



Object and Attribute Sources cannot be added through the CSV file itself. A source value is added in the Step 7 of the import process, listed below, and is selected by the user.



The ThreatQ parser is case sensitive. When creating your CSV file, confirm that you are using the correct spelling and case for column headers as listed below.

# COLUMN HEADER

#### **DETAILS**

#### \*Indicator

This field identifies the indicator name/value.

ThreatQ requires that the Indicator column be included in the CSV file and that each entry have a value.

#### **Example**





#### \*Type

This field identifies the indicator type.

ThreatQ requires that the Type column be included in the CSV file and that each entry have a value.



You must use a type that already exists in your ThreatQ instance. If you are unable to provide an Indicator Type for each indicator, you can use the **Generic Text/PDF** parsing option that attempta to identify indicator type values automatically.

#### **Example**



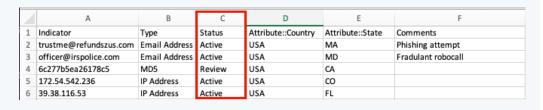
#### \*Status

The Status column is required. You must use a status that already exists in your ThreatQ instance. You can review your existing status by clicking on the **Settings** gear icon and selecting **Object Management**.



The status supplied in the CSV overrides the status selected during the import process.

#### **Example**



#### **Attribute**

The Attribute columns are optional. You can apply one or more attributes to an indicator by adding an Attribute column.

Attribute keys are **case** and **space** sensitive, 'MalwareFamily' and 'malware family' will generate a separate key in ThreatQ. In order to map to an existing Attribute Key in ThreatQ, you must match it exactly.

Each attribute column heading must use the follow format:

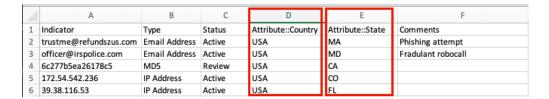
Attribute::<Attribute Name>





ThreatQuotient recommends you review existing attribute keys and values in ThreatQ prior to importing so that you can maintain consistent and normalized attribute data.

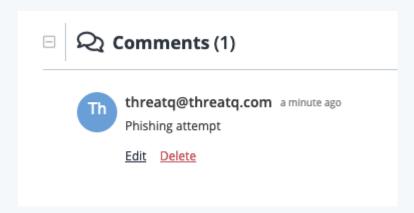
#### **Example**



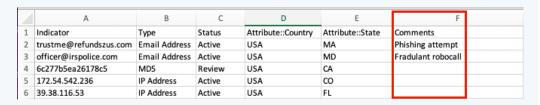
#### **Comments**

The optional Comments column allows you to add a comment for the indicator.

The ThreatQ user that performs the import process is marked as the author of the comment in ThreatQ.



#### **Example**

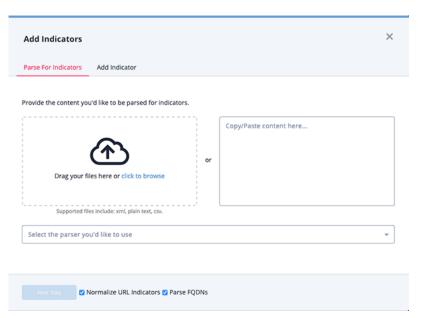


# Parsing a ThreatQ CSV File and Adding Context

1. Click the **Create** button and select **Indicator Parser** under the *Import* heading.

The Add Indicators dialog box opens with the Parse for Indicators tab selected.





- 2. Upload your CSV file by either:
  - Dragging and dropping your file into the window
  - Clicking the Click to Browse option and uploading your file
- 3. Select **ThreatQ CSV File** as the parser to use.
- 4. Use the checkboxes to select your parsing options:

#### **OPTION**

#### **DESCRIPTION**

#### Normalize URL Indicators

When checked, parsed URLs will have ports and leading protocol adjusted, as well as unneeded quotes and spaces removed.



Normalization also adds attributes for protocol and query string.

See the Indicator URL Normalization topic for more details.

#### **Parse FQDNs**

When checked, the Indicator Parser will parse FQDNs from the text and derive FQDN indicators from URLs in the text.

**Example (checked)**: URL: https://tqexample.com/table.jspa? query\_string\_example

Indicators created:

- o tqexample.com/table.jspa (the URL)
- tqexample.com (the derived FQDN from the URL)

When unchecked, the Indicator Parser will not generate FQDN indicators from the parsed text.



**Example (unchecked)**: URL: https://tqexample.com/table.jspa? query\_string\_example

Indicator created:

o tqexample.com/table.jspa (the URL)



Administrators can configure the default setting for these options under the General Tab on the System Configurations page. See the Indicator Parsing Presets topic for more details.

- 5. Click **Next Step**.
- 6. Select whether or not to save the CSV file. Saving the file will result in all extracted indicators being linked to the file for reference.

# Would you like to save this file? • Yes, save this file. (Recommended) All indicators extracted during this import will be linked to this file for future reference.



- No, delete this file after import.
- 7. Select a **Source** for the extracted indicators.

You can also click the **Add a New Source** option if the desired source is not listed in the dropdown list . If administrators have enabled TLP view settings, you can select a TLP label for the new source in the dropdown list provided. See the Traffic Light Protocol (TLP) topic for more



information on TLP schema.

# Provide the source of this information. Source Q. Search for sources Domain Tools Emerging Threats MITRE Enterprise ATT&CK MITRE Mobile ATT&CK MITRE PRE-ATT&CK

8. Select a **Status** for the extracted indicators. The indicator's Status value supplied in the CSV overrides this value.



- 9. Enter any **Tags** to apply to the extracted indicators. This field is optional.
- 10. Select any attribute, attribute value, and attribute source to apply to the extracted indicators.
- 11. Add **Relationships** for the extracted indicators.



If you enter an object name that is not found, you can click the **Create** link to add the new object. If you limited your search to a specific object type, you are linked to the corresponding form. For example, if you limit your search to Adversaries, the **Create** link opens the Add An Adversary form. If you leave the **Limit search to** field set to All Objects, you can select the object type you want to create from a drop-down list.

12. Click on **Next Step**.

The Step 2: Organize and Classify page will load.



13. You can review the extracted indicators' information and attributes.

You can perform the following actions:

ACTION DETAILS



#### **Add Indicator**

You can add additional indicators by clicking on the Add Indicator button.

## Edit Indicator Type and Value

You can edit the Indicator Type by clicking on the Pencil icon next to the indicator name. The Edit Indicator screen will load. You can edit the extracted indicator's value and type from this box.

## Set/Update Status

You can update the status of one or more extracted indicators. Select the checkbox next to the indicator(s) to update and then click on the **Add Info** option. Click on the **Set Status** tab and select your new status.

#### **Add Attribute**

You can add an attribute to one or more extracted indicators. Select the checkbox next to the indicator(s) to update and then click on the **Add Info** option. The Add Attributes tab will be selected by default. Select an **Attribute Name**, **Value**, and **Source** to apply to the selected indicator(s).

## Create Relationship

You can link one or more extracted indicators to another system object. Select the checkbox next to the indicator(s) to update and then click on the **Add Info** option. Click on the **Set Relationship** tab and set the relationship. When you add a relationship, it is displayed in the indicator list and you can click it to view its details in a preview panel.



If the object you want to link is not found, you can you can click the **Create** link to add the new object. If you limited your search to a specific object type, you are linked to the corresponding form. For example, if you limited your search to Adversaries, the **Create** link opens the Add An Adversary form. If you leave the **Limit search to** field set to All Objects, you can select the object type you want to create from a drop-down list. In the Add form, the indicators you selected in the second step of the import process are listed in the Create Relationship section.

#### **Add Comment**

You can add a comment to one or more extracted indicators. Select the checkbox next to the indicator(s) to update and then click on the **Add Info** option. Click on the **Set Comment** tab and enter your comment.



Delete Extracted Indicator

You can delete one or more extracted indicators. Select the checkbox next to the indicator(s) to delete and then click on the **Remove** icon.

14. Click **Finish Export**.

# **Troubleshooting**

If the CSV fails to parse please review the following points:

- Verify that the file is a CSV.
- Verify that column headers are spelled exactly as they are listed, the parser is case sensitive.
- Verify that all rows have a value for Indicator and Type.
- Verify that all Type and Status values are valid and exist in ThreatQ.



If you have previously hit a failed parse run and believe you have fixed the error but the file will still not parse, logout of TQ, log back in and attempt to parse again.



#### **Indicator URL Normalization**

#### Remove Quotes from the Beginning and/or End of an Indicator

Single and double quote characters are removed if they are the first or last character of an indicator.

#### Remove Unneeded Spaces found within an Indicator

All spaces irrelevant of their position in the Indicator value are removed (when applicable).

#### **Adjust Leading Protocol from Indicators**

Indicators with a leading protocol [http://, https://, ftp://, or ftps://] are extracted and included as an attribute. When applicable, this indicator adjustment could change the indicator type from URL to FQDN.



Original URL indicator of http://evilsubdomain.no-ip.biz/ would convert to a FQDN = evildomain.no-ip.biz.

#### Adjust the Port from an IP Address

An IP address with a port [ex. 199.7.136.88:8143] will be truncated to the IP address and the port assignment will be added as an attribute.

Using the previous example the following indicator/attribute will be created:

FIELD	VALUE
URL	199.7.136.88
Attribute > Port	8143

#### **Adjust Defanged/Neutered Indicators**

Indicators that have been defanged/neutered in order to "safely" share them (i.e. www [dot] 3322 [dot] org or badguy [at] gmail.com) need to be adjusted during import in order to ensure the indicators are properly deployed.

#### **Create an IP Address from a URL (when applicable)**

Using the previous example the following indicators will be created:

FIELD	VALUE
URL	51.255.131.66/civis/viewforum.php
IP Address	51.255.131.66

#### Create a FQDN from a URL (when applicable)



When a URL contains a domain [ex. bat99-11611.co/gate777.php] a second indicator will be created for the domain [bat99-11611.co].

Using the previous example, the following indicators will be created:

FIELD	VALUE
URL	bat99-11611.co/gate777.php
FQDN	bat99-11611.co

#### **Extract HTTP Parameters from a URL Indicator**

HTTP parameters [chained.j3oilgasinc.net/civis/viewforum.php?keywords=9obo&fid0=c27] are important but can significantly limit pattern-matching detection capabilities due to the likelihood of parameter deviations, as well as, hamper the volume of URL indicators being deployed. To increase the probability of detection the http parameters are extracted and created as attributes. In this example:

FIELD	VALUE
URL IOC	chained.j3oilgasinc.net/civis/viewforum.php
Attribute = HTTP Parameter = keywords	9obo&fid0=c27

#### Maintain "WWW" on FQDN Indicators

CHARACTER

When parsing or importing a FQDN the "www" will be maintained.

#### **Replace and/or Remove Special Characters**

CHARACIER	·	CLI EACTIVILIA
ASCII Values < 32 ASCII Values > 127	<space></space>	
Ascii 96	-	
Ascii145	ı	
Ascii146	ı	

**RFPI ACEMENT** 



Ascii147	п
Ascii148	11
Ascii151	-
carriage return and line feed	<space></space>
Control Characters	Remove
Convert to UTF8	Remove leading and trailing space, tab, newline, carriage return, vertical tabs and null characters.



# **Supported Defanging Techniques**

The table below lists all supported indicator defanging techniques.

[.] => .

[dot] => .

(dot) => .

[d] => .

-dot- => .

\_dot\_ => .

[:] => :

[://] => ://

hxxp:// => http://

hxxx:// => http://

hxxps:// => https://

hxxxs:// => https://

[hxxp] => http

hxtp:// => http://

htxp:// => http://

hxtps:// => https://



htxps://	=>	https://
[http]	=>	http
[http://]	=>	http://
[https]	=>	https
[https://]	=>	https://
[at]	=>	@
-at-	=>	@
_at_	=>	@
-@-	=>	@
_@_	=>	@
[@]	=>	@
[www]	=>	www



# **Indicator Expiration**

Expiration ("Expired") is a status that can be assigned to an indicator. The expired status should be used when an indicator is deemed by an analyst to pose less of a threat to their infrastructure than other indicators.



See the Indicator Expiration Policies topic for more information on setting up automatic expiration policies for indicators.

#### Ways an Indicator can Expire

An analyst manually changes an indicator(s) status to "Expired"

This can be achieved by visiting an individual indicator's details page, then using the Status dropdown in the top right hand corner of the page to change the status.

If the analyst wishes to change the status of multiple indicators at the same time, they can use the advanced search tool to find the indicators they'd like to update, then click the Bulk Update button found directly to the right above the search results.

- An analyst manually sets an expiration date for a specific indicator

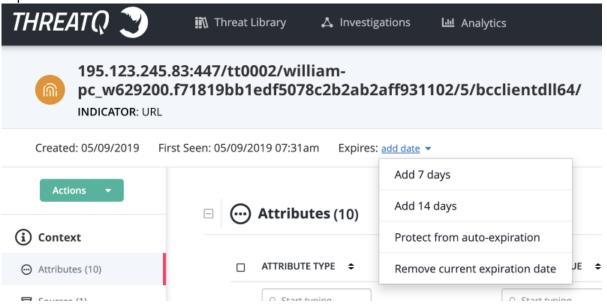
  Each indicator has the option to have an expiration date set, which once past, will toggle the status of that indicator from it's current status to "Expired".
- An expiration policy has been applied to the source reporting an indicator and therefore an expiration date is automatically set for that indicator during ingestion

Using the "Expiration" tab on the Indicator Management page, a ThreatQ admin has the ability to apply expiration policies to all ingested information, both new and existing, coming from a specific intelligence source. See the Indicator Expiration Policies topic for more details.



#### **Changing the Expiration Date for an Individual Indicator**

When viewing a specific indicator, its expiration date can be changed by clicking on the link next to the expiration information.



#### Options include:

OPTION

OPTION	DESCRIPTION
Add 7 Days	This will extend the current expiration date by 7 days.
Add 14 Days	This will extend the current expiration date by 14 days.
Protect from Auto- Expiration	This will set the indicator to "Never Expire". Once set, this indicator will be exempt from all automated expiration processes regardless of circumstances. The only way for this indicator to expire moving forward is by analyst choice.
Remove Current Expiration Date	This will remove the currently set expiration date. If this indicator is reported by an intelligence feed (with an expiration policy) in the future, a new expiration date will be added at that point in time.

DESCRIPTION

#### **Changing the Expiration Date for Multiple Indicators**

You can apply expiration changes for a set of indicators using the Bulk Action function. See the Bulk Actions topic for further details.



#### **Indicator Scoring**

Indicator scoring allows you to apply weighting to indicators and their contextual information, such as sources, attributes, and indicator types, as they are added to ThreatQ. Indicator scoring allows you to set manual scores or rely on ThreatQ's scoring algorithm to calculate scores. After scores are calculated, you can change the score to your custom value or accept the calculated value.

#### **Building a Scoring Algorithm**

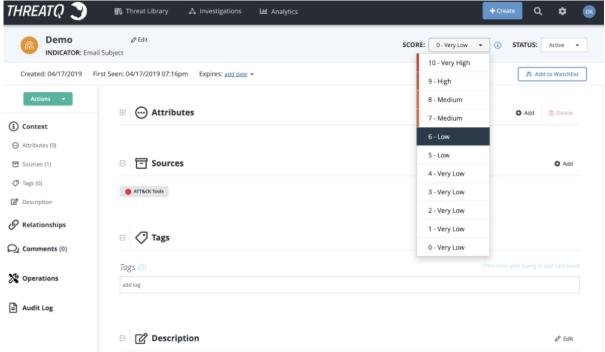
You can build a scoring algorithm that automatically assigns an indicator score based on user-designed criteria. See the Scoring Algorithms topic for further details.

#### **Setting a Manual Indicator Score**

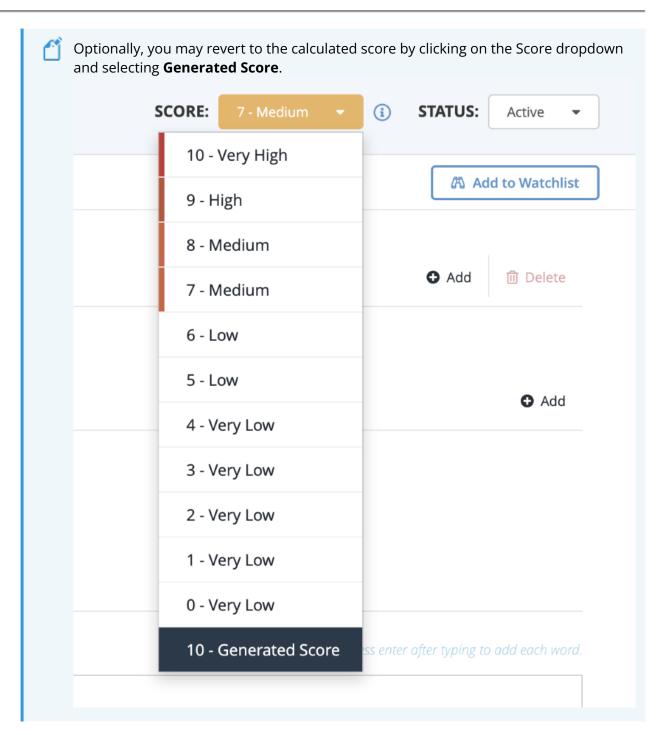


You can use this process to override an individual indicators score set by the scoring algorithm.

- 1. Navigate to an Indicator's Details page.
- 2. Click the **Score** dropdown and select a score.









#### **Indicator Status**

All Indicator in the system have statuses.



Most exports in ThreatQ are configured to use the **Active** status to signal deployment to external devices. However this can be modified and each status can be used however your organization sees fit.

#### **Default Statuses**

The default statuses that ship with a standard installation of ThreatQ are as follows:

STATUS	DESCRIPTION
Active	Poses a threat and is being exported to detection tools.
Indirect	Associated to an active indicator or event (i.e. pDNS).
Review	Requires further analysis.
Whitelisted	Poses NO risk and should never be deployed.
Expired	Indicator has reached its expiration and has been is deemed by an analyst to pose less of a threat to their infrastructure than other indicators.

#### **Custom Statuses**

You can create custom statuses for use in your ThreatQ instance. See the Indicator Statuses topic for more details.

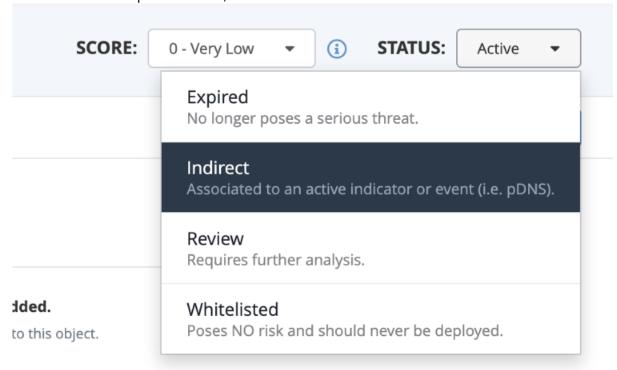
#### **Changing the Status of an Individual Indicator**

Changing an indicator's status is straightforward, except in the case of whitelisting CIDR Block indicators. When Whitelisting a CIDR Block indicator, this process generates a whitelisting rule. See the Whitelisted Indicators topic for more information.

1. Locate and click the indicator to open its details page.



2. Click the status dropdown menu, and select the desired status.



The status will be updated.



If an Administrator or the Primary Contributor are whitelisting a CIDR BLOCK indicator, there is a different process, as this actually generates a whitelisting rule. For more information, see the Creating a Whitelist Rule section of the Whitelisted Indicators topic.

## **Changing the Status for Multiple Indicators**

You can change the status for multiple indicators using the Bulk Status Change. See the Bulk Actions topic for more information.



# **Intrusion Sets**

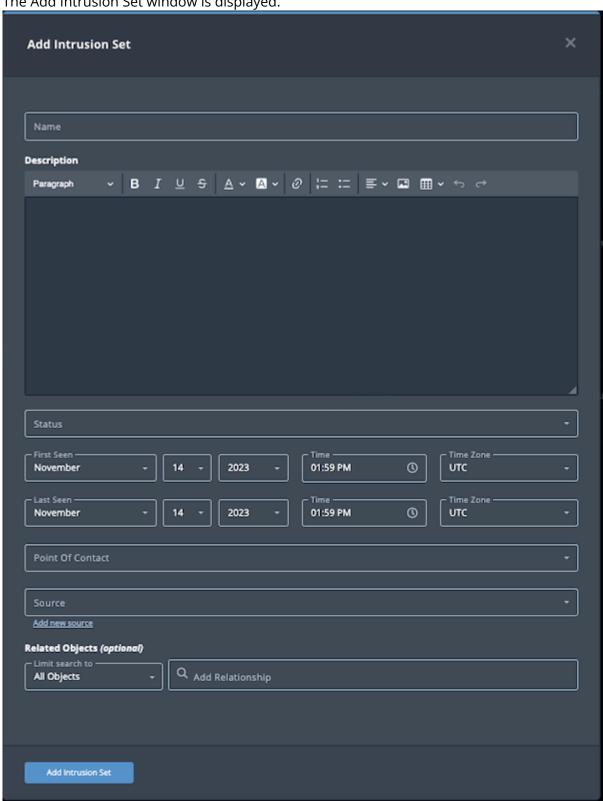
An Intrusion Set is grouped sets of adversarial behaviors and resources, sometimes referred to as attack packages, used to target an individual organization.



## **Adding an Intrusion Set**

1. Go to **Create > Intrusion Set**.

The Add Intrusion Set window is displayed.



2. Populate the following fields:



FIELD	DESCRIPTION
Name	Add an intrusion set name.
Description	Enter a brief description of the intrusion set.  Any description you add during object creation defaults to a Source value of ThreatQ System.
Status	Optional field. Click the Status field to assign a status to the intrusion set.
	Intrusion set statuses are configured in the Object Statuses tab in the Object Management page. If none are configured, this field is not displayed.
First Seen/Last Seen	Select the first and last seen dates and times.
Point of Contact	Optional field. Click the field to select the ThreatQ display name of the point of contact for the intrusion set.
Source	Select a <b>Source</b> from the dropdown list provided. You can also click the <b>Add a New Source</b> option if the desired source is not listed in the drop-down list. If administrators have enabled TLP view settings, you can select a TLP label for the new source in the dropdown list provided. See the Traffic Light Protocol (TLP) topic for more information on TLP schema.

- 3. Select any **Related Objects** you need to link to the Intrusion Set. This field is optional.
- 4. Click **Add Intrusion Set**.

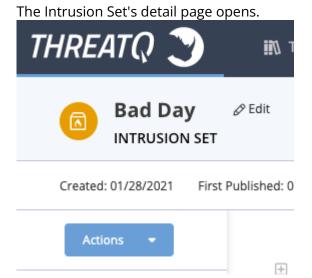


### **Adding Context**

See the About Object Details section and its topics for details on adding context to an object such as adding sources, attributes, and related objects.

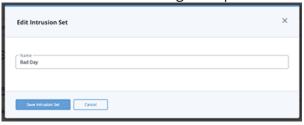
# **Editing an Intrusion Set**

1. Locate and click on the Intrusion Set.



2. Click on **Edit** next to the Intrusion Set's name.

The Edit Intrusion Set dialog box opens.



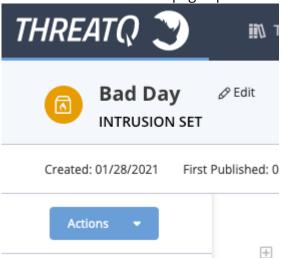
3. Make the desired change to the Intrusion Set's name and click **Save Intrusion Set**.

## **Deleting an Intrusion Set**

1. Locate and click on the Intrusion Set.



The Intrusion Set's details page opens.



2. Click on the **Actions** menu and select **Delete Intrusion Set**.

A confirmation dialog box appears.



3. Click on **Delete Intrusion Set**.



# **Malware**

Malware, short for malicious software, targets devices, services, and networks with the intent to gain unauthorized access or damage a network or programmable device.

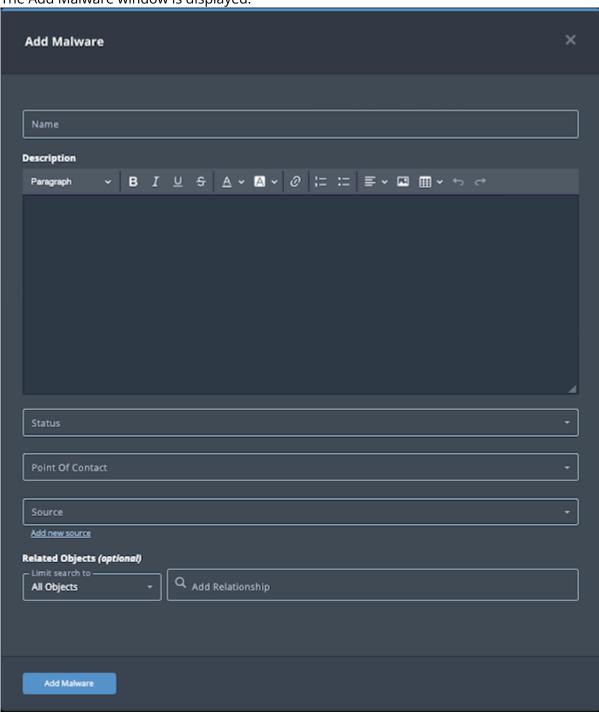
Use the steps below to create, edit and delete a Malware object.



# **Adding a Malware Object**

1. Go to **Create > Malware**.

The Add Malware window is displayed.



2. Populate the following fields:



FIELD	DESCRIPTION
Name	Add a malware name.
Description	Enter a brief description of the malware object.
	Any description you add during object creation defaults to a Source value of ThreatQ System.
Status	Optional field. Click the Status field to assign a status to the malware object.
	Malware statuses are configured in the Object Statuses tab in the Object Management page. If none are configured, this field is not displayed.
Point of Contact	Optional field. Click the field to select the ThreatQ display name of the point of contact for the malware object.
Source	Select a <b>Source</b> from the dropdown list provided. You can also click the <b>Add a New Source</b> option if the desired source is not listed in the drop-down list. If administrators have enabled TLP view settings, you can select a TLP label for the new source in the dropdown list provided. See the Traffic Light Protocol (TLP) topic for more information on TLP schema.

- 3. Select any **Related Objects** you need to link to the Malware. This field is optional.
- 4. Click **Add Malware**.



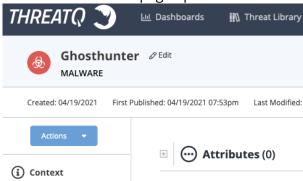
### **Adding Context**

See the About Object Details section and its topics for details on adding context to an object such as adding sources, attributes, and related objects.

### **Editing a Malware Object**

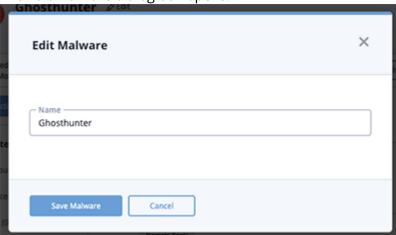
1. Locate and click on the Malware.

The Malware's detail page opens.



2. Click on **Edit** next to the Malware's name.

The Edit Malware dialog box opens.



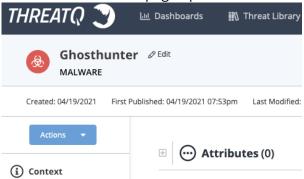
3. Make the desired change to the Malware name and click **Save Malware**.

## **Deleting a Malware Object**

1. Locate and click on the Malware.

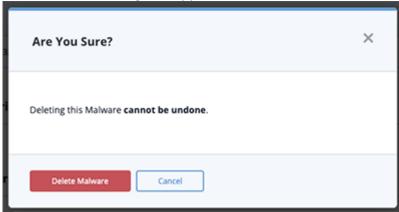


The Malware's details page opens.



2. Click on the **Actions** menu and select **Delete Malware**.

A confirmation dialog box appears.



3. Click on Delete Malware.



## **Notes**

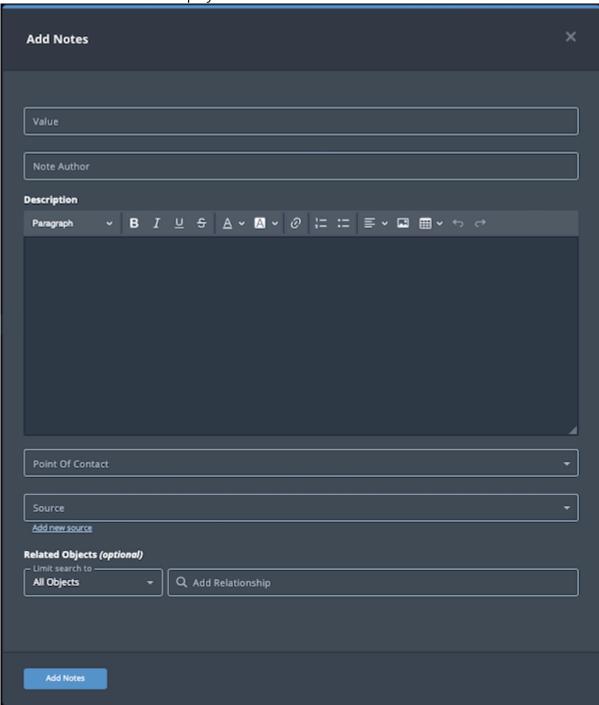
Notes objects are STIX 2.1 objects that provide further context and/or additional analysis. You can export a Note object to PDF or CSV.



## **Adding Notes**

1. Go to **Create > Notes**.

The Add Notes window is displayed.



2. Populate the following fields:



FIELD	DESCRIPTION
Value	Add a descriptive name for the note.
Note Author	Optional field. Enter the name of the note author.
Description	Enter the note's description. If you do not select a source during object creation, the description source defaults to ThreatQ System.
Point of Contact	Optional field. Click the field to select the ThreatQ display name of the point of contact for the note.
Source	Select a <b>Source</b> from the dropdown list provided. You can also click the <b>Add a New Source</b> option if the desired source is not listed in the drop-down list. If administrators have enabled TLP view settings, you can select a TLP label for the new source in the dropdown list provided. See the Traffic Light Protocol (TLP) topic for more information on TLP schema.

- 3. Select any **Related Objects** you need to link to the note. This field is optional.
- 4. Click **Add Notes**.

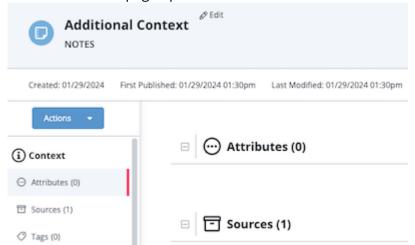
## **Adding Context**

See the About Object Details section and its topics for details on adding context to an object such as adding sources, attributes, and related objects.

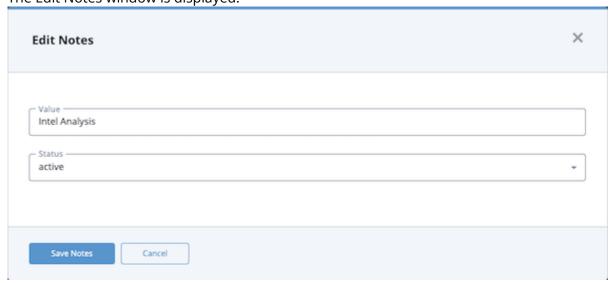


## **Editing Notes**

1. Locate and click the Notes object. The Notes Details page opens.



2. Click the **Edit** option next to the Notes object name. The Edit Notes window is displayed.

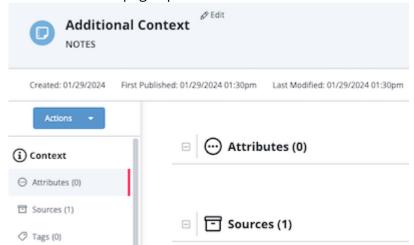


- 3. Make the desired change to the Note name.
- 4. Click the **Save Notes** button.



## **Deleting Notes**

1. Locate and click the Notes object. The Asset Details page opens.



2. Click the **Actions** menu and select **Delete Notes**. The Are You Sure window prompts you confirm the deletion.



3. Click the **Delete Notes** button.



# Reports

Report contain information and related details for a specific threat such as Malware . Use the steps below to create, edit and delete a Report.



## **Adding a Report**

1. Go to **Create > Report**.

The Add Report window is displayed. **Add Report** Description ▼ B I U S A ▼ A ▼ Ø := := \( \overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\overline{\o Paragraph Add new source Related Objects (optional) All Objects

2. Populate the following fields:



FIELD	DESCRIPTION	
Name	Add a report name.	
Description	Enter a brief description of the report.  Any description you add during object creation defaults to a Source value of ThreatQ System.	
Status	Optional field. Click the Status field to assign a status to the report.	
	Report statuses are configured in the Object Statuses tab in the Object Management page. If none are configured, this field is not displayed.	
Point of Contact	Optional field. Click the field to select the ThreatQ display name of the point of contact for the report.	
Source	Select a <b>Source</b> from the dropdown list provided. You can also click the <b>Add a New Source</b> option if the desired source is not listed in the drop-down list. If administrators have enabled TLP view settings, you can select a TLP label for the new source in the dropdown list provided. See the Traffic Light Protocol (TLP) topic for more information on TLP schema.	

- 3. Select any **Related Objects** you need to link to the Report. This field is optional.
- 4. Click Add Report.

## **Adding Context**

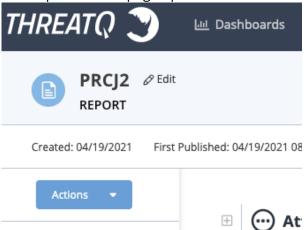
See the About Object Details section and its topics for details on adding context to an object such as adding sources, attributes, and related objects.



## **Editing a Report**

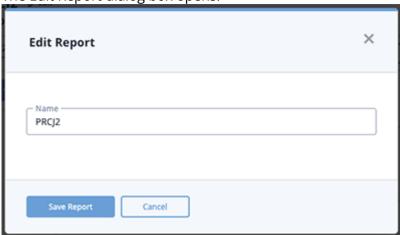
1. Locate and click on the Report.

The Report's detail page opens.



2. Click on **Edit** next to the Report's name.

The Edit Report dialog box opens.



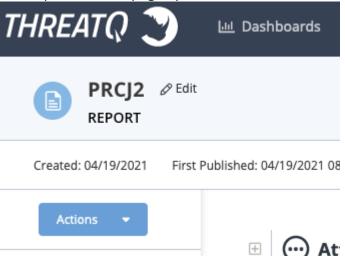
3. Make the desired change to the Report name and click **Save Report**.

## **Deleting a Report**

1. Locate and click on the Report.

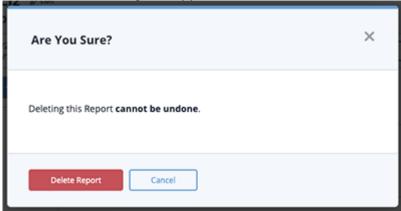


The Report's details page opens.



2. Click on the **Actions** menu and select **Delete Report**.

A confirmation dialog box appears.



3. Click on **Delete Report**.



# **Signatures**

Signatures contain the blueprints or patterns associated with a malicious attack on a network or system.

ThreatQ provides you with the ability to ingest and manage Signatures, such as Snort, YARA, and OpenIOC. While importing, ThreatQ parses the signature file for Indicators to add. Once signatures are included in your deployment, you can add contextual information and correlate them with Indicator, Events, Adversary, and Files.

#### **Adding a Signature**

1. From the main menu, choose **Create > Signature**.

The Add Signatures

Abundon this import

What type?

Source

Add Source

Drag your files here or click to browse

Drag your files here or click to browse

Supported file types include: Alex, acr, xml. and

Signature status to

The wat one eventer the subset of any pre-execting signatures.

Set signature status to

The wat one eventer the subset of any pre-execting signatures.

Apply attributes to all extracted signatures.

Add these signatures to another object (e.g. an indicator, event, adversary, etc...)

Limit sequence is an about the import > Step 2: Review Signatures

- 2. Choose the type of signature from the dropdown.
- 3. Select a **Source** from the dropdown provided. You can also click the **Add a New Source** option if the desired source is not listed in the dropdown list . If administrators have enabled TLP view settings, you can select a TLP label for the new source in the dropdown list provided. See the Traffic Light Protocol (TLP) topic for more information on TLP schema.



- 4. Do one of the following:
  - Drag your file(s) into the left pane.
  - Click click to browse, and locate the file you wish to upload.
  - Copy/paste content into the right pane.
- 5. Optionally, select to parse the signature for indicators.
- 6. Choose a **Signature Status** from the drop-down menu.
- 7. Optionally, Apply attributes to all extracted signatures:
  - Select an Attribute Type.
  - Enter an Attribute Value.
  - Enter an Attribute Source.



You can click on the **Add** icon for additional attributes.

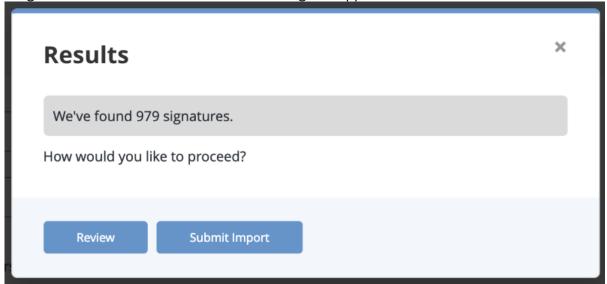
8. Optionally, relate the signature to another object by entering the object in the **Relate signatures to another object** field.



If you enter an object name that is not found, you can click the **Create** link to add the new object. If you limit your search to a specific object type, you are linked to the corresponding form. For example, if you limit your search to Adversaries, the **Create** link opens the Add An Adversary form. If you leave the **Limit search to** field set to All Objects, you can select the object type you want to create from a drop-down list.

9. Click **Next Step**.

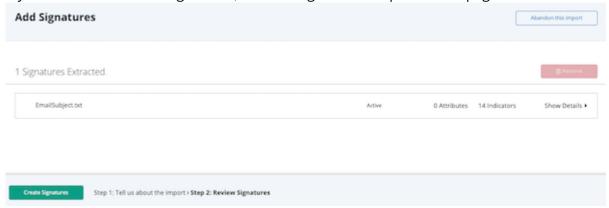
If signatures are discovered, the Results dialog box appears.



10. You can either select **Submit Import** to finish adding the signatures or **Review** to customize what data is imported.

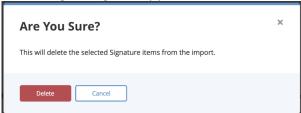


If you selected to review signatures, the Add Signatures Step 2: Review page loads.



- 11. Select one or more signatures and click **Delete**.
- 12. Click on **Show Details** for a signature to review individual items in a signature. Use the checkboxes to select unwanted signature items and click **Delete**.

A warning dialog box appears.



- 13. Click **Delete** to remove the unwanted items.
- 14. Click **Create Signatures** when finished.



#### **STIX**

#### **About STIX**



ThreatQ supports STIX 1.1.1, STIX 1.2 and STIX 2.0.

Although the ThreatQ STIX parser does not support version 2.1, it will parse 2.1 files in the same manner as 2.0 files. As such, it does not parse out any object types introduced in STIX 2.1, except for Notes objects.

ThreatQ allows you to ingest and manage STIX files. You can ingest STIX data in two ways:

- You can set up a STIX/TAXII Feed.
- You can upload a STIX file or insert STIX data to parse for indicators.

#### **ThreatQ STIX Object Types**

STIX integration provides ThreatQ with the following additional object types.

- Campaign
- · Courses of Action
- Exploit Target
- Incident
- TTP objects
- Identity (STIX 2.0)
- Report (STIX 2.0)
- Vulnerability (STIX 2.0)
- Notes (STIX 2.1)

These objects enable better understanding and communication of STIX data. STIX data will be mapped to these objects and existing objects in the system.

#### **Parsing a STIX File for Indicators**

ThreatQ allows you to upload a STIX file or insert STIX data to parse for indicators.

- Click the Create button, located at the top of the dashboard and select STIX Parser under the Import heading.
  - The Parse for Intelligence window is displayed.
- 2. Do one of the following:
  - Drag your file(s) into the left pane.
  - Click on **Click to Browse**, and locate the file you wish to upload.
  - Copy/paste the content in the right pane.
- 3. The **Normalize URL Indicators** check box defaults to checked. You can click the check box to unselect it or leave it checked. See <u>Indicator URL Normalization</u> for more information.



4. Click the **Next Step** button.



If at any point, you wish to abandon the import, click **Abandon this import**.

5. Populate the following fields:

FIELD	REQUIRED	DESCRIPTION
Name	Υ	Enter the name of your import file.
Source	Υ	Select a <b>Source</b> from the dropdown menu provided.
		You can also click the <b>Add a New</b> Source option if the desired source is not listed in the dropdown list . If administrators have enabled TLP view settings, you can select a TLP label for the new source in the dropdown list provided. See the Traffic Light Protocol (TLP) topic for more information on TLP schema.
Select a status	Υ	Select a <b>Status</b> to be applied to the imported objects. You can select a status for any object for which an Admin or Maintenance user has configured object statuses. See the Object Statuses topic for more information.
Add attributes	N	Select <b>Attributes</b> to be assigned to the imported objects.
Add comment	N	Add a comment to the imported objects.
Add relationships	N	Add <b>Relationships</b> for the imported objects.
relationships		If you enter an object name that is not found, you can click the <b>Create</b> link to add the new object. If you limit your search to a specific object type, you are linked to the corresponding form. For example, if you limit your search to Adversaries, the <b>Create</b> link opens the Add An Adversary form. If you



leave the **Limit search to** field set to All Objects, you can select the object type you want to create from a drop-down list.

Tags

Enter any **Tags** that should be applied to the imported objects.

6. Click the **Submit** button.

New objects will become available in the Threat Library.

Ν



# STIX 1.1.1, 1.2 Data Mapping

You can click on the expand icon located to top-right of this topic to expand and collapse all mapping tables below.

• Threat Actors Mapping

STIX FIELD	THREATQ FIELD MAPPING	THREATQ NAME
Identity	Adversary.value	
ID	Adversary.attribute	STIX Reference ID
Title	Adversary.value	
Туре	Adversary.attribute	Туре
Timestamp	Adversary.published_at	
Description	Adversary.attribute	Description
Motivation	Adversary.attribute	Motivation
Sophistication	Adversary.attribute	Sophistication
Intended_Effect	Adversary.attribute	Intended Effect
Role	Adversary.attribute	Role
Confidence	Adversary.attribute	Confidence
Handling	Adversary.tlp	
Observed_TTPs	TTP	
Associated_Actors	Adversary	



STIX FIELD	THREATQ FIELD MAPPING	THREATQ NAME
Associated_Campaigns  Indicators Mapping	Campaign	
STIX FIELD	THREATQ FIELD MAPPING	THREATQ NAME
Title	Indicator.attribute	Indicator Title
ID	Indicator.attribute	STIX Reference ID
Timestamp	Indicator.published_at	
Туре	Indicator.attribute	Indicator Type
Description	Indicator.attribute	Description
Short Description	Indicator.attribute	Short Description
Producer	Indicator.source	
Observable	Indicator	
Indicated_TTP	TTP	
Kill_Chain_Phases	Indicator.attribute	Kill Chain Phase
Likely_Impact	Indicator.attribute	Likely Impact
Suggested_COAs	Course of Action	
Handling	Indicator.tlp	
Confidence	Indicator.attribute	Confidence



STIX FIELD	THREATQ FIELD MAPPING	THREATQ NAME
	Indicator.attribute.source	
Related_Observables		
Related_Indicators	Indicator	
Related_Campaigns	Campaign	
	Signature	
	Signature.type = "Snort"	
	Signature.value	
	Indicator.source	
	Course of Action	
	Indicator.attribute	Start Time
	Indicator.attribute	End Time
	Indicator.published_at	

• Exploit Target Mapping

STIX FIELD	THREATQ FIELD MAPPING	THREATQ NAME
Title	Exploit Target.value	
ID	Exploit Target.attribute	STIX Reference ID
Description	Exploit Target.attribute	Description



STIX FIELD	THREATQ FIELD MAPPING	THREATQ NAME
Short Description	Exploit Target.attribute	Short Description
Weakness	Exploit Target.attribute	CWE ID
Weakness	Exploit Target.attribute	Weakness Description
Configuration	Exploit Target.attribute	CCE ID
Configuration	Exploit Target.attribute	Configuration Description
Configuration	Exploit Target.attribute	Configuration Short Description
Vulnerability	Exploit Target.attribute	CVE ID
Potential_COAs	Course of Action	
Related_Exploit_Targets	Exploit Target	

• Observables Mapping

THREATQ FIELD MAPPING	THREATQ NAME
Indicator.attribute	STIX Reference ID
Indicator.attribute	Description
Indicator.type	IP Address
Indicator.value	
Indicator.type	Filename
Indicator.value	
	Indicator.attribute Indicator.attribute Indicator.type Indicator.value Indicator.type



STIX FIELD	THREATQ FIELD MAPPING	THREATQ NAME
	Indicator.type	File Path
	Indicator.value	
	Indicator.attribute	File Size
	Indicator.attribute	File Format
	Indicator.attribute	Packer
	Indicator.type	MD5
	Indicator.type	SHA-256
	Indicator.type	SHA-1
	Indicator.type	SHA-512
	Indicator.value	
	Indicator.type	SSDEEP
	Indicator.value	
	Indicator.type	FQDN
	Indicator.value	
	Indicator.type	URL
	Indicator.value	
	Indicator.type	Email Subject



STIX FIELD	THREATQ FIELD MAPPING	THREATQ NAME
	Indicator.value	
	Indicator.type	Email Address
	Indicator.value	
	Indicator.type	IP Address
	Indicator.value	
	Indicator.type	User-agent
	Indicator.value	
	Indicator.type	Filename
	Indicator.value	
	Indicator.type	Mutex
	Indicator.value	
	Indicator.attribute	Port
	Indicator.attribute	Protocol
	Object.Description	
	Spearphish.value	
	Indicator.type	Registry Key
	Indicator.value	



STIX FIELD	THREATQ FIELD MAPPING	THREATQ NAME
	Indicator.attribute	Hive

• Campaigns Mapping

STIX FIELD	THREATQ FIELD MAPPING	THREATQ NAME
Title	Campaign.value	
ID	Campaign.attribute	STIX Reference ID
Description	Campaign.attribute	Description
Short Description	Campaign.attribute	Short Description
Timestamp	Campaign.started_at	
Names	Campaign.attribute	Alias
Status	Campaign.attribute	Status
Intended_Effect	Campaign.attribute	Intended Effect
Confidence	Campaign.attribute	Confidence
Activity	Campaign.attribute	Activity
Related TTPs	TTP	
Related Incidents	Incident	
Attribution	Adversary	
Associated_Campaigns	Campaign	

• Courses of Action Mapping



STIX FIELD	THREATQ FIELD MAPPING	THREATQ NAME
Title	Course of Action.value	
ID	Course of Action.attribute	STIX Reference ID
Description	Course of Action.attribute	Description
Stage	Course of Action.attribute	Stage
Objective	Course of Action.attribute	Objective
Objective Confidence	Course of Action.attribute	Objective Confidence
Туре	Course of Action.attribute	Туре
Short Description	Course of Action.attribute	Short Description
Parameter_Observables	Indicator	
Impact	Course of Action.attribute	Impact
Cost	Course of Action.attribute	Cost
Efficacy	Course of Action.attribute	Efficacy
Related_COAs	Course of Action	

• Incidents Mapping

STIX FIELD	THREATQ FIELD MAPPING	THREATQ NAME
Title	Incident.value	
ID	Incident.attribute	STIX Reference ID



STIX FIELD	THREATQ FIELD MAPPING	THREATQ NAME
Timestamp	Incident.published_at	
Description	Incident.attribute	Description
Categories	Incident.attribute	Category
First Malicious Action	Incident.attribute	First Malicious Action
Initial_Compromise	Incident.attribute	Initial Compromise
First_Data_Exfiltration	Incident.attribute	First Data Exfiltration
Incident_Discovery	Incident.attribute	Incident Discovery
Incident_Opened	Incident.attribute	Incident Opened
Incident_Opened	Incident.started_at	
Containment_Achieved	Incident.attribute	Containment Achieved
Restoration_Achieved	Incident.attribute	Restoration Achieved
Incident_Reported	Incident.attribute	Incident Reported
Incident_Closed	Incident.attribute	Incident Closed
Incident_Closed		
Coordinator	Incident.attribute	Coordinator
	Incident.attribute	Coordinator
Reporter	Incident.attribute	Reporter



STIX FIELD	THREATQ FIELD MAPPING	THREATQ NAME
	Incident.attribute	Reporter
Responder	Incident.attribute	Responder
	Incident.attribute	Responder
Victim	Incident.attribute	Victim
	Incident.attribute	Victim
Related Indicators	Indicator	
Related Observables	Indicator	
Leveraged_TTPs	TTP	
Intended_Effect	Incident.attribute	Intended Effect
COA_Requested	Course of Action	
COA_Taken	Course of Action	
Confidence	Incident.attribute	Confidence
Attributed_Threat_Actors	Adversary	
Discovery_Method	Incident.attribute	Discovery Method
Related_Incidents	Incident	

<sup>•</sup> TTP Mapping



STIX FIELD	THREATQ FIELD MAPPING	THREATQ NAME
Title	TTP.value	
ID	TTP.attribute	STIX Reference ID
Description	TTP.attribute	Description
Handling	TTP.tlp	
Kill_Chain_Phases	TTP.attribute	Kill Chain Phase
Intended_Effect	TTP.attribute	Intended Effect
	TTP.attribute	CAPEC ID
Behavior	TTP.attribute	Attack Pattern
	TTP.attribute	Attack Pattern Description
	TTP.attribute	Attack Pattern Short Description
	TTP.attribute	Malware Type
	TTP.attribute	Malware Name
	TTP.attribute	Malware Description
	TTP.attribute	Malware Short Description
	TTP.attribute	Malware Detection Vendor
	TTP.attribute	Malware Family
	TTP.attribute	Exploit



STIX FIELD	THREATQ FIELD MAPPING	THREATQ NAME
	TTP.attribute	Exploit Description
	TTP.attribute	Exploit Short Description
Exploit_Targets	Exploit Target	
Related_TTPs	TTP	
Resources	TTP.attribute	Tool
	TTP.attribute	Tool
	TTP.attribute	Tool Type
	TTP.attribute	Tool Description
	TTP.attribute	Tool Short Description
	TTP.attribute	Infrastructure Type
	TTP.attribute	Infrastructure
	TTP.attribute	Infrastructure Short Description
	TTP.attribute	Infrastructure Description
	Indicator	
	TTP.attribute	Persona
Victim Targeting	TTP.attribute	Victim Name
	TTP.attribute	Victim <ciq identity="" name=""></ciq>



STIX FIELD	THREATQ FIELD MAPPING	THREATQ NAME
	TTP.attribute	Targeted Systems
	TTP.attribute	Targeted Information
	Indicator	

• CIQ Identity Mapping

STIX FIELD	THREATQ FIELD MAPPING	THREATQ NAME
Party Name	Object.attribute	Name
Organization Name	Object.attribute	Organization
Industry Sector	Object.attribute	Industry
Nationality	Object.attribute	Nationality
Languages	Object.attribute	Language
Address	Object.attribute	Country
Email Address	Object.attribute	E-Mail Address
Chat Handle	Object.attribute	Chat Handle
Phone	Object.attribute	Phone



# **STIX 2.0 Data Mapping**



Although the ThreatQ STIX parser does not support version 2.1, it will parse 2.1 files in the same manner as 2.0 files. As such, it does not parse out any object types introduced in STIX 2.1, except for Notes objects.

You can click on the expand icon located to the top-right of this topic to expand and collapse all mapping tables below.

• Attack Patterns Mapping

STIX 2.0 FIELD	THREATQ FIELD MAPPING	THREATQ NAME
created	Attack Pattern.Published_at	
description	Attack Pattern.Attribute	Description
external_references[]	See External References	
kill_chain_phases.[]e	See Kill Chain Table	
modified	Attack Pattern.Attribute	Modified At
name	Attack Pattern.Value	
revoked (if revoked == true)	Attack Pattern.Attribute	Revoked
labels	Attack Pattern.Attribute	Label

• Threat Actors Mapping

STIX 2.0 FIELD	THREATQ FIELD MAPPING	THREATQ NAME
aliases	Adversary	* The Adversary created will have all the same attributes and published_at as the base Attribute. All alias Adversaries will be interrelated



STIX 2.0 FIELD	THREATQ FIELD MAPPING	THREATQ NAME
created	Adversary.Published_At	
goals	Adversary.Attribute	Goal
labels	Adversary.Attribute	Label
modified	Adversary.Attribute	Modified At
name	Adversary.Value	
primary_motivation	Adversary.Attribute	Primary Motivation
resource_level	Adversary.Attribute	Resource Level
roles	Adversary.Attribute	Role
secondary_motivation	Adversary.Attribute	Secondary Motivation
sophistication	Adversary.Attribute	Sophistication
revoked (if revoked == true)	Adversary.Attribute	Revoked
external_references[]	See External References	
personal_motivations	Adversary.Attribute	Personal Motivation
Indicators Mapping		
STIX 2.0 FIELD	THREATQ FIELD MAPPING	THREATQ NAME
created	Signature.Published_at	



STIX 2.0 FIELD	THREATQ FIELD MAPPING	THREATQ NAME
description	Signature.Description	
external_references[]	See External References	
labels	Signature.Attribute	Label
modified	Signature.Attribute	Modified At
name	Signature.Name	ThreatQ will default to using Indicator Pattern as the signature name if a name is not provided.
pattern	Signature.Value	
	Signature.Type	Indicator Pattern
valid.from	Signature.Attribute	Valid From
valid.until	Signature.Attribute	Valid Until
revoked (if revoked == true)	Signature.Attribute	Revoked
kill_chain_phases.[]	See Kill Chain Table	

ThreatQ Indicator and / or Event objects based on the Observables Mapping may be derived from the pattern field and related back to the resulting Signature.

#### • Identities Mapping

STIX 2.0 FIELD	THREATQ FIELD MAPPING	THREATQ NAME
contact_information	Identity.Contact_Information	



STIX 2.0 FIELD	THREATQ FIELD MAPPING	THREATQ NAME
created	Identity.Published_at	
description	Identity.Description	
external_references[]	See External References	
identity_class	Identity.Attribute	Identity Class
modified	Identity.Attribute	Modified At
name	Identity.Value	
sectors	Identity.Attribute	Sector
labels	Identity.Attribute	Label
revoked (if revoked == true)	Identity.Attribute	Revoked

Observables Mapping

STIX 2.0 FIELD	THREATQ FIELD MAPPING	THREATQ NAME
created	Observable.Published_at	
modified	Observable.Attribute	Modified At
revoked (if revoked == true)	Observable.Attribute	Revoked
external_references	Observable.Attribute	External Reference See External References.
number_observed	Observable.Attribute	Number Observed



STIX 2.0 FIELD	THREATQ FIELD MAPPING	THREATQ NAME
objects[]		Specifies Cyber Observable Objects representing this observation. See the tables below for parsing details.
1. Artifact Mapping		

STIX 2.0 FIELD	THREATQ FIELD MAPPING	THREATQ NAME
type: artifact	Indicator.Type	URL
mime_type	Indicator.Attribute	МІМЕ Туре
url	Indicator.Value	
hashes{}	Indicator.relationship	
hashes{}.key	Indicator.Type	MD5 / SHA-1 / SHA-256 / SHA-384 / SHA-512 / Fuzzy Hash
hashes{}.value	Indicator.Value	

## 2. Automous System Mapping

STIX 2.0 FIELD	THREATQ FIELD MAPPING	THREATQ NAME
type: autonomous- system	Indicator.Type	ASN
number	Indicator.Value	
name	Indicator.Attribute	Name



STIX 2.0 FIELD	THREATQ FIELD MAPPING	THREATQ NAME
rir	Indicator.Attribute	Regional Internet Registry

3. Directory Mapping

STIX 2.0 FIELD	THREATQ FIELD MAPPING	THREATQ NAME
type: directory	Indicator.Type	File Path
path	Indicator.Value	
path_enc	Indicator.Attribute	Path Encoding
created	Indicator.Attribute	Created At
accessed	Indicator.Attribute	Last Accessed
contains_refs	Indicator.relationship	

#### 4. Domain-Name Mapping

STIX 2.0 FIELD	THREATQ FIELD MAPPING	THREATQ NAME
type: domain-name	Indicator.Type	FQDN
value	Indicator.Value	
resolves_to_refs[]	Indicator.relationship	

#### 5. Email Addr Mapping

STIX 2.0 FIELD	THREATQ FIELD MAPPING	THREATQ NAME
type: email-addr	Indicator.Type	Email Address
display_name	Indicator.Attribute	Display Name



STIX 2.0 FIELD	THREATQ FIELD MAPPING	THREATQ NAME
value	Indicator.Value	
belongs_to_ref[]	Indicator.relationship	

# 6. Email Message Mapping

STIX 2.0 FIELD	THREATQ FIELD MAPPING	THREATQ NAME
type: email-message	Event.Type Indicator.Type	Spearphish Email Subject
subject**	Event.Title Indicator.Value	
is_multipart	Indicator.Attribute	ls Multipart
date (if parsing as an event)* sent date (if parsing as an indicator)	Event.happened_at Indicator.Attribute	
content_type	Indicator.Attribute	Content Type
from_ref	Event.Relationship Indicator.Relationship	From
sender_ref	Event.Relationship Indicator.Relationship	Sender
to_refs	Event.Relationship Indicator.Relationship	То
cc_refs	Event.Relationship	CC
bcc_refs	Event.Relationship Indicator.Relationship	BCC



STIX 2.0 FIELD	THREATQ FIELD MAPPING	THREATQ NAME
received_lines	Event.Attribute Indicator.Attribute	Received Lines
additional_header_fields	Event.Attribute Indicator.Attribute	Additional Header - {key} An attribute is created for each key-value pair of the additional_header_fields object.
body	Event.Attribute Indicator.Attribute	Body
body_multipart[].body_raw_ref***	Indicator	Filename
raw_email_ref	Event.Relationship Indicator.Relationship	

<sup>\*</sup> To parse an event from an email message, the email must have a **date**and **subject** field.

Note: Parsing both an indicator and event from an email message will relate the two objects .

#### 7. File Mapping

	STIX 2.0 FIELD	THREATQ FIELD MAPPING	THREATQ NAME	
type	file	Indicator.Type	Filename	

<sup>\*\*</sup> To parse an indicator from an email message, the email must contain a **subject** field.

<sup>\*\*\*</sup> If an object in body\_multipart has a body field (body\_multipart[].body), an attribute is created. The attribute's name is "Body Multipart" and the attribute's value is in the format "Content Type: {body\_multipart[].content\_type}, Content Disposition: {body\_multipart[].content\_disposition}, Body: {body\_multipart[].body}".



STIX 2.0 FIELD	THREATQ FIELD MAPPING	THREATQ NAME
size	Indicator.Attribute	File Size
hashes{}		
hashes{}.key	Indicator.Type	MD5 / SHA-1 / SHA-256 / SHA-384 / SHA-512 / Fuzzy Hash
hashes{}.value	Indicator.Value	
name	Indicator.Value	
name_enc	Indicator.Attribute	File Name Encoding
magic_number_hex	Indicator.Attribute	Magic Number Hex
mime_type	Indicator.Attribute	MIME Type
created	Indicator.Attribute	Created At
accessed	Indicator.Attribute	Last Accessed
parent_directory_ref	Indicator.Relationship	
is_encrypted	Indicator.Attribute	Encrypted
encryption_algorithm	Indicator.Attribute	Encryption Algorithm



STIX 2.0 FIELD	THREATQ FIELD MAPPING	THREATQ NAME
decryption_key	Indicator.Attribute	Decryption Key
contains_refs[]	Indicator.Relationship	
content_ref	Indicator.Relationship	
extensions.archive-ext.contains_refs[]	Indicator.Relationship	
extensions.archive-ext.version	Indicator.Attribute	Archive Version
extensions.archive-ext.comment	Indicator.Attribute	Archive File Comment
extensions.ntfs-ext.sid	Indicator.Attribute	Security ID
extensions.ntfs- ext.alternate_data_streams[].hashes{}		
extensions.ntfs- ext.alternate_data_streams[].hashes{}.key	Indicator.Type	MD5 / SHA-1 / SHA-256 / SHA-384 / SHA-512 / Fuzzy Hash
extensions.ntfs- ext.alternate_data_streams[].hashes{}.value	Indicator.Value	
extensions.ntfs- ext.alternate_data_streams[].name	Indicator.Attribute	Alternate Data Stream Name
extensions.ntfs- ext.alternate_data_streams[].size	Indicator.Attribute	Alternate Data Stream Size



STIX 2.0 FIELD	THREATQ FIELD MAPPING	THREATQ NAME
extensions.pdf-ext.version	Indicator.Attribute	PDF Specification Version
extensions.pdf-ext.is_optimized	Indicator.Attribute	PDF Is Optimized
extensions.pdf-ext.document_info_dict{}.key/ value	Indicator.Attribute	Formatted as: 'PDF {key.title()}'
extensions.pdf-ext.pdfid0	Indicator.Attribute	PDF First File Identifier
extensions.pdf-ext.pdfid1	Indicator.Attribute	PDF Second File Identifier
extensions.raster-image-ext.image_height	Indicator.Attribute	Image Height
extensions.raster-image-ext.image_width	Indicator.Attribute	Image Width
extensions.raster-image-ext.bits_per_pixel	Indicator.Attribute	Image Bits Per Pixel
extensions.raster-image- ext.image_compression_algorithm	Indicator.Attribute	Image Compression Algorithm
extensions.raster-image-ext.exif_tags{}.key/ value	Indicator.Attribute	Formatted as: 'Image EXIF {key.title()}'
extensions.windows-pebinary-ext.pe_type	Indicator.Attribute	Executable Extension Type



STIX 2.0 FIELD	THREATQ FIELD MAPPING	THREATQ NAME
extensions.windows-pebinary-ext.imphash	Indicator.Attribute	Executable Imphash
extensions.windows-pebinary- ext.machine_hex	Indicator.Attribute	Target Machine Hex
extensions.windows-pebinary- ext.number_of_sections	Indicator.Attribute	PE Binary Section Count
extensions.windows-pebinary- ext.time_date_stamp	Indicator.Attribute	PE Binary Created Date
extensions.windows-pebinary- ext.pointer_to_symbol_table_hex	Indicator.Attribute	Symbol Table Hex Offset
extensions.windows-pebinary- ext.number_of_symbols	Indicator.Attribute	PE Binary Symbol Table Size
extensions.windows-pebinary- ext.size_of_optional_header	Indicator.Attribute	PE Binary Optional Header Size
extensions.windows-pebinary- ext.characteristics_hex	Indicator.Attribute	PE Binary Characteristics Hex
extensions.windows-pebinary- ext.file_header_hashes{}		
extensions.windows-pebinary- ext.file_header_hashes{}.key	Indicator.Type	MD5 / SHA-1 / SHA-256 / SHA-384 / SHA-512 / Fuzzy Hash



STIX 2.0 FIELD	THREATQ FIELD MAPPING	THREATQ NAME
extensions.windows-pebinary- ext.file_header_hashes{}.value	Indicator.Value	
extensions.windows-pebinary- ext.optional_header.magic_hex	Indicator.Attribute	PE Binary Magic Hex
extensions.windows-pebinary- ext.optional_header.major_linker_version	Indicator.Attribute	PE Binary Major Linker Version
extensions.windows-pebinary- ext.optional_header.minor_linker_version	Indicator.Attribute	PE Binary Minor Linker Version
extensions.windows-pebinary- ext.optional_header.size_of_code	Indicator.Attribute	PE Binary Code Size
extensions.windows-pebinary- ext.optional_header.size_of_initialized_data	Indicator.Attribute	PE Binary Initialized Data Size
extensions.windows-pebinary- ext.optional_header.size_of_uninitialized_data	Indicator.Attribute	PE Binary Uninitialized Data Size
extensions.windows-pebinary- ext.optional_header.address_of_entry_point	Indicator.Attribute	PE Binary Memory Address Entry Point
extensions.windows-pebinary- ext.optional_header.base_of_code	Indicator.Attribute	PE Binary Base Code Memory Address



STIX 2.0 FIELD	THREATQ FIELD MAPPING	THREATQ NAME
extensions.windows-pebinary- ext.optional_header.base_of_data	Indicator.Attribute	PE Binary Base Data Memory Address
extensions.windows-pebinary- ext.optional_header.image_base	Indicator.Attribute	PE Binary Base Image Memory Address
extensions.windows-pebinary- ext.optional_header.section_alignment	Indicator.Attribute	PE Binary Section Alignment Bytes
extensions.windows-pebinary- ext.optional_header.file_alignment	Indicator.Attribute	PE Binary Image File Alignment Bytes
extensions.windows-pebinary- ext.optional_header.major_os_version	Indicator.Attribute	Windows OS Major Version
extensions.windows-pebinary- ext.optional_header.minor_os_version	Indicator.Attribute	Windows OS Minor Version
extensions.windows-pebinary- ext.optional_header.major_image_version	Indicator.Attribute	Image Major Version
extensions.windows-pebinary- ext.optional_header.minor_image_version	Indicator.Attribute	Image Minor Version
extensions.windows-pebinary- ext.optional_header.major_subsystem_version	Indicator.Attribute	Subsystem Major Version



STIX 2.0 FIELD	THREATQ FIELD MAPPING	THREATQ NAME
extensions.windows-pebinary- ext.optional_header.minor_subsystem_version	Indicator.Attribute	Subsystem Minor Version
extensions.windows-pebinary- ext.optional_header.win32_version_value_hex	Indicator.Attribute	Win32 Version Hex
extensions.windows-pebinary- ext.optional_header.size_of_image	Indicator.Attribute	Image Byte Size
extensions.windows-pebinary- ext.optional_header.size_of_headers	Indicator.Attribute	PE Binary Combined Header Size
extensions.windows-pebinary- ext.optional_header.checksum_hex	Indicator.Attribute	PE Binary Checksum Hex
extensions.windows-pebinary- ext.optional_header.subsystem_hex	Indicator.Attribute	PE Binary Required Subsystem Hex
extensions.windows-pebinary- ext.optional_header.dll_characteristics_hex	Indicator.Attribute	DLL Characteristics Hex
extensions.windows-pebinary- ext.optional_header.size_of_stack_reserve	Indicator.Attribute	Reserved Stack Size
extensions.windows-pebinary- ext.optional_header.size_of_stack_commit	Indicator.Attribute	Stack Commit Size
extensions.windows-pebinary- ext.optional_header.size_of_heap_reserve	Indicator.Attribute	Heap Space Reserve Size



STIX 2.0 FIELD	THREATQ FIELD MAPPING	THREATQ NAME
extensions.windows-pebinary- ext.optional_header.size_of_heap_commit	Indicator.Attribute	Heap Space Commit Size
extensions.windows-pebinary- ext.optional_header.loader_flags_hex	Indicator.Attribute	Loader Flags Hex
extensions.windows-pebinary- ext.optional_header.number_of_rva_and_sizes	Indicator.Attribute	Number of RVA and Sizes
extensions.windows-pebinary- ext.optional_header.hashes{}		
extensions.windows-pebinary- ext.optional_header.hashes{}.key	Indicator.Type	MD5 / SHA-1 / SHA-256 / SHA-384 / SHA-512 / Fuzzy Hash
extensions.windows-pebinary- ext.optional_header.hashes{}.value	Indicator.Value	
extensions.windows-pebinary- ext.sections[].hashes{}		
extensions.windows-pebinary- ext.sections[].hashes{}.key	Indicator.Type	MD5 / SHA-1 / SHA-256 / SHA-384 / SHA-512 / Fuzzy Hash
extensions.windows-pebinary- ext.sections[].hashes{}.value	Indicator.Value	
extensions.windows-pebinary- ext.sections[].name	Indicator.Attribute	PE Binary Section Name



STIX 2.0 FIELD	THREATQ FIELD MAPPING	THREATQ NAME
extensions.windows-pebinary- ext.sections[].size	Indicator.Attribute	PE Binary Section Size
extensions.windows-pebinary- ext.sections[].entropy	Indicator.Attribute	PE Binary Section Entropy

## 8. IPv4 Mapping

STIX 2.0 FIELD	THREATQ FIELD MAPPING	THREATQ NAME
type: ipv4-addr	Indicator.Type	CIDR Block (if value contains a / and does not end with /32) IP Address (if the value ends with /32, the /32 is omitted and reported as an IP Address)
value	Indicator.Value	
resolves_to_refs[]	Indicator.Relationship	
belongs_to_refs[]	Indicator.Relationship	
ID CAA		

## 9. IPv6 Mapping

STIX 2.0 FIELD	THREATQ FIELD MAPPING	THREATQ NAME
type: ipv6-addr	Indicator.Type	IPv6 Address
value	Indicator.Value	
resolves_to_refs[]	Indicator.Relationship	
belongs_to_refs[]	Indicator.Relationship	
MAC Manning		

#### 10. MAC Mapping



STIX 2.0 FIELD	THREATQ FIELD MAPPING	THREATQ NAME
type: mac-addr	Indicator.Type	MAC Address
value	Indicator.Value	
Mutex Mapping		

11. Mutex Mapping

STIX 2.0 FIELD	THREATQ FIELD MAPPING	THREATQ NAME
type: mutex	Indicator.Type	Mutex
name	Indicator.Value	

12. URL Mapping

STIX 2.0 FIELD	THREATQ FIELD MAPPING	THREATQ NAME
type: url	Indicator.Type	URL
value	Indicator.Value	

13. User Account Mapping

STIX 2.0 FIELD	THREATQ FIELD MAPPING	THREATQ NAME
type: user-account	Indicator.Type	Username
user_id	Indicator.Attribute	User ID
account_login	Indicator.Value	
account_type	Indicator.Attribute	Account Type
display_name	Indicator.Attribute	Display Name
is_service_account	Indicator.Attribute	ls Service Account



STIX 2.0 FIELD	THREATQ FIELD MAPPING	THREATQ NAME
is_privileged	Indicator.Attribute	Is Privileged Account
can_escalate_privs	Indicator.Attribute	Can Escalate Privileges
is_disabled	Indicator.Attribute	ls Disabled
account_created	Indicator.Attribute	Account Created
account_expires	Indicator.Attribute	Account Expires
password_last_changed	Indicator.Attribute	Password Last Changed
account_first_login	Indicator.Attribute	Account First Login
account_last_login	Indicator.Attribute	Account Last Login
extensions.unix- account-ext.gid	Indicator.Attribute	Account Group ID
extensions.unix- account-ext.groups[]	Indicator.Attribute	Account Group
extensions.unix- account-ext.home_dir	Indicator.Attribute	Account Home Directory
extensions.unix- account-ext.shell	Indicator.Attribute	Account Command Shell

14. Windows Registry Key Mapping



STIX 2.0 FIELD	THREATQ FIELD MAPPING	THREATQ NAME
type: windows-registry- key	Indicator.Type	Registry Key
key	Indicator.Value	
values[].name	Indicator.Attribute	Registry Name
modified	Indicator.Attribute	Registry Modified At
creator_user_ref	Indicator.Relationship	

• Campaigns Mapping

STIX 2.0 FIELD	THREATQ FIELD MAPPING	THREATQ NAME
aliases	Campaign	
created	Campaign.Published_at	
description	Campaign.Description	
first_seen	Campaign.Started_at	
last_seen	Campaign.Ended_at	
modified	Campaign.Attribute	Modified At
name	Campaign.Value	
objective	Campaign.Objective	
revoked (if revoked == true)	Campaign.Attribute	Revoked



STIX 2.0 FIELD	THREATQ FIELD MAPPING	THREATQ NAME
external_references[]	See External References	
labels	Campaign.Attribute	Label
Courses of Action Mapping  STIX 2.0 FIELD	THREATQ FIELD MAPPING	THREATQ NAME
created	Course of Action.Published_at	
modified	Course of Action.Attribute	Modified At
name	Course of Action.Value	
description	Course of Action.Description	
action		
revoked (if revoked == true)	Course of Action.Attribute	Revoked
external_references[]	See External References	
labels	Course of Action.Attribute	Label
Intrusion Sets Mapping STIX 2.0 FIELD	THREATQ FIELD MAPPING	THREATQ NAME
aliases	Intrusion Set	
created	Intrusion Set.Published_at	
description	Intrusion Set.Description	
first_seen		



STIX 2.0 FIELD	THREATQ FIELD MAPPING	THREATQ NAME
goals	Intrusion Set.Attribute	Goal
modified	Intrusion Set.Attribute	Modified At
name	Intrusion Set.Value	
primary_motivation	Intrusion Set.Attribute	Primary Motivation
resource_level	Intrusion Set.Attribute	Resource Level
secondary_motivations	Intrusion Set.Attribute	Secondary Motivation
external_references[]	See External References	
revoked (if revoked == true)	Intrusion Set.Attribute	Revoked
Malware Mapping		
Malware Mapping STIX 2.0 FIELD	THREATQ FIELD MAPPING	THREATQ NAME
	THREATQ FIELD MAPPING  Malware.Published_at	THREATQ NAME
STIX 2.0 FIELD	•	THREATQ NAME
STIX 2.0 FIELD created	Malware.Published_at	THREATQ NAME
STIX 2.0 FIELD  created  description	Malware.Published_at  Malware.Description	THREATQ NAME
STIX 2.0 FIELD  created  description  kill_chain_phases.[]	Malware.Published_at  Malware.Description  See Kill Chain Table	
stix 2.0 field  created  description  kill_chain_phases.[]  labels	Malware.Published_at  Malware.Description  See Kill Chain Table  Malware.Attribute	Label



STIX 2.0 FIELD	THREATQ FIELD MAPPING	THREATQ NAME
revoked (if revoked == true)	Malware.Attribute	Revoked
Tools Mapping		
STIX 2.0 FIELD	THREATQ FIELD MAPPING	THREATQ NAME
created	Tool.Published_at	
modified	Tool.Attribute	Modified At
labels	Tool.Attribute	Label
name	Tool.Value	
revoked (if revoked == true)	Tool.Attribute	Revoked
external_references[]	See External References	
description	Tool.Description	
kill_chain_phases.[]	See Kill Chain Table	
tool_version	Tool.Attribute	Tool Version
Reports Mapping		
STIX 2.0 FIELD	THREATQ FIELD MAPPING	THREATQ NAME
created	Report.Published_at	
modified	Report.Attribute	Modified At
name	Report.Value	
description	Report.Description	



STIX 2.0 FIELD	THREATQ FIELD MAPPING	THREATQ NAME
labels	Report.Attribute	Label
object_refs	Report.Relationship.Link	
external_references[]	See External References	
revoked (if revoked == true)	Report.Attribute	Revoked
Sightings Mapping		
STIX 2.0 FIELD	THREATQ FIELD MAPPING	THREATQ NAME
count	Event.Attribute	Count
created	Event.published_at	
first_seen	Event.happened_at	
last_seen	Event.Attribute	Last Seen
observed_data_refs	Event.relationship.link	
sighting_of_ref	Event.relationship.link	
where_sighted_refs	Event.relationship.link	
revoked (if revoked == true)	Object.attribute	Revoked
	Event.name	STIX Sighting
	Event.type	Sighting
external_references[]	See External References	



STIX 2.0 FIELD	THREATQ FIELD MAPPING	THREATQ NAME
modified	Event.Attribute	Modified

#### **External References**

STIX 2.0 FIELD	THREATQ FIELD MAPPING	THREATQ NAME
Object.external_references[].source_name	Object.Attribute	External Reference*
Object.external_references[].external_id	Object.Attribute	External Reference*
Object.external_references[].description	Object.Attribute	External Reference*
Object.external_references[].url	Object.Attribute	External Reference*

<sup>\*</sup> Formatted as: {source\_name} ({external\_id}): {description} - {url}

#### **Kill Chain Phrases**

STIX 2.0 FIELD	THREATQ FIELD MAPPING	THREATQ NAME
kill_chain_phases[].kill_chain_name	Object.Attribute	Kill Chain Name
kill_chain_phases[].phase_name	Object.Attribute	Kill Chain Phrase



# **STIX 2.1 Data Mapping**



Although the ThreatQ STIX parser does not support version 2.1, it will parse 2.1 files in the same manner as 2.0 files. As such, it does not parse any object types introduced in STIX 2.1, except for Notes objects and Confidence values.

Notes Mapping

THREATQ FIELD MAPPING	THREATQ NAME
	Object Value
	"note"
See External References	External Reference
	Description
	Note Author
Notes.Published_At	
Notes.Attribute	Modified At
object_marking_refs	
	See External References  Notes.Published_At  Notes.Attribute

#### **External References**

STIX 2.0 FIELD	THREATQ FIELD MAPPING	THREATQ NAME	
Object.external_references[].source_name	Object.Attribute	External Reference*	

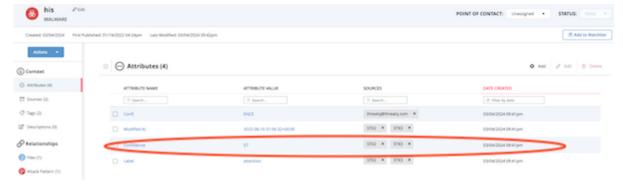


STIX 2.0 FIELD	THREATQ FIELD MAPPING	THREATQ NAME
Object.external_references[].external_id	Object.Attribute	External Reference*
Object.external_references[].description	Object.Attribute	External Reference*
Object.external_references[].url	Object.Attribute	External Reference*

<sup>\*</sup> Formatted as: {source\_name} ({external\_id}): {description} - {url}

### **Common Properties**

ThreatQ allows you to import system object Confidence values from STIX 2.1 files as attributes. Confidence is an optional value that specifies the confidence of the object creator in their data on a scale from zero to one hundred.





# **Tasks**

ThreatQ allows you to create and assign tasks to yourself or other users in the platform.

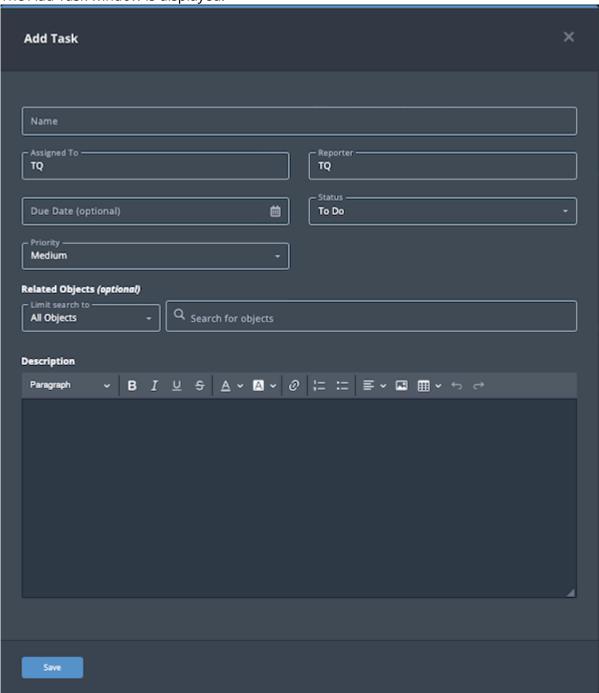
Once tasks are included in your deployment, you can add contextual information and correlate them with Indicator , Events , Adversary , Signatures , and Files . You can also add comments, change the task priority, change the task status, and delete the task.

## **Assigning a Task**

Complete the following steps to assign a task in ThreatQ.



From the main menu, choose Create > Task.
 The Add Task window is displayed.



2. Populate the following fields:

**FIELD** 

**DESCRIPTION** 

Name

Add a task name.



FIELD	DESCRIPTION
Assigned To	Enter the person to which the task is assigned. This field defaults to your ThreatQ display name.
Reporter	Enter the person who reported the task. This field defaults to your ThreatQ display name.
Due Date	Use the date picker to select a due date
Status	Select one of the following statuses:  To Do  In Progress Review  Done
Priority	Select one of the following task priorities: <ul> <li>Low</li> <li>Medium</li> <li>High</li> </ul>
Related Objects	Optional. Select any related objects you need to link to the Task.
Description	Enter a brief description of the task object.  Any description you add during object creation defaults to a Source value of ThreatQ System.

#### 3. Click **Save**.

The assignee receives a Notification Center alert about the task. This alert includes a link to the assigned task.

# **Managing Tasks**

After a task is created, you can manage it on the task's Details page.

The following table describes the actions you can take to manage your tasks on a Task Details page.



ТО	YOU CAN
Change task priority	Choose the <b>Priority</b> drop-down and select a new priority.
Change task status	Choose the <b>Status</b> drop-down and select a new status.
Add Attributes, Comments, Relationships, and Sources	Choose the <b>Add Context</b> drop-down and select an item.
View and Add Comments	Choose <b>Comments</b> .
View the Audit Log	Choose <b>Audit Log</b> .
Request Investigation Access	<ol> <li>Choose Investigations.</li> <li>Click the related investigation to open the Access Denied window.</li> <li>Click the Request Access button.         When you click this button, the investigation owner receives a Notification Center alert indicating you have requested access to the investigation.</li> </ol>



# **Tools**

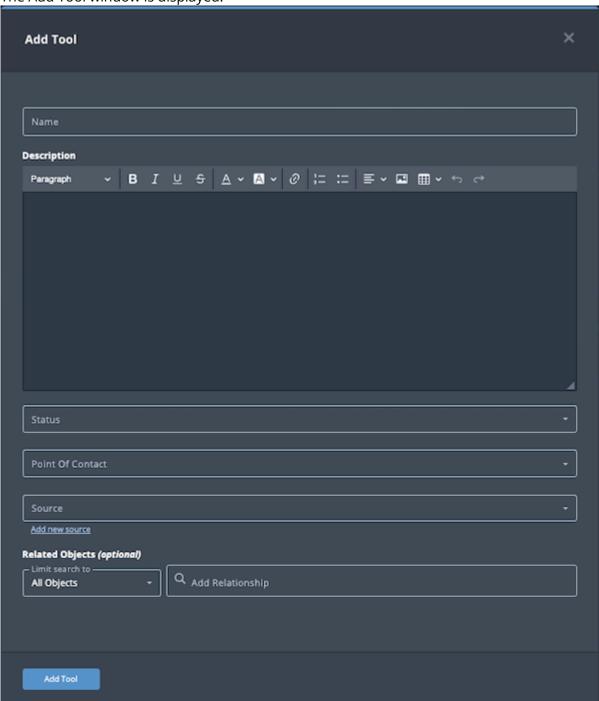
A Tool is a legitimate application that can be leveraged to perform malicious activities. Use the steps below to create, edit and delete a Tool.



# **Adding a Tool**

1. Go to **Create > Tool**.

The Add Tool window is displayed.



2. Populate the following fields:



FIELD	DESCRIPTION
Name	Add a tool name.
Description	Enter a brief description of the tool.  Any description you add during object creation defaults to a Source value of ThreatQ System.
Status	Optional field. Click the Status field to assign a status to the tool.
	Tool statuses are configured in the Object Statuses tab in the Object Management page. If none are configured, this field is not displayed.
Point of Contact	Optional field. Click the field to select the ThreatQ display name of the point of contact for the tool.
Source	Select a <b>Source</b> from the dropdown list provided. You can also click the <b>Add a New Source</b> option if the desired source is not listed in the drop-down list. If administrators have enabled TLP view settings, you can select a TLP label for the new source in the dropdown list provided. See the Traffic Light Protocol (TLP) topic for more information on TLP schema.

- 3. Select any **Related Objects** you need to link to the Tool. This field is optional.
- 4. Click **Add Tool**.

## **Adding Context**

See the About Object Details section and its topics for details on adding context to an object such as adding sources, attributes, and related objects.

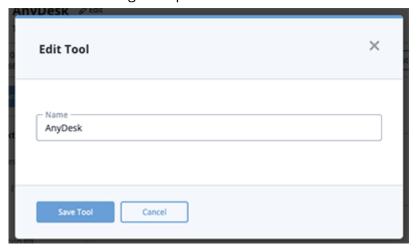


# **Editing a Tool**

1. Locate and click on the Tool. The Tool's detail page opens.



2. Click on **Edit** next to the Tool's name. The Edit Tool dialog box opens.



3. Make the desired change to the Tool name and click **Save Tool**.

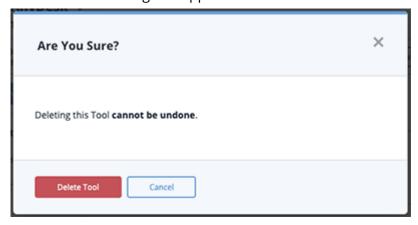
# **Deleting a Tool**

Locate and click on the Tool.
 The Tool's details page opens.





2. Click on the **Actions** menu and select **Delete Tool**. A confirmation dialog box appears.



3. Click on **Delete Tool**.



# **TTP**

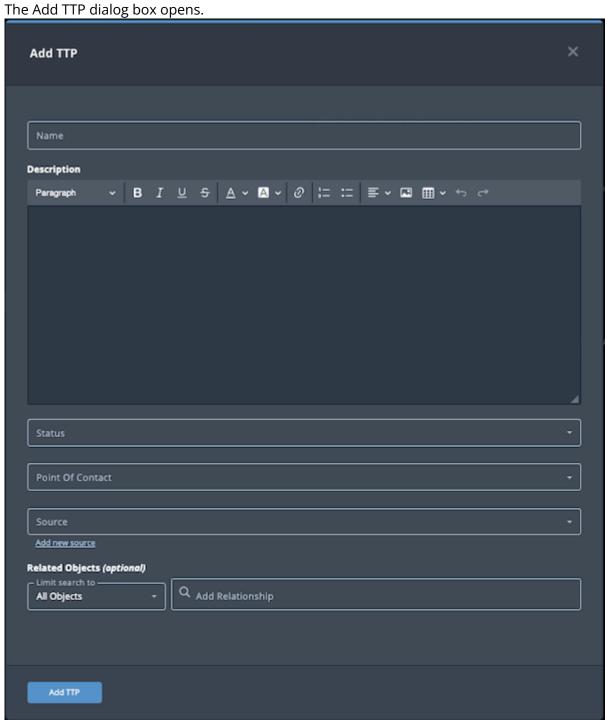
TTP, which stands for tactics, techniques, and procedures, describes how an intruder may attempt to access your system.

Use the steps below to create, edit and delete a TTP.



# **Adding a TTP**

1. Go to **Create > TTP**.



2. Populate the following fields:



FIELD	DESCRIPTION
Name	Add a TTP name.
Description	Enter a brief description of the TTP.  Any description you add during object creation defaults to a Source value of ThreatQ System.
Status	Optional field. Click the Status field to assign a status to the TTP.
	TTP statuses are configured in the Object Statuses tab in the Object Management page. If none are configured, this field is not displayed.
Point of Contact	Optional field. Click the field to select the ThreatQ display name of the point of contact for the TTP.
Source	Select a <b>Source</b> from the dropdown list provided. You can also click the <b>Add a New Source</b> option if the desired source is not listed in the drop-down list. If administrators have enabled TLP view settings, you can select a TLP label for the new source in the dropdown list provided. See the Traffic Light Protocol (TLP) topic for more information on TLP schema.

- 3. Select any **Related Objects** you need to link to the TTP. This field is optional.
- 4. Click **Add TTP**.

# **Adding Context**

See the About Object Details section and its topics for details on adding context to an object such as adding sources, attributes, and related objects.



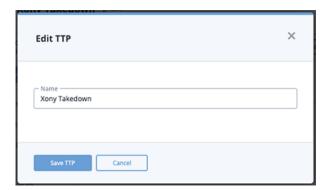
## **Editing a TTP**

Locate and click on the TTP.
 The TTP's detail page opens.



Created: 04/20/2021 First Published: 04/20/2021 12:

2. Click on **Edit** next to the TTP's name. The Edit TTP dialog box opens.



3. Make the desired change to the TTP name and click **Save TTP**.

## **Deleting a TTP**

Locate and click on the TTP.
 The TTP's details page opens.



Created: 04/20/2021 First Published: 04/20/2021 12:

2. Click on the **Actions** menu and select **Delete TTP**.



A confirmation dialog box appears.



3. Click on **Delete TTP**.



# **Vulnerabilities**

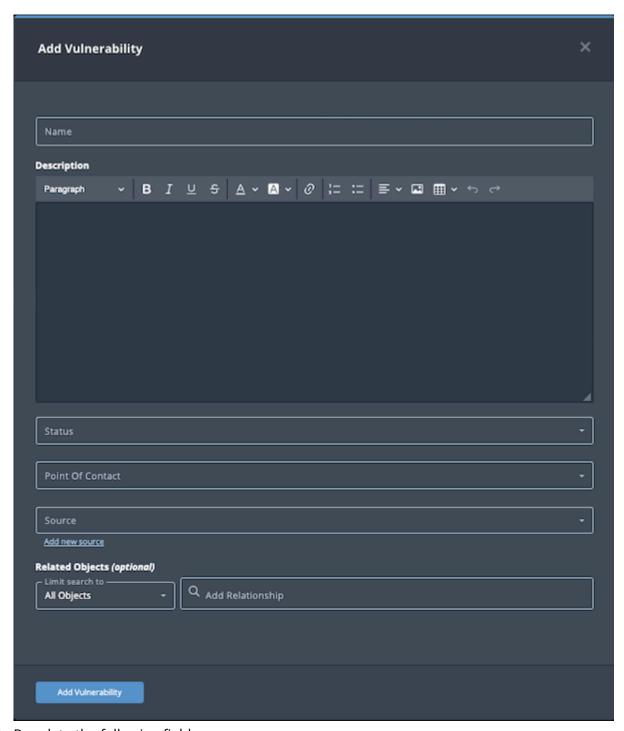
A Vulnerability, as its name suggests, is a vulnerability in an application that can be exploited to infiltrate systems/networks.

Use the steps below to create, edit and delete a Vulnerability.

# **Adding a Vulnerability**

Go to Create > Vulnerability.
 The Add Vulnerability dialog box opens.





2. Populate the following fields:

# FIELD DESCRIPTION Add a vulnerability name.

Name

Description

Enter a brief description of the vulnerability.



FIELD	DESCRIPTION
	Any description you add during object creation defaults to a Source value of ThreatQ System.
Status	Optional field. Click the Status field to assign a status to the vulnerability.
	Vulnerability statuses are configured in the Object Statuses tab in the Object Management page. If none are configured, this field is not displayed.
Point of Contact	Optional field. Click the field to select the ThreatQ display name of the point of contact for the vulnerability.
Source	Select a <b>Source</b> from the dropdown list provided. You can also click the <b>Add a New Source</b> option if the desired source is not listed in the drop-down list. If administrators have enabled TLP view settings, you can select a TLP label for the new source in the dropdown list provided. See the Traffic Light Protocol (TLP) topic for more information on TLP schema.

- 3. Select any **Related Objects** you need to link to the vulnerability. This field is optional.
- 4. Click **Add Vulnerability**.

# **Adding Context**

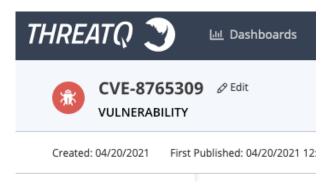
See the About Object Details section and its topics for details on adding context to an object such as adding sources, attributes, and related objects.

# **Editing a Vulnerability**

1. Locate and click on the Vulnerability.



The Vulnerability's detail page opens.



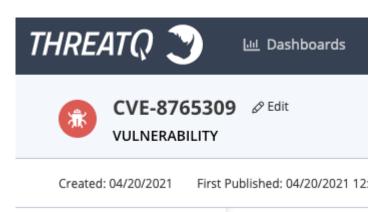
2. Click on **Edit** next to the Vulnerability's name. The Edit Vulnerability dialog box opens.



3. Make the desired change to the Vulnerability name and click Save Vulnerability.

# **Deleting a Vulnerability**

Locate and click on the Vulnerability.
 The Vulnerability's details page opens.



2. Click on the **Actions** menu and select **Delete Vulnerability**.



A confirmation dialog box appears.



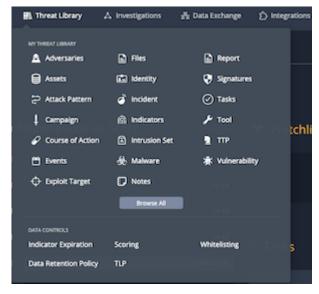
3. Click on **Delete Vulnerability**.



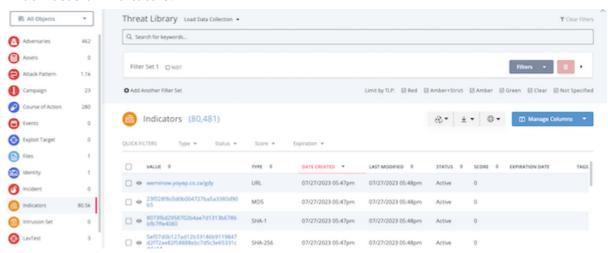
# **Threat Library**

# **About Threat Library**

The Threat Library is your interactive hub for managing the threat intelligence ingested into the the ThreatQ Platform. You can access the Threat Library from the Main Navigation bar.



The Threat Library drop-down list allows you to control the focus of your initial view by selecting an object type or you can click the Browse All button to access the default view of all object types with an initial focus on Indicators.



From the Threat Library, you can:

- Customize the object information displayed in the results list.
- Perform basic searches and/or narrow your search results using filter sets.
- Perform bulk updates or deletes of system objects.



- Save your searches as data collections which you can use in dashboards, your data retention policy, ThreatQ Data Exchange feeds, and ThreatQ TDR Orchestrator workflows.
- Enrich your data objects by adding context and relationships or applying operations.



# **Managing Your Library View**

You can limit the object types displayed in your Threat Library view and configure the data columns displayed in your search results.

## **Selecting Object Type View**

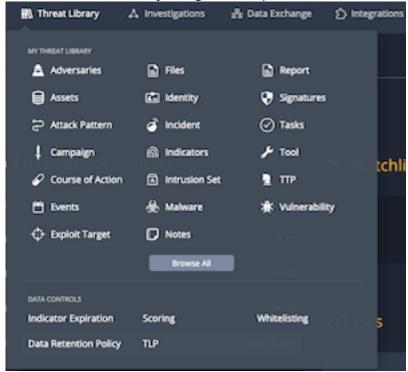
You can select which object types appear in your view of the Threat Library using the following methods:



The methods listed below will not be added to your filter set. See the Type Filters topic for details on how to add object type filtering to your Filter Sets.

## **Threat Library Navigation Menu:**

1. Click the **Threat Library** navigation dropdown and select an **Object Type** or **Browse All**.



The Advanced Results page opens with the applied object type filter.



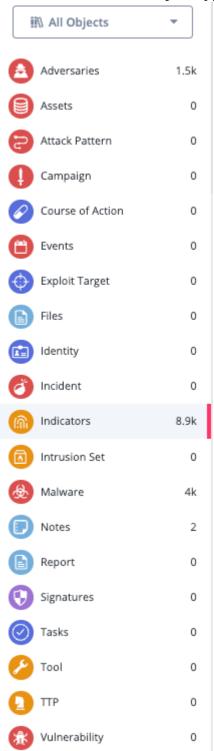
You can also access the Data Controls from this menu.

#### **Object Type Left-Hand Menu**

You can use the left-hand menu of the Threat Library to select view specific system object types.



You can either use the **Object Type** dropdown list or click directly on a object type listed in the menu.

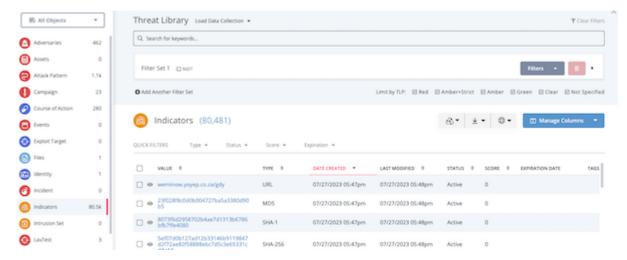


# **Managing Library Columns**

You can choose which columns to display in your Threat Library view. Your column options will vary by object type.

1. Navigate to the Threat Library page.





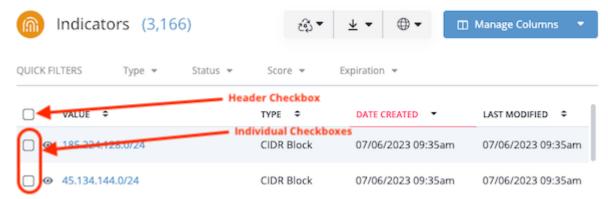
- 2. Click the **Manage Columns** button.
- 3. Use one of the following methods to locate the columns you want to display/hide:
  - Scroll through the list of column options.
  - Begin typing the column name until it is displayed below the search field.
- 4. To display a column, check the checkbox next to the column name.
- 5. To hide a column, uncheck the checkbox next to the column name.



You can click the values in related object columns to view a list of the related objects. For instance, if the Related Adversaries column lists a value of 10, you can click the 10 to view a list of the ten related adversaries. To return from this list to your original review, use your browser back button or remove the filter set displayed above the list.

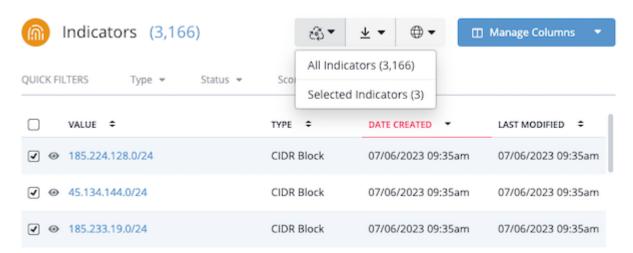
## **Selecting System Objects**

The Threat Library results list allows you to select multiple objects of the same type for workflows, exports, or bulk actions. You can select individual objects by checking the checkbox to the left of the object or select all the objects currently displayed by clicking the header checkbox next to the Value column title.



In addition, the drop down options for the Start Workflow, Export, and Bulk Actions buttons give you the option to apply your choice to all objects or just the selected objects.





#### **Tips and Tricks**

- Clicking the header checkbox selects all objects displayed on your current page of system objects. If your search results or data collection includes multiple pages, you must access those pages to select additional objects. For instance, if your search returns 100 indicators and you want to select the first 50, you can click the header checkbox on page 1 and page 2.
- When you navigate pages of results for the same indicator type, Threat Library retains your checked checkboxes. However, if you change your search filter(s) or switch to a different data collection, object type, or ThreatQ page, your checked checkboxes return to a default state of unchecked.
- In job details, Bulk action jobs applied to a selected subset of objects list the following message in the Search Criteria field: **No search data to display.**



## **Basic Search**

The basic Search, located to the right of the **Create** button in the ThreatQ navigation, allows you to find objects you are looking for quickly, without having to browse through a large number of objects.

Basic Search allows you to search for all objects in the system: Indicator, Events, Adversary, Files, Signatures, and so on. The search capability looks at high level aspects of each object, including:

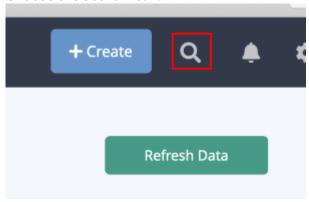
- Indicators (network or host)
- · Attachment titles, hashes, keywords
- Attributes
- Adversary name
- Event title

For example, if you search for google.com, the following indicators are also returned:

- www.google.com (FQDN)
- analytic.google.com (FQDN)
- www.google.com/analytic (URL)
- analytic@google.com (email address)

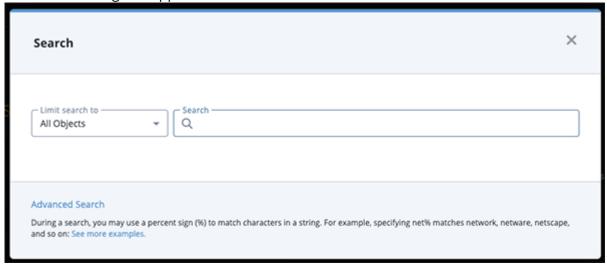
## **Performing a Basic Search**

1. Choose the Search icon.



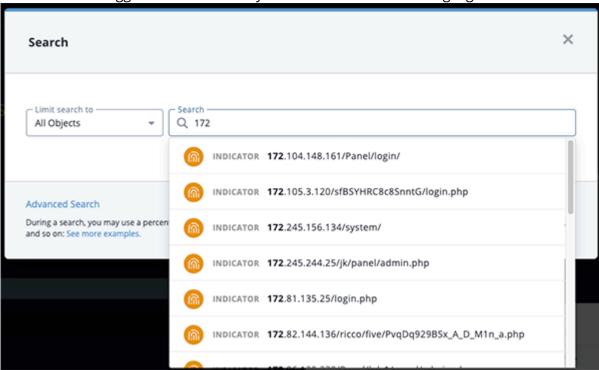


The Search dialog box appears.



- 2. Use the **Limit Search** dropdown to filter your search to a specific object type.
- 3. Enter the search criteria.

The Search field provides type ahead suggestions, if any, based on what you have typed. Portions of the suggestions that match your search criteria will be highlighted in bold.



- 4. Select the desired result.
  - If you do not retrieve any search results, we recommend trying the Threat Library advanced search.
  - o If there is only one result, the object details page appears.



## **Wildcards and Symbols in Searches**

During a search, you may use a percent sign (%) to match characters in a string. The percent wildcard specifies that any characters can appear in multiple positions represented by the wildcard. For example, specifying net% matches network, netware, netscape, and so on.

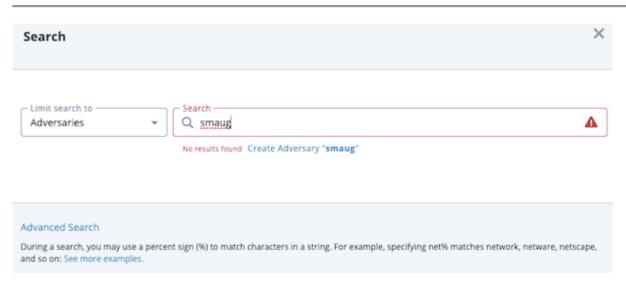
Here are a number of examples showing search terms with percent wildcards:

SEARCH QUERY	DESCRIPTION
% panda	Finds any adversaries and indicators prefaced by another word, such as "red panda"
%ear	Finds any character string that ends with "ear," such as bear
%panda%	Finds any character string that has panda in any position
panda%	Finds any character string that begins with panda
pan%a	Finds any character string that has pan in the first three positions and ends with an "a"
р%а	Finds any character string that contains "p" and "a" with characters between them, such as "panda" and "pappa"

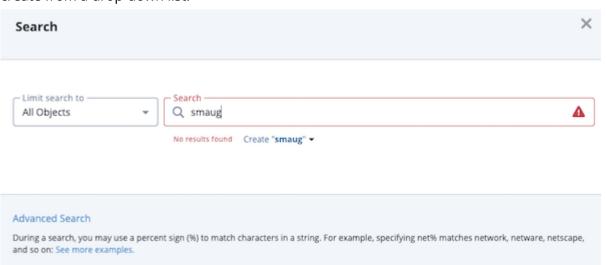
## **Creating an Object During a Basic Search**

The Basic Search window gives you the option to add a new object. If you enter an object name that is not found, you can click the **Create** link to select the object type from a drop-down list and add the new object. In addition, if you limit a basic search to a specific object type, you are linked to the corresponding form. For example, if you limit your search to Adversaries, the **Create** link opens the **Add An Adversary** form.





If you leave the **Limit search to** field set to All Objects, you can select the object type you want to create from a drop-down list.





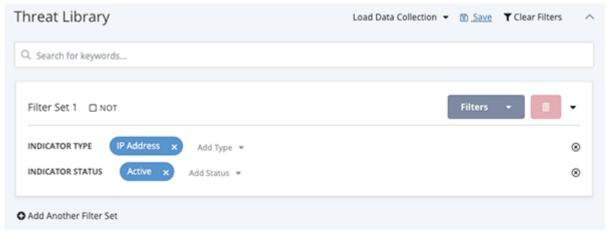
# **Building Searches with Filter Sets**

## **About Building Searches with Filter Sets**

Filter Sets allow you to create multiple sets of filters that can be applied to the threat library at the same time using AND/OR logic. You can also save your Filter Sets using the Save Search option - see the Saving Searches section in the Managing Search Results topic for more details.

#### **Adding Filter Sets**

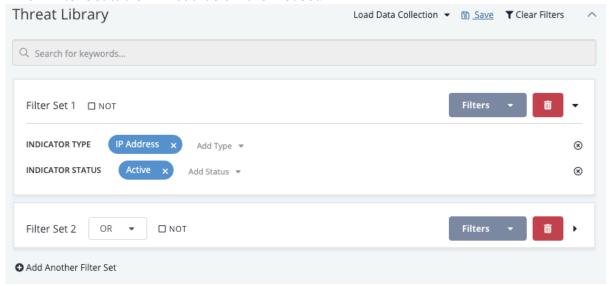
- 1. Use the **NOT** checkbox to determine if the filters in the initial filter set will be used to include or exclude Threat Library objects.
- 2. Select one or more filters for the search.



You can use the search box provided at the top of the filters dropdown to narrow down the list of available filters.

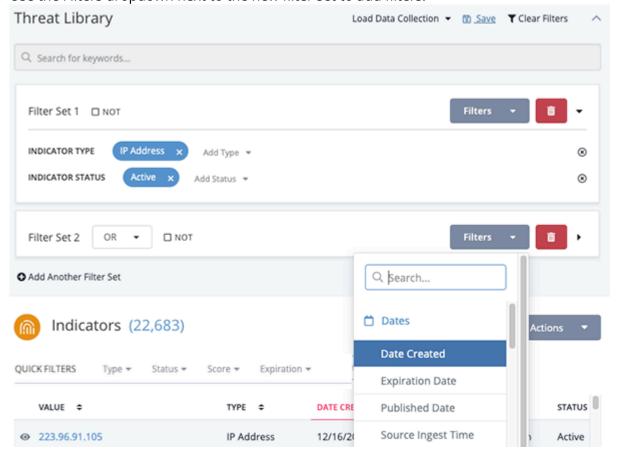
3. Click on Add Another Filter Set.

A new Filter Set table will load below the first set.

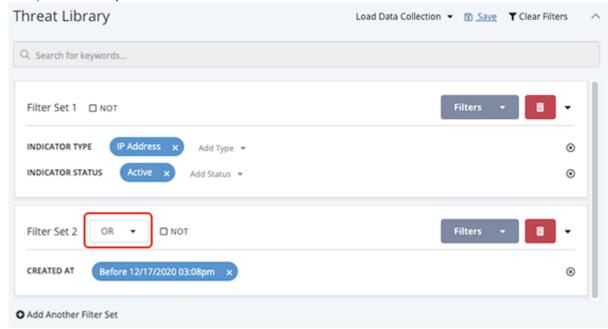




- 4. Use the **Not** checkbox to determine if the filters in the new filter set will be used to include or exclude Threat Library objects.
- 5. Use the Filters dropdown next to the new filter set to add filters.



6. Click on the **And/Or** dropdown to set the **And/Or** logic for the Filter Sets. See the And/Or Order of Operations topic for more details.



Repeat steps 3-6 to add additional filter sets.

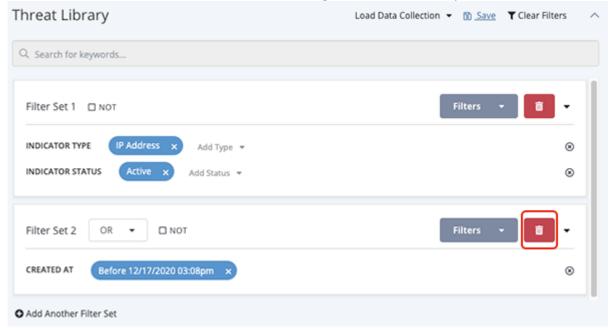


## **Deleting Filter Sets**



Deleting a Filter Set removes it from the search results and cannot be undone.

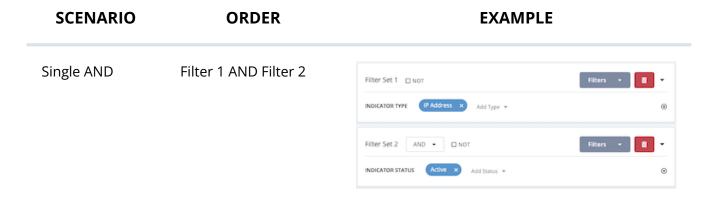
1. Click on the delete 💶 icon located next to the right of the Filters dropdown.



You can click on **Clear Filters**, located above the filter sets, to remove all filter sets from the current search.

## **And/Or Order of Operations**

Filter Set AND/OR logic follows the standard mathematical order of operations with ANDs being executed before ORs. The table below provides different scenarios and examples for Filter Sets.



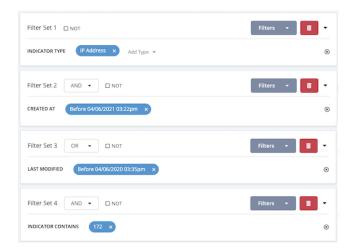


## **SCENARIO ORDER EXAMPLE** Single OR Filter 1 OR Filter 2 Filter Set 1 🗆 NOT INDICATOR TYPE IP Address × Add Type \* Filter Set 2 OR ▼ □ NOT INDICATOR STATUS Active x Add Status \* Single AND, (Filter 1 AND Filter 2) Filters ▼ 🛅 ▼ Filter Set 1 □ NOT Single OR OR Filter 3 Filter Set 2 AND ▼ □ NOT Filters -CREATED AT Before 04/06/2021 03:22pm × Filter Set 3 OR ▼ □ NOT Multiple ANDs, (Filter 1 AND Filter 2 Filter Set 1 NOT Single OR AND Filter 3) OR Filter INDICATOR TYPE IP Address × Add Type \* Filter Set 2 AND ▼ □ NOT CREATED AT Before 04/06/2021 03:22pm × Filter Set 3 AND ▼ □ NOT LAST MODIFIED Before 04/06/2020 03:35pm × Filter Set 4 OR ▼ □ NOT INDICATOR CONTAINS 172 ×



## SCENARIO ORDER EXAMPLE

Multiple ANDs, Multiple ORs (Filter 1 AND Filter 2) OR (Filter 3 AND Filter 4)





#### **Context Filters**

Context filters allow you to filter advanced search results by specific details associated with an object.

#### Filtering by Author

The Author context filter allows you to filter the system objects displayed based on the objects' source and attribute source authors. It allows you to filter by:

- Configuration Driven Feed (CDF)
- Operation
- ThreatQ Data Exchange (TQX) feed
- ThreatQ TDR Orchestrator (TQO) Workflow/CDW
- User
- 1. Click the **Filters** option and select **Author**.

The Author row is displayed under the filter set name.



- 2. Click the **Add Author** option to access a drop-down list of authors.
- 3. Locate and click the checkbox next to the author value(s) for your filter by scrolling through the drop-down list or entering the name in the Search field. You can select one or more authors at a time from this list.

When you apply the Author filter, the Author column is automatically added to the results listing. The Author column displays the source author(s) listed alphabetically in pill format.



The Author column only lists an object's source author(s). It does not list an object's attribute source author(s). If your author filter only matches an object's attribute source author, the column is blank.

## **Filtering by Attribute**

You can filter the Threat Library list to include or exclude objects with a specific attribute.

1. Click the **Filters** option and select either **With Attribute** or **Without Attribute**.



The Attribute Filter dialog box opens.



- 2. Select an Attribute Type.
- 3. Enter an **Attribute Value** associated with the **Attribute Type**. When you apply a **With Attribute** filter, you can use wildcard values to more easily locate indicators. The Value field supports the following search methods:

SEARCH TYPE	SEARCH QUERY	SEARCH RESULTS
Exact Match	us	US only
Ends With	*us or %us	US and Lazarus
Begins With	us* or us%	US, USBferry, and USBStealer
Value Contains	*us* or %us%	US, USBferry, USBStealer, Lazarus, and Dust Storm



Click the **Plus** icon to the right of the dialog box to add another attribute and repeat steps 2-3. This step is optional.

4. Click the **Add** button.

The filters are applied to the search results.

#### **Using Multiple Attribute Filters**

The **Match Any/All** toggle option allow you to configure the filter to include objects that either fit one attribute filter or all. The **Any** option is selected by default. This means the filter displays results that fit any of the attribute filters. The **All** option means the filter displays results that fit all attribute filters.

#### Multiple Attribute Filters ANY - Match Toggle Selection Example



SETTING	FIELD	VALUE
Filter A	Attribute Type	Attack Phase
	Attribute Value	C2
Filter B	Attribute Type	Severity
	Attribute Value	High
Filter Options	Any/All Toggle	Any
Result	Search Results are filtered to include/exclude objects with Attack Phase: C2 <b>OR</b> Severity: High attributes.	

## Multiple Attribute Filters ALL - Match Toggle Selection Example

SETTING	FIELD	VALUE
Filter A	Attribute Type	Attack Phase
	Attribute Value	C2
Filter B	Attribute Type	Severity
	Attribute Value	High
Filter Options	Any/All Toggle	All
Result	Search Results are filtered to include/exclude objects with Attack Phase: C2 <b>AND</b> Severity: High attributes.	

#### **Attribute Common Scenarios**

Applying a "With Attribute" filter (All items with an Attribute Type and Value)

- 1. User clicks on the **Threat Library** tab and selects on the **Indicators** tab.
- 2. User clicks on the **Filters** button and select **With Attribute**.

The Attribute Filter dialog box opens.



- 3. User selects Attack Pattern as the Attribute Type and C2 as the Attribute Value.
- 4. User clicks on **Add**.

The User will now see a search parameter **With Attribute** with **Attack Pattern: C2** listed. The search results update to show all Indicators with an attribute of **Attack Pattern: C2**.

Applying a "Without Attribute" filter (All items without an Attribute Type and Value)

- 1. User clicks on the **Threat Library** tab and selects on the **Indicators** tab.
- 2. User clicks on the **Filter** button and select **Without Attribute**.

The Attribute Filter dialog box opens.

- 3. User selects Attack Pattern as the Attribute Type and C2 as the Attribute Value.
- 4. User clicks on **Add**.

The User will now see a search parameter **With Attribute** with **Attack Pattern: C2 listed**. The search results update to show all Indicators without an attribute of **Attack Pattern: C2**.

Applying a "Without Attribute" filter (All items Without a specific Attribute Type with any Value)

- 1. User clicks on the **Threat Library** tab and selects on the **Indicators** tab.
- 2. User clicks on the **Filters** button and select **Without Attribute**.

The Attribute Filter dialog box opens.

- 3. User selects **Attack Pattern** as the **Attribute Type** and leave the **Attribute Value** blank.
- 4. User clicks on **Add**.

The User will now see a search parameter **Without Attribute** with **Attack Pattern** listed. The search results update to show all Indicators that do not have an **Attribute Type** of **Attack Pattern** assigned to them.

Applying keyword filters then applying a "With Attribute" filter

- 1. User clicks on the **Threat Library** tab and selects on the **Indicators** tab.
- 2. User searches for keyword: **demo**.

The User will see a search parameter listed Keyword: "demo" and the results update to show only indicators that mention demo.

3. User clicks on the **Filters** button and select **With Attribute**.

The Attribute Filter dialog box opens.

- 4. User selects **Attack Pattern** as the **Attribute Type** and **C2** as the **Attribute Value**.
- 5. User clicks on **Add**.

The User will now see a search parameter **With Attribute** with **Attack Pattern: C2** listed. The search results will update to show all Indicators that mention the keyword **demo AND** have an attribute of **Attack Pattern: C2**.

Editing multiple attributes that were applied as part of the search parameters

1. User clicks on the **Threat Library** tab and navigates to the **Indicators** tab.



2. User clicks on the **Filter** button and select **With Attribute**.

The Attribute Filter dialog box opens.

- 3. The User specifies two attributes:
  - Attack Pattern:C2
  - Severity: High
- 4. User clicks on **Add**.

The User will now see two search parameters under the **With Attribute** section - **Attack Pattern: C2** and **Severity: High**. The search results updates to show all Indicators with an attribute of **Attack Pattern: C2** and **Severity: High**. The search parameter for attributes is defaulted to Any. This indicates that objects with an attribute of **Attack Pattern: C2** or **Severity: High** are displayed.

5. User clicks on the **Filters** option and selects **With Attribute**.

A form will load with all applied filter attributes.

6. The User clears the Attack Pattern's Attribute Value field and clicks Add.

The User will now see two search parameters under the **With Attribute** section: **Attack Pattern: Any** and **Severity: High**. The search results updates to show all Indicators with an attribute type of **Attack Pattern OR Severity: High**.

Add multiple attributes and toggle Match from Any to All

- 1. User applies two attribute filters to the indicators results: **Attack Phase: C2** and **Severity:High**. *The filtered results will display any indicators that has either of those attributes.*
- 2. User clicks on the Any/All Match toggle button and select All.

The filtered results will display any indicator that has both of those attributes

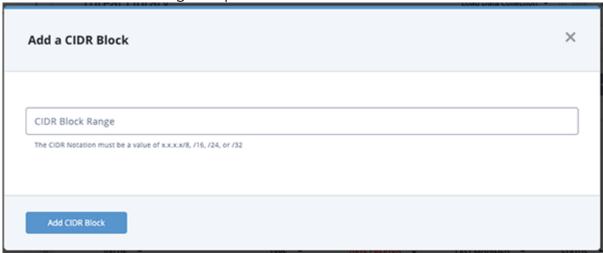
#### Filtering by CIDR Block Range

You can filter Threat Library objects by a block of IP addresses using the CIDR block range filter. The CIDR block Range filter allows you to specify a CIDR block with prefix and suffix for an IPv4 search.

1. Click the **Filters** option and select **CIDR block range**.



The Add a CIDR Block dialog box opens.



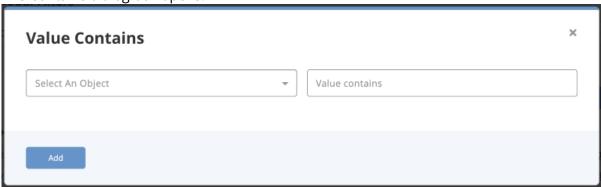
- 2. Enter the CIDR block in one of the following formats:
  - o x.x.x.x/8
  - o x.x.x.x/16
  - o x.x.x.x/24
  - o x.x.x.x/32
- 3. Click **Add CIDR Block** to apply the filter.

## **Filtering by Value Contains**

You can filter Threat Library objects by a specific value or string within the value using the Value Contains filter.

1. Click the **Filters** option and select **Value Contains**.

The Contains dialog box opens.



2. Select an **Object**, enter a **Value**, and click **Add** to apply the filter.

## **Filtering by List of Indicators**

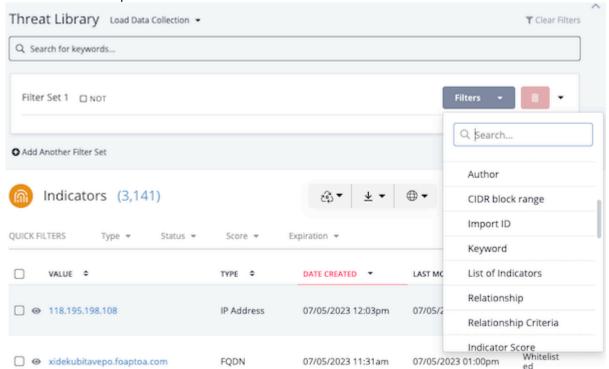
The List of Indicators Filter option allows you to filter the Threat Library by pasting a list of indicators, in raw text.



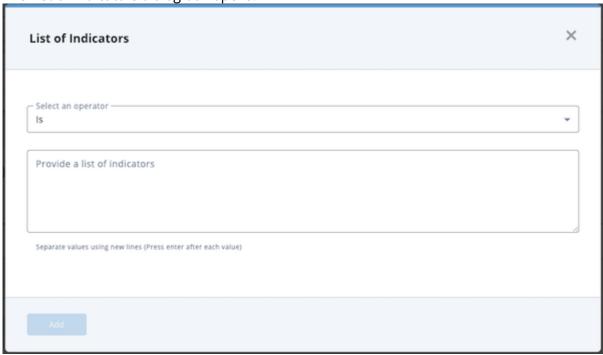


The filter will return indicators that are an exact match. It does not return partial matches.

1. Click the **Filters** option and select **List of Indicators**.



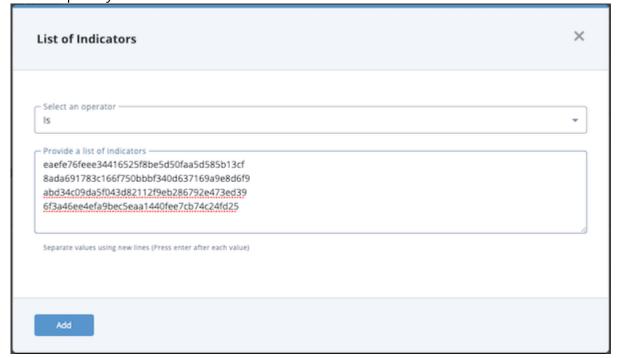
The List of Indicators dialog box opens.



2. The **Specify an operator** field defaults to a value of *Is* which returns exact matches. However, you can click the arrow next to this field and select *Contains* as the operator to return partial matches.



3. Enter or paste your list of indicators in the **Provide a list of indicators** field.



The accepted list format is one indicator per line.

4. Click **Add** to apply the filter.

## Filtering by Keyword

Keyword searches for phrases return objects that include all the terms in the phrase. For instance, a search for "united kingdom" returns objects that include "united kingdom" instead of objects that include "united" and "kingdom" or "united" or "kingdom". By default, searches return instances where the search term or phrase is a standalone prefaced by and appended by a space. For instance, a search for "panda" **does not** return "pandas" or "expandability".

To search for characters in a string, you can use a percent sign (%) or asterisk (\*) to specify that characters appear in the position represented by the wildcard. For example, specifying "net%" matches "network" and "netware". Specifying "%net" matches "botnet" and "internet". Specifying "%net%" matches "ninety" and "hornets". See the Wildcards and Symbols in Searches section for more examples.

ThreatQ keyword searches apply to different fields based on system object type.

SYSTEM OBJECT/OBJECT CONTEXT	FIELDS SEARCHED
Adversary	<ul><li>name</li><li>tags</li></ul>
Attachment	<ul><li>content_type_name</li><li>hash</li></ul>



SYSTEM OBJECT/OBJECT CONTEXT	FIELDS SEARCHED
	<ul><li>name</li><li>tags</li><li>text</li><li>title</li><li>type_name</li></ul>
Attribute	<ul><li>name</li><li>value</li></ul>
Comment	• value
Custom Object	• tags • value
Description	• value
Event	<ul><li>spearphish_subject</li><li>spearphish_value</li><li>tag</li><li>title</li><li>type_name</li></ul>
Indicator	<ul><li>class</li><li>status_name</li><li>tags</li><li>type_name</li><li>value</li></ul>
Object Status	• status_name
Point of Contact	• point_of_contact_name
Signature	<ul><li>hash</li><li>name</li><li>status_name</li><li>tags</li><li>type_name</li><li>value</li></ul>



# Source • name Task • assignee\_source\_name • creator\_source\_name • name • name • status\_name

1. Enter your keyword search term or phrase in the **Search for keywords** field and press Enter OR

Click the **Filters** option and select Keyword to access the Filter by Keyword window. Then, enter your search term or phrase in the **Keyword** field and click the Add button.

tags

**FIELDS SEARCHED** 

2. To add more keywords, repeat step 1.

SYSTEM OBJECT/OBJECT CONTEXT

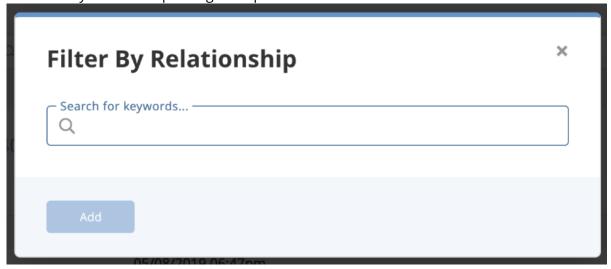
- 3. If you add more than one keyword, you can specify a **Must Match** setting of:
  - **ANY** Search results include objects that include any of the keywords.
  - **ALL** Search results include objects that include all of the keywords.
- 4. Click the X for each filter to remove it or select Clear All Filters to remove all filters

#### **Filtering by Relationship**

The Relationship Filter option allows you to filter the Threat Library by related objects. Using the Relationship filter, you can:

- Filter search results to include objects related to a specific object.
- Filter search results to include objects using multiple related object filters. You will also have the option to set the filter to include objects that fit one of the multiple filters or all.
- 1. Click the **Filters** option and select **Relationship**.

The Filter by Relationship dialog box opens.



2. Use the text box provided to select an object.



3. Click **Add** to apply the filter.



The **Match Any/All** toggle option will allows you to configure the filter to include objects that either fit one related object filter or all. The **Any** option will be selected by default. This means the filter will display results that fit any of the related object filters. The **All** option means the filter will display results that fit all related object filters.

## Filtering by Relationship ANY - Match Toggle Selection Example

SETTING	RELATED OBJECT
Filter A	ABC Indicator
Filter B	DEF Event
Filter Option	Any
Result	Search Results are filtered to include objects related to the ABC Indicator <b>OR</b> the DEF Event.

#### Filtering by Relationship ALL - Match Toggle Selection Example

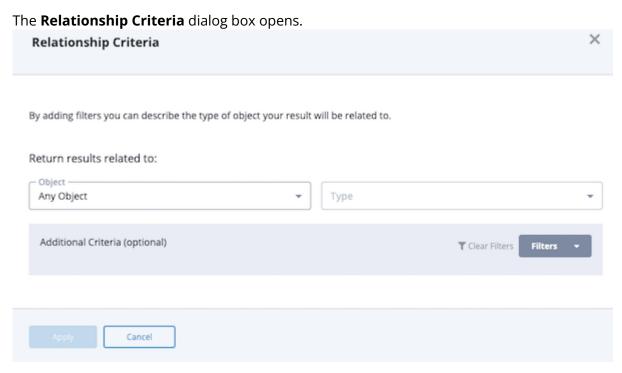
SETTING	RELATED OBJECT
Filter A	ABC Indicator
Filter B	DEF Event
Filter Option	All
Result	Search Results are filtered to include objects related to the ABC Indicator <b>AND</b> the DEF Event.

#### **Filtering by Relationship Criteria**

The Relationship Criteria filter allows you to filter system objects based on the characteristics of their related objects. For instance, you can filter a list of indicators to include only those with related login compromise event objects.

1. Click the **Filters** option and select **Relationship Criteria**.





- 2. Use the text box to select your **Object** and **Type**.
- 3. Optional. You can further filter your results based on the following additional criteria.

#### **Date Created Filter**

The Date Created option allows you to narrow your results based on the date a related object was created. This filter allows you to specify creation before or after a date, within a date range, or within a specific number of preceding days.

- 1. To add a Date Created filter, click the **Filters** dropdown and select **Date Created**.
- 2. Click the date type dropdown to specify creation before (**is before**) or after (**is after**) a date, within a date range (**is between**), or within a specific number of preceding days (**is within the last**).
- 3. Based on the date type you selected, enter a date and time, date and time range, or number of days.

#### **Source Filter**

The Source option allows you to filter your results based on one or more sources. In addition, you can specify that an object must meet all or at least one of your Source criteria.

- 1. To add a Source filter, click the **Filters** dropdown and select **Source**.
- 2. Click the Add Source option
- 3. Locate the source by scrolling through the list or typing the source name in the Search for sources field.
- 4. Click the source you want to add as a filter criteria.
- 5. To add more source filters, repeat steps 2 through 4.



When you add multiple Source filters, the Must Match field allows you to select ALL to indicate that an object must meet the requirements of all the Source filters or ANY to



specify that your results include objects that meet the requirements of at least one Source filter.

#### **Value Contains Filter**

- 1. To add a Value Contains filter, click the **Filters** dropdown and select **Value Contains**.
- 2. Enter your desired value in the field provided.

#### With Attribute Filter

The With Attribute option allows you to filter results based on one or more specific attribute keys or attribute key and value combinations. In addition, you can specify that an object must meet all or at least one of your With Attribute criteria.

- 1. To add a With Attribute filter, click the **Filters** dropdown and select **With Attribute**.
- 2. Enter the attribute key and attribute value (optional) you want to filter by.
- 3. To add more attribute key/value filters, click the + icon and repeat step 7.



When you add multiple With Attribute filters, the Must Match field is displayed and defaults to ALL to indicate that an object must meet the requirement of all the With Attribute filters. You can change this value to ANY so that your results include objects that meet the requirements of at least one With Attribute filter.

#### **Tag Filter**

The Tag option allows you to filter your results based on the tag(s) associated with a related object. In addition, you can specify that an object must meet all or at least one of your Tag criteria.

- 1. To add a Tag filter, click the **Filters** dropdown and select **Tag**.
- 2. Click the Add Tag option
- 3. Locate the tag by scrolling through the list or typing the tag name in the Search for tags field.
- 4. Click the tag you want to add as a filter criteria.
- 5. To add more tag filters, repeat steps 2 through 4.



When you add multiple Tag filters, the Must Match field allows you to select ALL to indicate that an object must meet the requirements of all the Tag filters or ANY to specify that your results include objects that meet the requirements of at least one Tag filter.

4. After you select all of your filter options, click **Apply** to filter your Threat Library results.

#### **Filtering by Score**

You can filter indicators in the advanced search results by score.



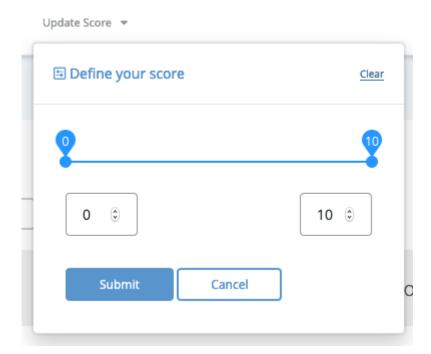
This option is only available for indicators.

1. Navigate to the Advanced Search results page by selecting **Search > Advanced Search** then selecting **Indicators** from the left-hand object type menu.



You can also select **Threat Library > Indicators** from the main menu.

2. Click the **Filters** dropdown and select the **Indicator Score** filter option. The Indicator Score dialog row will load in the filter set.





The scale offers a range of 1-10.

3. Adjust the score scale to filter the results.

## **Filtering by Scoring Range**

You can move the two scale markers to select a scoring range.



Move the left marker to 6 and the right marker to 8 to filter the search results to include indicators with a score between 6 and 8.

#### **Filtering by Specific Score**

You can move the scale makers to the same scoring number to filter by a specific score.



Move the left and right markers to 8 to filter the search results to only include indicators with a score of 8.



Select the **Update Score** filter again or select **Clear** to remove the filter.

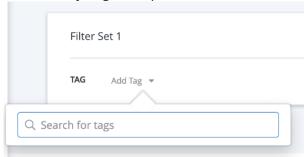
#### **Filtering by Tags**

Using the **Tags** filter allows you to filter search results based on tags applied to an object.

1. Click the **Filters** option and select **Tags**.



The Filter by Tag row opens.



# 2. Select Add Tag.

The Add Tag dialog box opens.

- 3. Use the supplied text field to select a tag.
- 4. Repeat steps 2-3 to apply multiple tag filters.



The **Match Any/All** toggle option will allows you to configure the filter to include objects that either fit one tag filter or all. The **Any** option will be selected by default. This means the filter will display results that fit any of the tag filters. The **All** option means the filter will display results that fit all tag filters.

## **ANY - Match Toggle Selection Example**

SETTING	TAG
Filter A	Phishing
Filter B	DDoS
Filter Option	Any
Result	Search Results are filtered to include items with either Phishing <b>OR</b> the DDoS tags.

## **ALL - Match Toggle Selection Example**

SETTING	TAG
Filter A	Phishing
Filter B	DDoS
Filter Option	All



Result

Search Results are filtered to include items with both Phishing **AND** DDoS tags.

## **Filtering by Source**

The Source filter allows you to filter Threat Library search results by object, attribute, or description source.

- Click the **Filters** option and select **Source**.
   The Source row is displayed below the filter name.
- 2. Locate and select the source for your filter by scrolling through the drop-down list or entering the source in the Search for sources field.
- 3. Click the arrow next to Source to specify whether the filter references all sources or is restricted to object or attribute sources.
- 4. Click the checkbox next to **Is Only** to specify that the filter includes objects that only include the selected source(s) and do not include any other sources not specified by the filter.
- 5. To continue adding sources to the filter, click the Add Source option and repeat step 2.



The **Match Any/All** toggle option allows you to configure the filter to include objects that either fit one related object filter or all. The **Any** option is selected by default. This means the filter displays results that fit any of the related object filters. The **All** option means the filter displays results that fit all related object filters.

## Filtering by Source ANY - Match Toggle Selection Examples

SETTING	SOURCE

Filter A	This Platform
Filter B	Domain Tools
Filter Option	Any
Result	Search Results are filtered to include objects with a source of This Platform <b>OR</b> Domain Tools.

#### Filtering by Source ALL - Match Toggle Selection

CETTINIC	COLIDCE
SETTING	SOURCE



Filter B	Domain Tools
Filter Option	All
Result	Search Results are filtered to include objects with both This Platform <b>AND</b> Domain Tools as sources.

#### Filtering by TLP



TLP visibility must be enabled to use the TLP filter in the Threat Library search. See the Configure TLP Visibility section for more details.

The Threat Library allows you to filter your search results based on the TLP label assigned to the object sources, attributes, or description sources. By default, all TLP filter options are checked so that your Threat Library view includes all objects. To exclude objects by TLP, you can uncheck the box to the left of the label name. For example, to omit objects with object and/or description sources assigned a Red TLP label, uncheck the Red box.

When you apply a TLP filter, the Sources, attribute, and description columns only display data that matches the TLP filter.

# **Tips and Tricks**

- TLP filters can be stored as part of data collections, similar to other filter types.
- The TLP filter is a global filter that is applied across all object types and all filter sets for a given search query (i.e. it cannot be applied to individual object types or within individual filter sets).
- TLP filters impact the Threat Library CSV output in that CSV results output will match those in the Threat Library results.
- 1. Navigate to Threat Library.

The option to filter by TLP color designation will be located under the search bar and Filter Set option.



2. Use the **Limit by TLP** filter check boxes to select which TLP designations to apply to your search results.



[] If TLP Green is checked, only objects with any source of TLP Green will be returned in the search results.

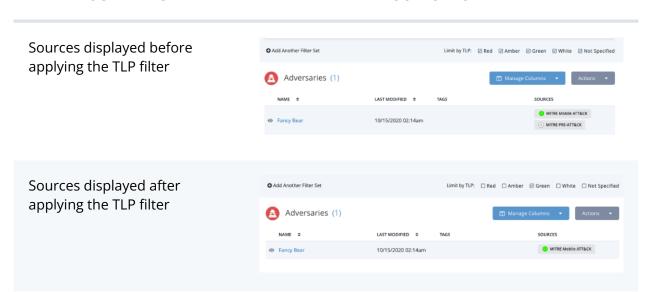
The TLP filter also impacts the information returned in search results columns, including Sources, attributes, and descriptions.



**Sources** - In the Sources column of the search results, only sources that match the selected TLP labels are displayed.

#### **SCENARIO**

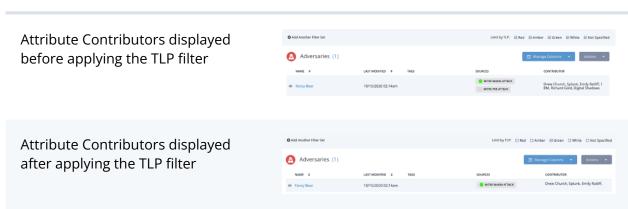
#### **RESULTS DISPLAY**



**Attributes** - In any displayed attribute column, only attribute values with sources that match the selected TLP labels are displayed.

# SCENARIO

#### **RESULTS DISPLAY**



**Descriptions** - In any displayed description column, only descriptions with sources that match the selected TLP labels are displayed.

#### **Filtering by Point of Contact**

The Point of Contact filter allows you to filter objects by the ThreatQ user display name of the person assigned as the object's point of contact. You can filter by multiple user names as well as include objects that do not have a point of contact (Unassigned).



Click the Filters option and select Point of Contact.
 The Point of Contact row is displayed under the filter set name.



2. Click the **Add Point of Contact** option to access a drop-down list of user names.



The point of contact list includes all ThreatQ user names even those not currently assigned as a point of contact for an object. In addition, this list contains an Unassigned option that allows you to include objects with a blank Point of Contact field.

3. Locate and click the checkbox next to the user name for your filter by scrolling through the drop-down list or entering the name in the Search field. You can select one or more user names at a time from this list.



#### **Date Filters**

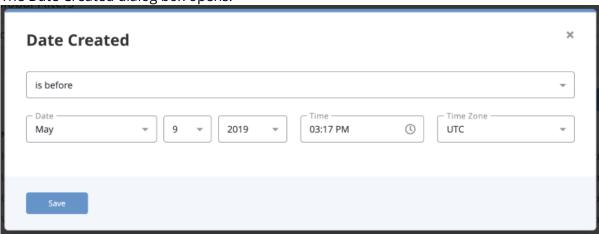
Date filters allow you to filter advanced search results by date-related values.

## **Filtering by Date Created**

Complete the following procedure to filter Advanced Search results by the date the objects were created.

1. Click on the **Filters** option and select **Date Created**.

The Date Created dialog box opens.



2. Select one of the following options to determine how the filter is applied:

OPTION	RESULT
is before	Search results include items before a selected date
is after	Search results include items after a selected date
is in the range of	Search results include items in a selected range of dates
is within the last	Search results include items within the selected number of days.

- 3. Use the controls to select date options based upon the selection in step 2.
- 4. Click Save.

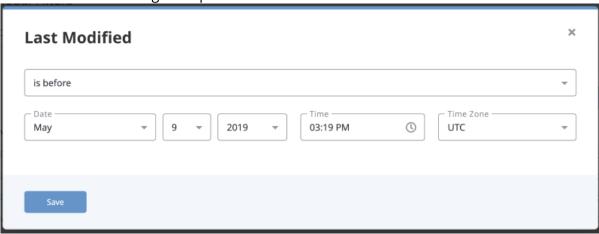
## **Filtering by Last Modified**

Complete the following procedure to filter Advanced Search results by the date objects were last modified.



1. Click on the **Filters** option and select either **Last Modified**.

The Last Modified dialog box opens.



2. Select one of the following options to determine how the filter is applied:

OPTION	RESULT
is before	Search results include items before a selected date
is after	Search results include items after a selected date
is in the range of	Search results include items in a selected range of dates
is within the last	Search results include items within the selected number of days.

- 3. Use the controls to select date options based upon the selection in step 2.
- 4. Click Save.

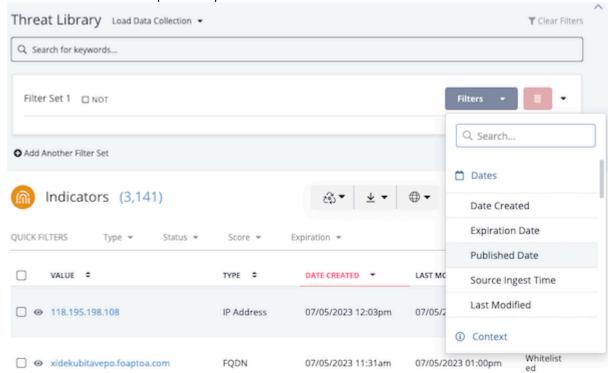
# **Filtering by Published Date**



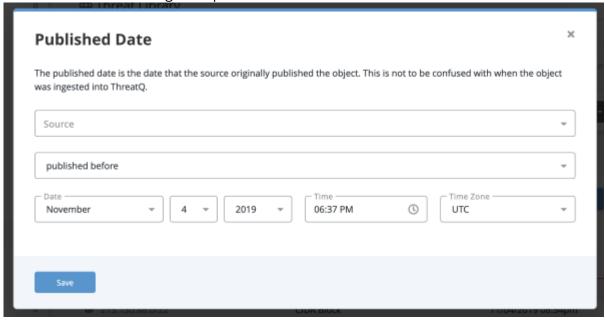
The Published Date is the date that an object was originally published by the source. This is not to be confused with when the object was ingested into ThreatQ.



1. Click on the **Filters** dropdown option for a filter set and select **Published Date**.



The Published Date dialog box opens.



- 2. Select the **Source** that published the object.
- 3. Select one of the following options to determine how the filter is applied:

OPTION RESULT

published before

Search results include items before a selected date



**OPTION** 

published after	Search results include items after a selected date
published between	Search results include items in a selected range of dates
published within the last	Search results include items within the selected number of days.

**RESULT** 

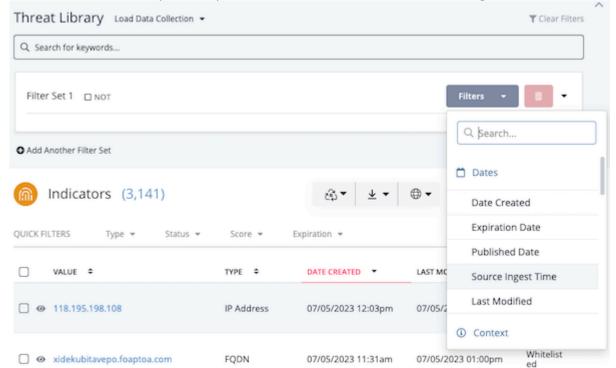
- 4. Select **Date**, **Time**, and **Time Zone** for the filter to use.
- 5. Click Save.

# **Filtering by Source Ingest Time**



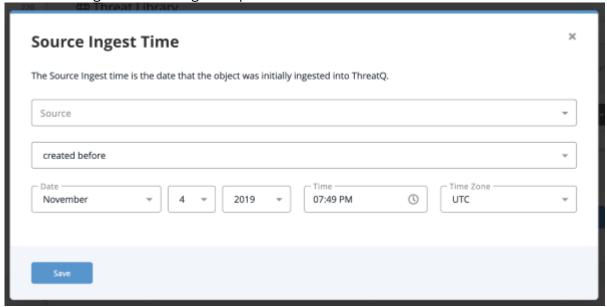
The Source Ingest Time is the date that an object was ingested into ThreatQ.

1. Click on the **Filters** dropdown option for a filter set and select **Source Ingest Time**.





The Source Ingest Time dialog box opens.



2. Select the **Source** that published the object.

ODTION

You have the option to select **Any Source**.

3. Select one of the following options to determine how the filter is applied:

OPTION	KESULI
created before	Search results include items before a selected date
created after	Search results include items after a selected date
created between	Search results include items in a selected range of dates
created within the last	Search results include items within the selected number of days.

**DECLIIT** 

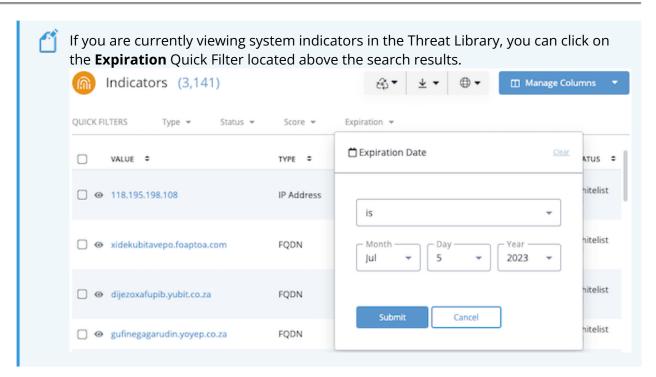
- 4. Select **Date**, **Time**, and **Time Zone** for the filter to use.
- 5. Click Save.

## **Filtering by Expiration Date**

You can narrow down the Indicators in your search results by the expiration date.

1. Click on the **Filters** dropdown option for a filter set and select **Expiration Date**.





The Expiration Date dialog box opens.

**OPTION** 

2. Select one of the following options to determine how the filter is applied:

01 11014	RESOLI
is	Search results include the specified date.
is not	Search results exclude items from a range of dates.
is after	Search results include items after a selected date.
is before	Search results include items before a selected date.
is between	Search results include items in a selected range of dates.
is greater than	Search results include items have exceeded their expiration date by a selected number of days.
is within the last	Search results include items within the selected number of days.
is within the next	Search results include items within a range of future dates.

**RESULT** 



OPTION	RESULT
is protected from auto- expiration	Search results include items that are protected from auto-expiration.

- 3. Based on the filter option you selected, select the date, date range, or number of days for the filter to use.
- 4. Click **Submit**.



#### **Status Filters**

Status filters allow you to filter advanced search results an object's Status.



Only Events, Indicators, Signatures, and Tasks can be filtered by their Status. In addition, the Event Status filter is displayed only if an administrator has configured Event Statuses in the Object Management page.

## **Filtering by Status**

- Click the Filters dropdown and select **Object Type>Status**.
   The **Object Type> Status filter row** is displayed under the filter set name.
- 2. Click the **Add Status** option to access a drop-down list of statuses.
- 2. Locate and click the checkbox next to the status for your filter by scrolling through the drop-down list or entering the status in the Search field. You can select one or more user names at a time from this list.



The Event Status filter gives you the option to include events without an status by selecting the None option.

The search results update with the applied filter.



## **Tasks Filters**

Tasks filters allow you to filter tasks based on their priority and to whom they are assigned.

# **Filtering Tasks by Assignment**

You can filter tasks based on whom they are assigned to.

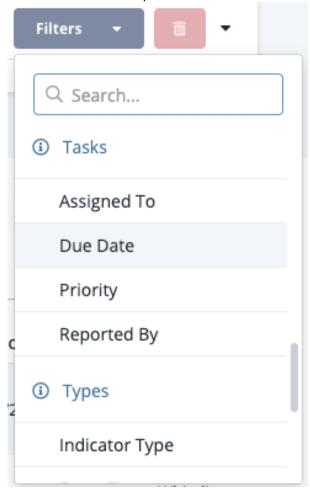
- 1. Click on the **Filters** option and select **Assigned To**.
- 2. Use the **Add User** dropdown to select the user.

Filter Set 1	
ASSIGNED TO	Add User ▼
Q Search	
☐ Amy Rose	
☐ Ivo Robotnik	
☐ John Apple	



# Filtering Tasks by Due Date

1. Click on the **Filters** option and select **Due Date**.



The Due Date dialog box opens.



2. Select one of the following options to determine how the filter is applied:

OPTION	RESULT
is after	Search results include tasks with a due date after a selected date.
is before	Search results include tasks with a due date before a selected date.



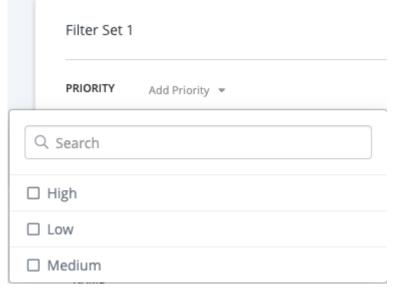
OPTION	RESULT
is between	Search results include tasks with a due date that set between the selected range of dates.
ls within the last	Search results include tasks with a due date within the last user-specified number of days.
ls within the next	Search results include tasks with a due date within the next user- specified number of days.

3. Click **Save**.

# **Filtering Tasks by Priority**

You can filter tasks based on their priority.

- 1. Click on the **Filters** option and select **Priority**.
- 2. Use the **Priority** dropdown and select **Add Priority**.

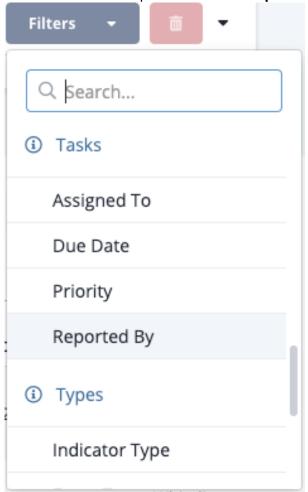


# Filtering Tasks by Reported By

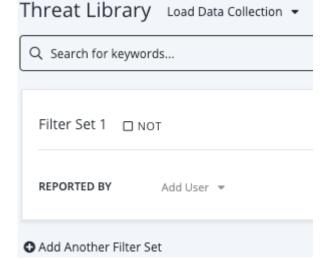
You can filter tasks based on who created them.



1. Click on the **Filters** option and select **Reported By**.

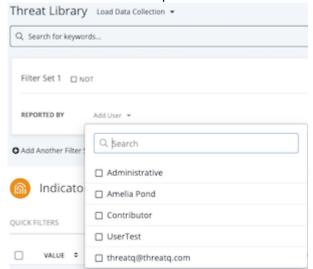


The Reported By Filter will appear in the filter set.





2. Click on the **Add User** option to select the user.





# **Type Filters**

You can filter Indicator, Events, Signatures, and Files by specific types of each.

# Filtering by Object Type



Filter the Signature list to include YARA types only.

1. Click on the Filters dropdown and select **<Object Type>Type**.



The Type filter row will appear in the filter set.

2. Click on **Add Type**.



You can select multiple types using the check boxes.

The search results will update with the applied filter.



# **Managing Search Results**

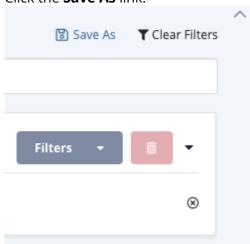
ThreatQ allows you to save your Threat Library searches as Data Collections and/or export your search results to a CSV file or STIX bundle. Once saved, a Data Collection can be used by dashboard widgets, integrations, TQO actions, TAXII collections, and other workflows.



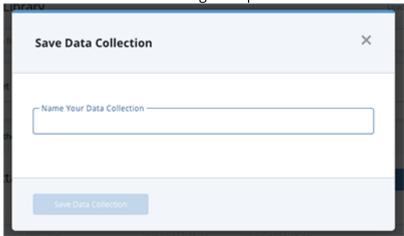
Use caution when deleting a data collection as it could be associated with integrations, custom dashboards, TAXII collections, and other workflows in use with your organization.

# **Saving Searches as Data Collections**

- 1. Perform a search on the Threat Library.
- 2. Click the Save As link.



The Save Data Collection dialog box opens.



- 3. Enter a name for the search in the Data Collection dialog box.
- 4. Click the **Save Data Collection** button.

The name of the data collection is displayed at the top of the page. As the data collection creator, you have owner-level permissions and are the only user who can view or edit the data

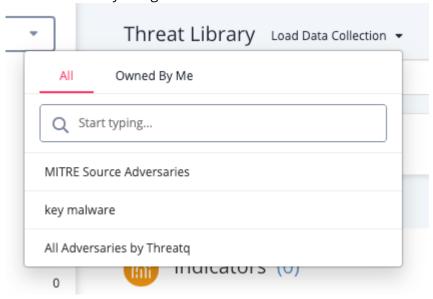


collection. See the Sharing Data Collections section for information on allowing other users to access your data collection.



# **Loading Data Collections**

- 1. Navigate to the Threat Library page.
- 2. Click the **Load Data Collection Search** option. The data collection window defaults to the All tab that lists all the data collections you own or to which you have view or edit access. The Owned By Me tab lists the data collections for which you are the owner. You can also locate a data collection by using the search field.



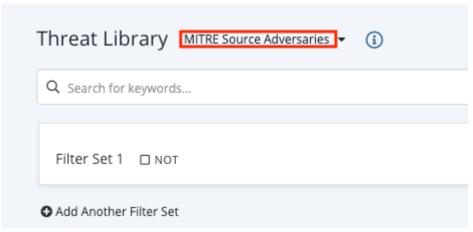
3. Select the data collection.

The data collection is displayed in the Threat Library page. The name of the data collection is listed at the top of the page.

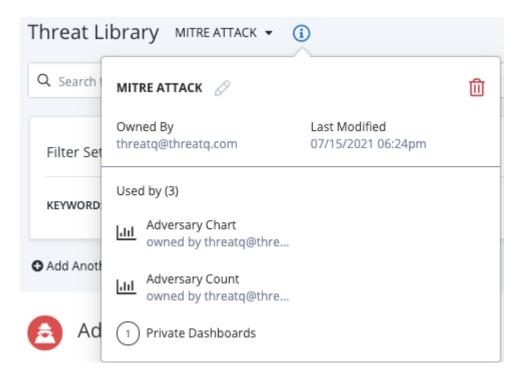


If the data collection name is longer than forty characters, it is truncated with ellipses





- 4. Click the icon to view:
  - Data collection name and owner
  - Date of the last change to the data collection
  - O Dashboards, data feeds, TAXII collections, and workflows that use the data collection. You can click these items to access the corresponding dashboard or data feed.
  - The number of private dashboards that use the data collection



# **Modifying a Data Collection**

Users with owner or editor permissions for a data collection can make changes to it.

- 1. Navigate to the Threat Library.
- 2. Load the data collection you want to change.
- 3. Enter your changes to the data collection.
- 4. Click the Save link.

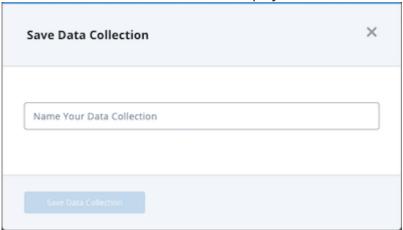


# **Copying a Data Collection**

When an owner or editor makes changes to a data collection, the Save As link allows the creation of a new data collection that reflects these changes and leaves the original data collection unchanged. For example, you can add a filter to an existing Adversaries data collection to include only MITRE Enterprise ATT&CK sources, then save the new data collection as Adversaries - MITRE Enterprise.

- 1. Navigate to the Threat Library.
- 2. Load the data collection you want to copy.
- 3. Enter your changes to the data collection.
- 4. Click the **Save As** link.

The Save Data Collection window is displayed.



- 5. Enter the name of the new data collection.
- Click the Save Data Collection button.
   ThreatQ creates your new data collection and displays it in the Threat Library page.

# **Renaming a Data Collection**

Only the owner of a data collection can change its name.

- 1. Navigate to the Threat Library.
- 2. Load the data collection whose name you want to change.
- 3. Click the icon.
- 4. Click the  $\emptyset$  icon next to the data collection's name.
- 5. Enter the new name.
- 6. Click the voto save your change.

# **Sharing Data Collections**

Owners and editors have the option to share a data collection with other users. However, only the data collection owner can remove a user's permissions. In addition, the Share(d) button displayed depends on your permission level and the sharing status of the data collection.

PERMISSION LEVEL SHARED WITH OTHERS? SHARE(D) BUTTON

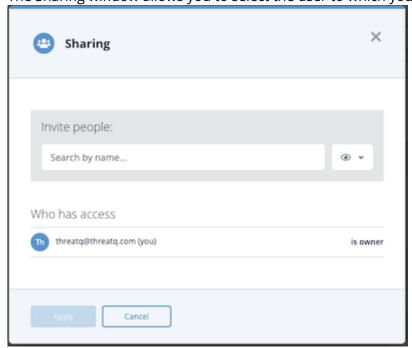




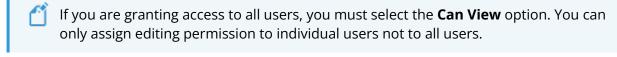
See the Sharing topic for more information on the permissions you can assign to each data collection.

- 1. Navigate to the Threat Library.
- 2. Load the data collection you want to share.
- 3. Click the **Share** button.

  The Sharing window allows you to select the user to which you want to grant access.

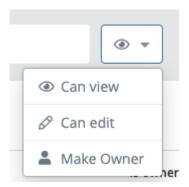


4. Click the arrow next to the @ icon to select the user's permission level.



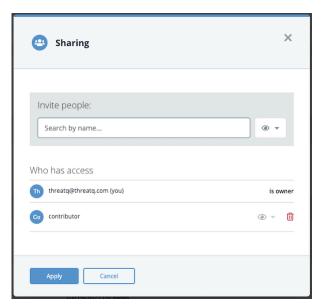
If you assign owner permissions to another user, your permissions automatically change to editor-level.





5. Use the search field to locate and select the user name or the **Everybody (Public)** option. This option grants view-only access to all users.

The user is now listed in the Who has access list. From this listing, you can change or delete the user's permissions.



6. Click the **Apply** button to save the user's permission level.

# Removing a User's Access to a Data Collection

Only the data collection owner can remove a user's permissions.

- 1. Navigate to the Threat Library.
- 2. Load the data collection to which you want to remove a user's access.
- 3. Click the Share button.
- 4. Click the iii icon next to the user's name.

# **Deleting a Data Collection**

To delete a data collection, you must have owner-level permissions for the data collection.

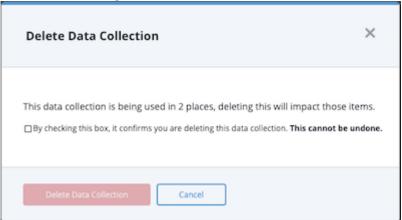




Deletion of a data collection cannot be undone. Exercise caution before deleting a data collection as it could be associated with integrations, custom dashboards, TAXII collections, and other workflows in use with your organization.

#### Method 1:

- 1. Navigate to the Threat Library.
- 2. Click the **Load Data Collection Search** option.
- 3. Click the Owned By Me tab.
- 4. Check the box next to the data collection you want to delete.
- 5. Click the iii icon.
  - The Delete Data Collection window prompts you to confirm your deletion
- 6. Check the warning checkbox and click the **Delete Data Collection** button to confirm.



#### Method 2:

- 1. Navigate to the Threat Library.
- 2. Load the data collection you want to delete.
- 3. Click the icon next to the data collection name.
- 4. Click the 🗓 icon.
  - The Delete Data Collection window prompts you to confirm your deletion
- 5. Check the warning checkbox and click the **Delete Data Collection** button to confirm.

# **Exporting Search Results to CSV**

You can export your search results as a CSV file, which allows you to use the data in another application, such as external spreadsheet software.



If you export a file with too many search results, the file may be too large to open in desktop applications. If you encounter this issue, you should separate your exports into smaller segments of data.



When exporting data collections to a CSV file, if you include additional columns beyond the default, this modification will impact the performance of the export process.



To export search results to a CSV file:

- 1. Navigate to the Threat Library.
- 2. Perform your search or load the appropriate data collection.
- 3. You can further customize your export by checking the checkbox next to each object you want to include.
- 4. Click the **Export** button  $\stackrel{\checkmark}{=}$  and select the option to export all objects or the option to select only checked objects.

The CSV file downloads to your desktop.

# **Exporting Search Results to STIX**

Each STIX export can contain up to 50,000 system objects. If you attempt to exceed this maximum, a tooltip is displayed indicating that the export option is available for searches under 50,000 objects.

ThreatQ supports STIX exports for the following seeded objects:

Adversaries

Identity

Tool

Attack Pattern

Indicators

Vulnerability

Campaign

Intrusion Set

Course of Action

Malware

For indicators, you can create STIX export bundles for the following indicator types:

ASN

File Path

• MD5

• x509 Serial

Binary String

Filename

Mutex

x509 Subject

CIDR Block

FQDN

Password

• URL

• CVE

IP Address

• SHA-1

User-agent Username

Email Address

Email Attachment

IPv6 AddressMAC Address

SHA-256SHA-512

• X-Mailer

Email Subject

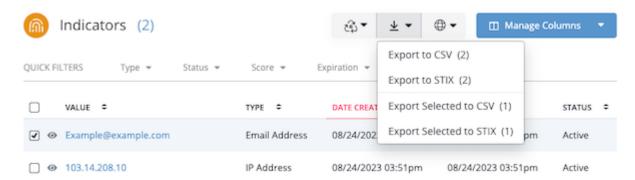


STIX exports do not include related objects.

To export search results to a STIX file:

- 1. Navigate to the Threat Library.
- 2. Perform your search or load the appropriate data collection.
- 3. You can further customize your export by checking the checkbox next to each object you want to include.
- 4. Click the **Export** button \* and select the option to export all objects or the option to select only checked objects.





The STIX file downloads to your desktop.



# **Bulk Actions**

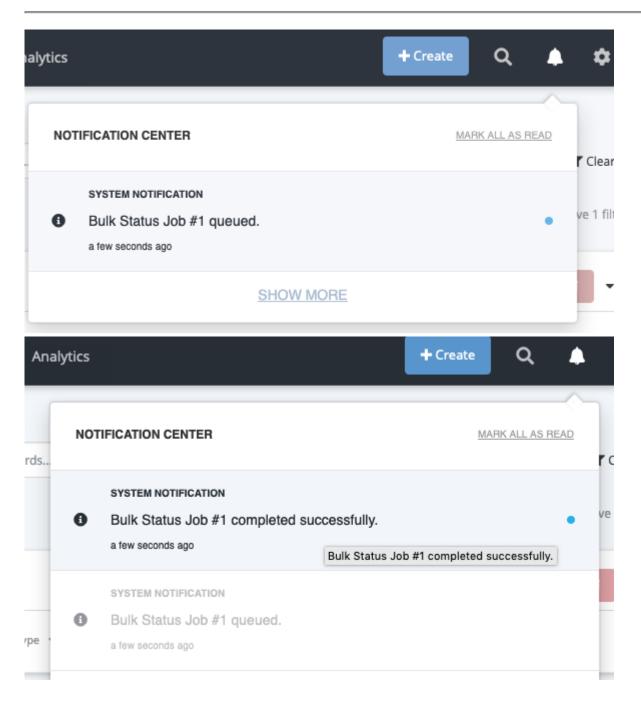
The Bulk Actions feature gives you the ability to update and delete large groups (1000+) of system objects. Once selected, the job process runs in the background and allows you to continue working within ThreatQ. You can review the status of the job and its results on the Job Management page.



The fields listed in the **Bulk Actions Bulk Change form** may differ based on the type of system objects you have selected. **Example:** If you selected a set of events, the Change Expiration options will not be listed as expiration pertains to indicators only.

Upon initiating a Bulk Action, the job is queued by the system and you receive an in-app notification via the Notification Center icon. The system also notifies you, via the Notification Center, that the job has been completed.





### **Bulk Add Source**

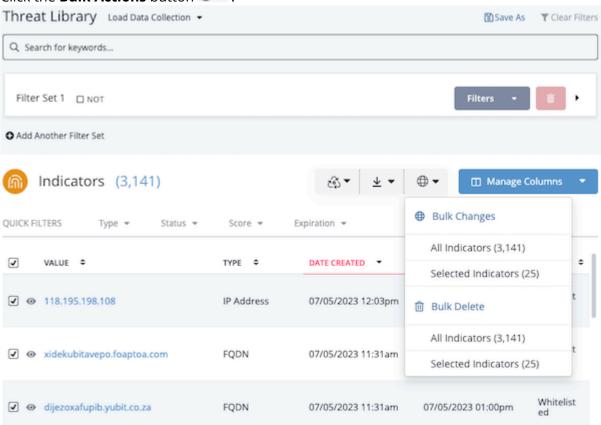


If an object is already associated with the source selected for the Bulk Add Sources action, the object is skipped during the bulk process.

1. Perform a search on the Threat Library.



2. Click the **Bulk Actions** button ⊕ ▼.





3. Click the **All System Object** or **Selected System Object** option under the **Bulk Changes** heading.



#### Status



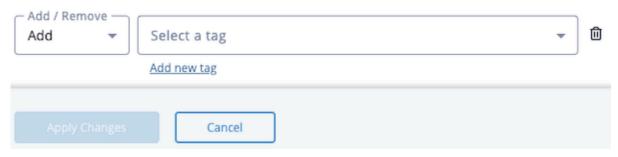
Note: Whitelisted indicators will not be affected when bulk updating status.

### **Change Expiration Date**



Note: When extending or setting an expiration date, all indicators that have a status of Expired will be set to a status of Active unless another status was specified above.

# Tags



4. Click **Add Row** under the **Source** heading.

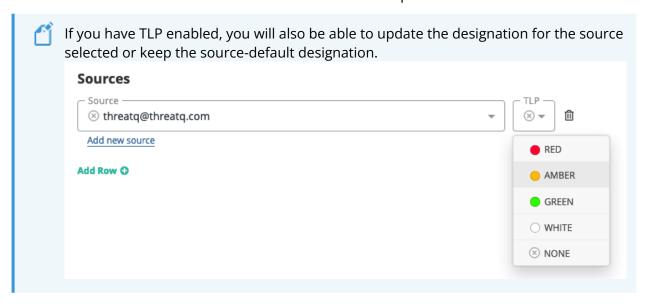
A new row with a dropdown option is displayed.

#### Sources



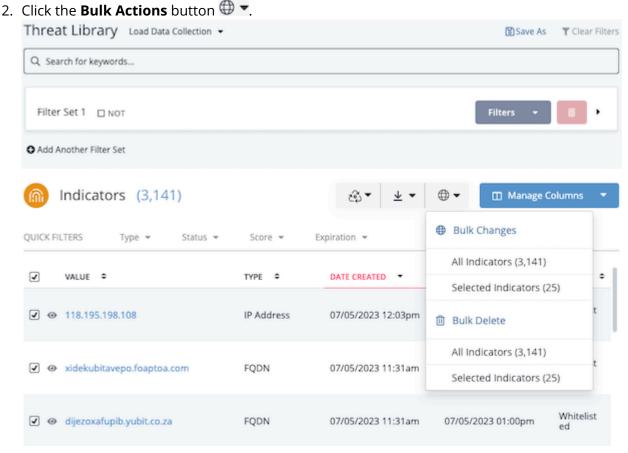


5. Use the dropdown to select the source to add to the selected objects. You can also use the **Add**New Source link to add a source that is not listed in the dropdown.



### **Bulk Add/Remove Attributes**

1. Perform a search on the Threat Library.



3. Click the **All <System Object>** or **Selected <System Object>** option under the *Bulk Changes* heading.



The Bulk Changes page is displayed.

# Bulk Changes Your changes will affect 100 objects

#### Status



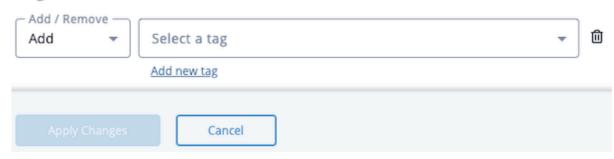
Note: Whitelisted indicators will not be affected when bulk updating status.

### Change Expiration Date



Note: When extending or setting an expiration date, all indicators that have a status of Expired will be set to a status of Active unless another status was specified above.

### Tags





Only the Bulk Actions that relate to the type of system object you selected will load on the Bulk Changes form.

- 4. Locate the Attributes heading and select either **Add** or **Remove**.
- 5. Select the attribute **Name** and **Value**. You can also use the **Add New Name** and **Add New Value** options to create new attributes. If you are adding an attribute, you will also select a **Source**. If you do not select a **Source**, the Source default will automatically be used.



#### **Attributes** Add / Remove Name Value ⑪ abuse.ch URLhaus Plai... Add ASN 13335 Add new name Add new value Add new source Add Row O Attributes Add / Remove Value ⑪ Remove ASN 13335 Add Row O



Click **Add Row** and repeat steps 4-5 to add/remove multiple attributes. See the Scenarios section below for more details.

6. Click the Apply Changes button located at the bottom of the form.

#### **Bulk Add/Remove Attribute Scenarios**

#### Add Multiple Attributes

- 1. The user narrows down the Threat Library using advanced search filters.
- 2. The user selects **Bulk Changes** from the **Actions** dropdown.
- 3. The user enters the **Attribute Name**, **Value**, and **Source** for the first row in the *Attributes* section.
- 4. The user clicks on **Add Row**.
- 5. The user enters the **Attribute Name**, **Value**, and **Source** for the new row.
- 6. The user clicks on Apply Changes.

### **Results**

All objects with in the list will have those attributes added



The attributes will be listed in the audit log mentioning that this. The author of the action will be "Job ID <job\_id\_number> (<username>)"

#### Remove Multiple Attributes

- 1. The user narrows down the Threat Library using advanced search filters.
- 2. The user selects **Bulk Changes** from the **Actions** dropdown.
- 3. The user selects **Remove** from the dropdown in the *Attributes* section and then enters the **Attribute Name**, **Value**, and **Source** for the first row.
- 4. The user clicks on Add Row.
- 5. The user selects **Remove** from the dropdown and then enters the **Attribute Name**, **Value**, and **Source** for the second row.
- 6. The user clicks on **Apply Changes**.

#### **Results**



 All objects in that change set that have the attributes specified (exact Name, Value, Source) will have them removed



The attributes will be listed in the audit log mentioning that this. The author of the action will be "Job ID <job\_id\_number> (<username>)"

• Any object that does not have the attributes specified (exact Name, Value, Source) will be skipped.



There will be no mentions of the job in the audit log for those objects because no changes were made.

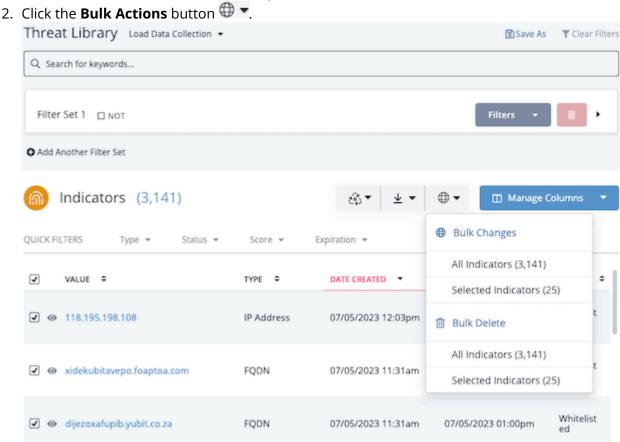
#### Add and Remove Attributes

In this scenario, the platform will execute the Bulk Changes in the following order:

- 1. Add Attributes See the Add Multiple Attributes Scenario above.
- 2. Remove Attributes See the Remove Multiple Attributes Scenario above.

# **Bulk Add/Remove Tags**

1. Perform a search on the Threat Library.



3. Click the **All <System Object>** or **Selected <System Object>** option under the *Bulk Changes* heading.



The Bulk Changes page is displayed.

# Bulk Changes Your changes will affect 100 objects

#### Status



Note: Whitelisted indicators will not be affected when bulk updating status.

# **Change Expiration Date**



Note: When extending or setting an expiration date, all indicators that have a status of Expired will be set to a status of Active unless another status was specified above.

### Tags



4. Select whether either the **Add** or **Remove** function and the **Tag**. You can also use the **Add New Tag** option if the desired tag is not listed in the dropdown.

# Tags





Click on **Add Row** and repeat step 3 to add/remove multiple tags.



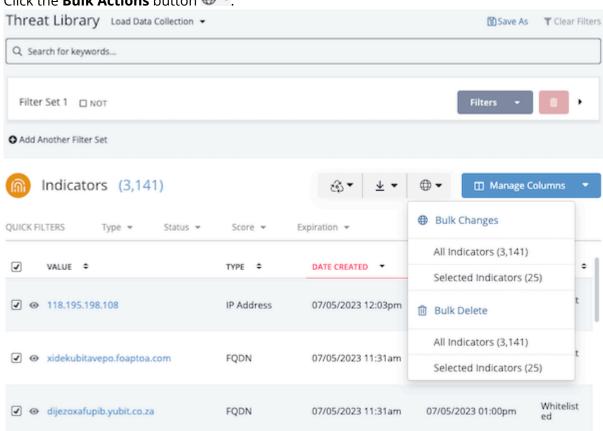
5. Click the **Apply Changes** button located at the bottom of the form.

# **Bulk Change Expiration Date**



This function can only be performed on Indicators.

- 1. Perform a search on the Threat Library.
- 2. Click the **Bulk Actions** button  $\oplus$   $\checkmark$ .



3. Click the **All <System Object>** or **Selected <***System Object>* option under the *Bulk Changes* heading.



The Bulk Changes page is displayed.

# Bulk Changes Your changes will affect 100 objects

#### Status



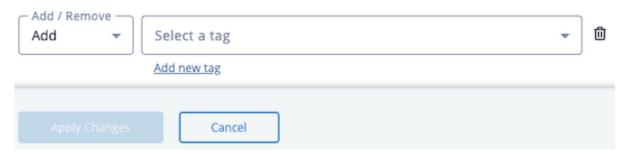
Note: Whitelisted indicators will not be affected when bulk updating status.

### Change Expiration Date



Note: When extending or setting an expiration date, all indicators that have a status of Expired will be set to a status of Active unless another status was specified above.

### Tags



4. Select the type of expiration update to perform:

See the Bulk Change Expiration Date Scenarios topic for specific details and outcomes.

Extend expiration date



The platform will ask you for the number of days to extend the expiration upon selection.

- >Protect from auto-expiration
- Remove expiration date
- Set a new expiration date



The platform will ask you to select a new date using a date picker upon selection.



5. Click the **Apply Changes** button located at the bottom of the form.

### **Bulk Expiration Change Scenarios**

Expiration isn't part of the form if indicators are not part of the result set

- 1. The user attempts to make bulk expiration changes to system objects other than indicators.
- 2. The Change Expiration Date option will not be listed on the Bulk Changes form.

Setting Expiration policy to a specific day

- 1. The user selects a set of indicators using the advanced search.
- 2. The user selects **Set a New Expiration Date** from the Change Expiration option.
- 3. The users selects a day using the date picker.



The date selected must be a future date.

4. After submitting the request, all indicators as part of that record set have the new expiration date.

Extending the expiration policy by a number of days

- 1. The user selects a set of indicators using the advanced search.
- 2. The user selects **Extend Expiration Date** from the Change Expiration option.
- 3. The user enters the number of days to extend.
- 4. After submitting the request, all indicators in that record set will now have their expiration date extended by that number of days specified.

Remove an expiration policy

- 1. The user selects a set of indicators using the advanced search.
- 2. The user selects **Remove Expiration Date** from the Change Expiration option.
- 3. After submitting the request, all indicators in that record set will no longer have an expiration date.

Protecting items from auto-expiration

- 1. The user selects a set of indicators using the advanced search.
- 2. The user selects **Protect from Auto-Expiration** from the Change Expiration option.
- 3. After submitting the request, all indicators in that record set will have the **protect from auto-expiration** expiration policy applied.

Extending/Setting an expiration date of an indicator with a status of Expired

- 1. The user selects a set of expired indicators using the advanced search.
- 2. The user selects **Set a New Expiration Date** from the Change Expiration option.
- 3. The users selects a day using the date picker. The date selected must be a future date.
- 4. After submitting the request, the expired indicators in that record set are then changed to a status of Active and the expiration date is set to the date indicated with the date picker.

Extending/Setting an expiration date of an indicator with a status of Whitelisted

All whitelisted indicators included in a Expiration Change set will be skipped.

Removing an expiration date on a previously expired indicator

1. The user selects a set of expired indicators using the advanced search.



- 2. The user selects **Remove Expiration Date** from the Change Expiration option.
- 3. The expired indicators in the set are skipped.

### **Bulk Delete**

The Bulk Delete feature offers users with Maintenance and Administrative roles the ability to select and delete system objects of all types, excluding Files and Tasks, from the Advanced Search page. In addition to the system object, bulk delete will also delete all child records such as attributes and relationships.



Individual Tasks and Files can be deleted by accessing the object's details page and selecting Delete Task/File from the Actions menu.

Once selected, the job process will run in the background and allow you to continue working within ThreatQ. An in-app notification will alert you when a Bulk Delete job has been queued and when it has been completed. You can also view the status and outcome of the job from the Job Management page.



The Bulk Delete function **permanently** deletes selected indicators from the system. Once deleted, you will be unable to undo the action. If you are executing a Bulk Delete on a large group of indicators, ThreatQuotient highly recommends performing a backup of your system before performing this function.



Based on the size of your bulk delete job and the system resources available, you may find that the estimated job duration is quite long. In these rare instances, contact ThreatQ support to explore your other options for deleting a large number of objects.

- 1. Perform a search on the Threat Library.
- 2. Click the **Bulk Actions** button  $\bigoplus$   $\checkmark$ .
- 3. Click the **All <System Object>** option under the *Bulk Delete* heading.

The Bulk Action Confirmation dialog box will load.



3. Click the checkbox to confirm deletion and then click the **Delete** button.

# **Bulk Add/Remove Relationships**

You can use the Bulk Change option to add/remove relationships for a group of objects, per object type, on the Advanced Search page. Bulk relationship updates are restricted to less than ten thousand objects and up to ten relationships per batch.

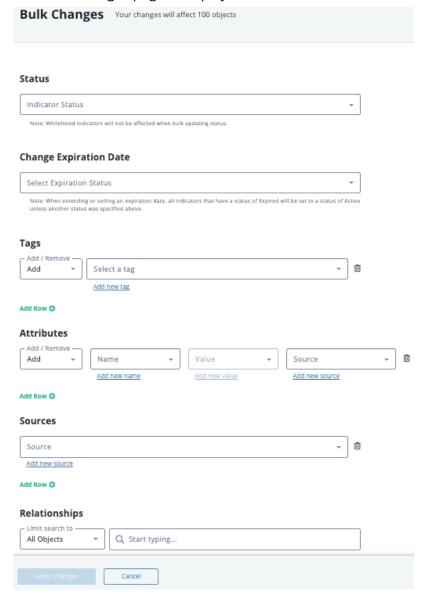




If an object is already associated with the source selected for the Bulk Add Relationships action, the object will be skipped during the bulk process.

- 1. Perform a search on the Threat Library.
- Click the Bulk Actions button ⊕ ▼.
- Click the All <System Object> or Selected <System Object> option under the Bulk Changes heading.

The Bulk Changes page is displayed.





Only the Bulk Actions that relate to the type of system object you selected will load on the Bulk Changes form. **Example:** Bulk Expiration Change will not load for non-indicators.

4. Locate the Relationships heading and optionally select **Limit Search To** to select an object type.



#### Relationships



5. Enter an object name.



By default, this field searches for objects that begin with the search string you enter. To search for objects that include your search string but do not begin with it, you must use a wildcard (% OR \*) search.

### **Examples:**

- 1. When you enter "us", your search returns **US**Bferry and **US**BStealer.
- 2. When you enter "%us" or "\*us", your search returns Aquari**us**, Lazar**us** Group, D**us**t Storm, **US**Bferry, and **US**BStealer.
- 6. After you select an object, the Add/Remove option appears.

#### Relationships



- 7. Select either **Add** or **Remove**.
- 8. Use the dropdown to select the source to add to the selected objects. You can also use the **Add**New Source link to add a source that is not listed in the dropdown.
- 9. Click the **Apply Changes** button located at the bottom of the form.

# **Bulk Status Change**



This function can only be performed on objects that use the status field such as Indicators, Events, Signatures, custom objects, etc.



Whitelisted Indicators are not affected by Bulk Status Change. If a Whitelisted Indicator is included in the set of system objects selected for a Bulk Status Change, the platform will skip the object without making a status change.

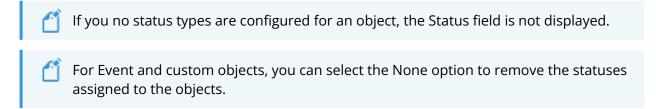
- 1. Perform a search on the Threat Library.
- 2. Click the **Bulk Actions** button .
- 3. Click the **All <System Object>** or **Selected <System Object>** option under the *Bulk Changes* heading.

The Bulk Changes page is displayed.



# **Bulk Changes** Your changes will affect 100 objects Status Indicator Status Note: Whitelisted indicators will not be affected when bulk updating status. Change Expiration Date Select Expiration Status Note: When extending or setting an expiration date, all indicators that have a status of Expired will be set to a status of Active unless another status was specified above. Tags Add / Remove ⑪ Select a tag Add Add new tag

4. Use the dropdown provided to select a new status to be applied to the selected objects.



5. Click on **Apply Changes** button located at the bottom of the form.

Cancel

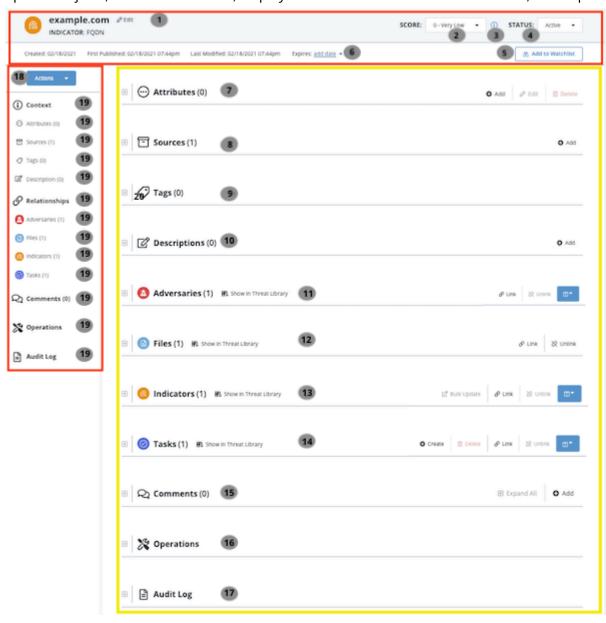


# **Object Details**

### **About Object Details**

You can click on an object within the ThreatQ application to access its details page. The Object Details page provides you with an in-depth look at an individual object. You can enter comments for others to view, link related objects, and view an audit log of all activity associated with the object.

Specific objects, such as Indicators, display additional information such as score, and expiration data.



Items marked with an \* in the Object Details Page Legend indicate an option only available to specific object types.



### **Header Section**

NUMBER	FIELD	DESCRIPTION	REFERENCE
1	Edit Object Link	The Edit link allows you to edit specific details about an object. Edit fields will differ based on the type of object.	N/A
2	Score Selection* Applies to Indicators Only	The Score Selection dropdown allows you to override an indicator's score set by the scoring algorithm.	<ul><li>Indicator Expiration</li><li>Scoring Algorithms</li></ul>
3	Scoring Influence* Applies to Indicators Only	You can click on the icon to review the criteria utilized by the application's scoring algorithm to generate the Indicator's score.	<ul> <li>Scoring Algorithms</li> </ul>
	Point of Contact* Does not apply to Adversaries, Files, Indicators, Signatures, and Tasks	The Point of Contact menu allows you to select the ThreatQ display name of the point of contact for the object.	
4	Status* Does not apply to Adversaries, Files, Signatures, and Tasks	The Status dropdown menu allows you to manually set the status of an object.	<ul> <li>Indicator         Status         Indicator         Statuses         Management (Object         Management)         </li> <li>Object</li> <li>Statuses (Object</li> <li>Management)</li> </ul>



5	Add to Watchlist	The Watchlist toggle button allows you to add and remove the object from the Watchlist widget.	<ul> <li>Add/Remove an Object to the Watchlist</li> </ul>
6	Expiration* Applies to Indicators Only	The Expire link allows you to set an expiration date for the indicator, protect from auto-expiration policies, and remove an existing set expiration date.	<ul> <li>Indicator         <ul> <li>Expiration</li> </ul> </li> <li>Indicator         <ul> <li>Expiration</li> <li>Policies (Data Controls)</li> </ul> </li> </ul>

### **Details Section**

Number	Pane	Description	Reference
7	Attributes	The Attributes pane displays attributes associated with the object. You can Add, Edit, and Delete attributes found in this section.	• Attributes Pane
8	Sources	The Sources pane displays sources associated with the object. You can Add, Edit, or Remove sources.	Sources Pane
9	Tags	The Tags pane displays tags associated with the object. You can Add and Delete tags found in this section.	Tags Pane
10	Descriptions	The Descriptions pane allows you to add, update, or delete object information.	• Descriptions Pane
11	Adversary	The Adversaries pane displays adversaries associated with the object.	• Relationships Panes



12	Files	The Files pane displays files associated with the object and gives you the option to preview, download, and/or parse the file. If your browser does not support file preview for a specific file type, the file is downloaded instead.  You cannot preview a malware locked file.	• Relationships Panes
13	Indicators	The Indicators pane displays indicators associated with the object.	• Relationships Panes
14	Tasks	The Tasks pane displays tasks associated with the object.	• Relationships Panes
15	Comments	The Comments pane allows you to record comments about the object for other users to read and reference.	• Comments Pane
16	Operations	The Operations pane allows you to associate third-party attributes and related indicators to the indicator.	<ul><li>About Integrations Management</li></ul>
		This options requires the installation of Operations. See the Managing Integrations topic for more details.	
17	Audit Log	The Audit Log panel displays all actions and changes made to an Object.	• Audit Log



# **Left-Hand Navigation**

Number	Field	Description	Reference
18	Actions Menu	The Actions menu lists the following options:	• Actions Menu
19	Object Details Navigation Tabs	This allows you to jump to a particular pane on the Object Details page.	N/A



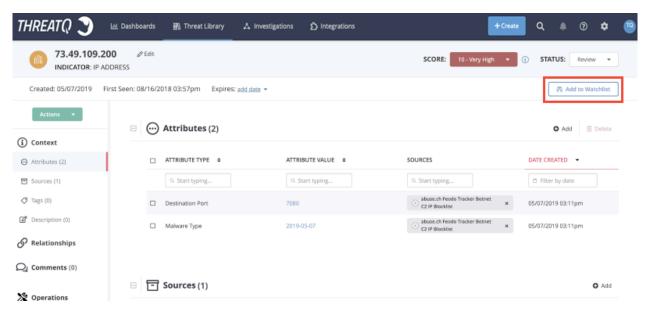
### Adding/Removing an Object to the Watchlist

Read Only users do not have the option to add an object to the Watchlist.



The steps to remove an item from the Watchlist are the same as adding an item.

- 1. From the ThreatQ user interface, navigate to the Details page of system object you want to track
- 2. Click **Add to Watchlist** to track the object. Or, click **Remove from Watchlist** to remove the object.

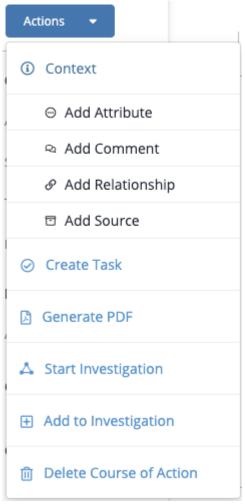


Depending on your selection, the object is added to/removed from the Watchlist on the system default dashboard.



### **Actions Menu**

The Action Menu, located on the left-hand of the Object Details page, allows users to quickly execute system object processes.



#### **Actions Include:**

ACTION	FUNCTION	REFERENCE
Add Attribute	Brings up the Add Details dialog box which allows you to add an attribute to the object.	• Attributes Pane
Add Comment	Displays a new text entry field in the Comments pane.	• Comments Pane



ACTION	FUNCTION	REFERENCE
Add Relationship	Brings up the Add Relationships window which allows you to link other system objects to the object.	<ul> <li>About Relationships Panes</li> <li>Additional Related Object Actions</li> </ul>
Add Source	Brings up the Add Details window which allows you to add a source to the object.	Sources Pane
Create Task	Opens the Add Task window.	
Generate PDF	Generates a PDF report of the object.	• Reports
Start Investigation	Opens the Create Investigation window so that you can create a new investigation to which the object is automatically added.	<ul> <li>Editing an Investigation</li> </ul>
Add to Investigation	Opens the Select Investigation window which allows you to add the object to one or more existing investigations.	
Delete <object></object>	The Are You Sure? window prompts you to confirm the deletion by clicking the <b>Delete</b> button.	



# **Context Panes**

#### **About Context Panes**

Based on the system object type, the Context section of the object details page displays:

- Attributes
- Sources
- Tags
- Descriptions
- Spearphish Details



#### **Sources Pane**

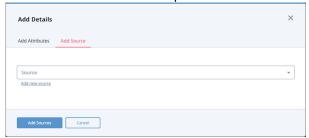
The Sources pane displays all Sources associated with the system object. From this pane, Maintenance Account, Administrative Access, and Primary Contributor Access accounts can add a source to the object, update a source's TLP label, or remove a source from the object. Read Only Access accounts can view sources but not remove or update them.

See the *Bulk Add Source* section in the *Bulk Actions* topic for information on adding a source to a group of system objects.

Adding a Source to an Object

- 1. Locate the Sources pane on the object details page.
- 2. Click the Add option.

The Add Details window opens with the Add Source tab selected by default.



3. Use the Source field's drop-down list to select a source. If TLP is enabled, you can override the source's default TLP label.

You can also click the **Add a New Source** option if the desired source is not listed in the drop-down list. If administrators have enabled TLP view settings, you can select a TLP label for the new source in the dropdown list provided. See the Traffic Light Protocol (TLP) topic for more information on TLP schema.



Even though the Source drop-down lists displays all sources, you cannot add a source to an object if it has already been added.

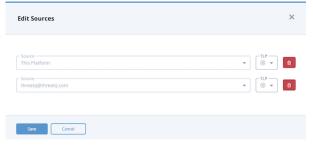
4. Click the **Add Sources** button.

#### Editing a Source

The Edit Sources window allows you to edit a source's TLP label (if TLP visibility is enabled via the TLP tab) or remove the source from the object.

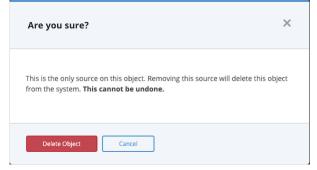
- 1. Locate the Sources pane on the object details page.
- 2. Click the Edit option.

This Edit Sources window lists all the sources associated with the system object.

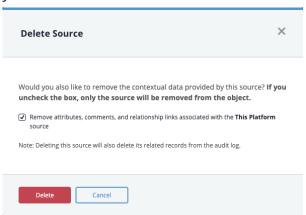




- 3. To update the source's TLP, select the new TLP label from the dropdown list and click the **Save** button.
  - To delete the source, click the trashcan icon next to the TLP field and go to step 4.
- 4. If you are removing the only source associated with the object, the **Are you sure** window prompts you to confirm the deletion of the object by clicking the **Delete Object** button.



If the object has multiple sources, the Delete Source window prompts you to specify whether you want to delete the source and its related context. Go to step 5.



5. To remove the object and its related context, leave the **Remove attributes**, **comments**, **and relationship links associated with the <source name> source** field checked.



Removing a relationship link does not delete the linked object. It only removes the link between the objects.

To remove the source but retain its related context, uncheck the option.

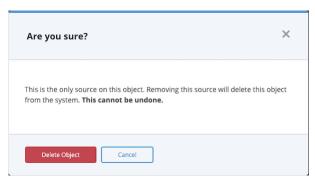
6. Click the **Delete** button.

Deleted sources are recorded in the audit log as Removed. Removed contexts such as attributes, comments, or relationships are not recorded in the audit log.

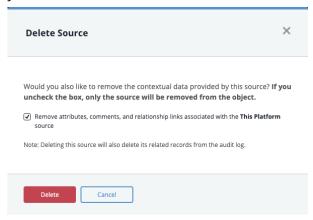
Removing a Source from an Object

- 1. Locate the Sources pane on the object details page.
- 2. Click the + next to pane title, **Sources**, to expand your view of the pane.
- 3. Click the **X** located to the right of the source's name.
- 4. If you are removing the only source associated with the object, the **Are you sure** window prompts you to confirm the deletion of the object by clicking the **Delete Object** button.





If the object has multiple sources, the Delete Source window prompts you to specify whether you want to delete the source and its related context. Go to step 5.



5. To remove the object and its related context, leave the **Remove attributes**, **comments**, **and relationship links associated with the <source name> source** field checked.



Removing a relationship link does not delete the linked object. It only removes the link between the objects.

To remove the source but retain its related context, uncheck the option.

6. Click the **Delete** button.

Deleted sources are recorded in the audit log as Removed. Removed contexts such as attributes, comments, or relationships are not recorded in the audit log.



#### **Tags Pane**

Maintenance Account, Administrative Access, and Primary Contributor Access accounts can add and remove tags in the Tags pane on the object details page. Read Only Access accounts can view tags but not remove them.

See Bulk Actions Add/Remove Tags for information on adding/removing tags from a group of system objects.

Adding an Existing Tag to an Object

- 1. Locate the Tags pane on the object details page.
- 2. Click the **Select an existing tag** field.
- 3. Select the tag you want to add from the dropdown list.



You can narrow the dropdown list options by entering all or part of the tag name. As you type, the dropdown list displays matches for your entry.

Adding a New Tag to an Object

- 1. Locate the Tags pane on the object details page.
- 2. Click the **Create a new tag** option.
- 3. Type the new tag's name in the **Tag name** field.
- 4. Press **Enter** to save the new tag and add it to the system object.

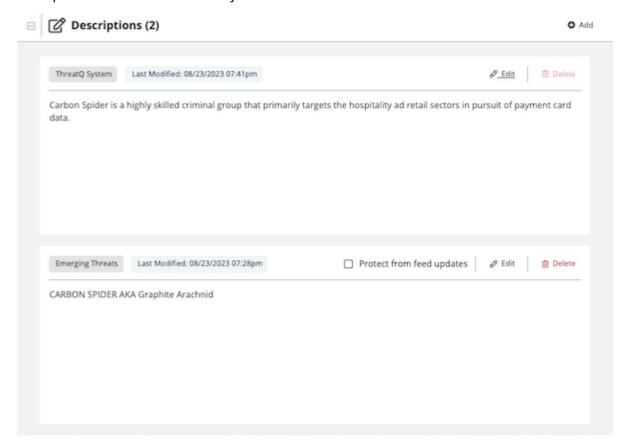
Deleting a Tag from an Object

- 1. Locate the Tags pane on the object details page.
- 2. Select the **X** next to the tag name.



#### **Descriptions Pane**

The Descriptions pane displays descriptions associated with a system object. This pane lists each description associated with an object.



#### Description Header and Body

Each description consists of a header and a body. The description header lists the description source's TLP label, source name, last modified timestamp, feed update setting, as well as Edit and Delete options. The **Protect from feed updates** checkbox allows you to specify whether the description is updated when you ingest a description change from the integration source.

The description body can include text, tables, and images.

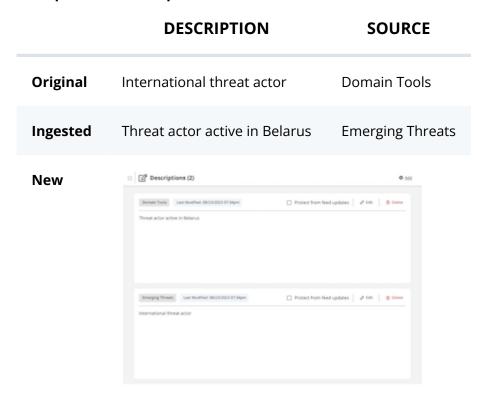
#### **Description Guidelines**

- An object can only have one description per source.
- ThreatQ System Descriptions:
  - When you create an object and do not specify a source for the object, the description is assigned a source of ThreatQ System.
  - If a description's source is ThreatQ System, the **Protect from feed updates** option is not displayed.
  - If present, an object's ThreatQ System description is the first description listed in the Descriptions pane.
- If TLP functionality is enabled, you can view/update the TLP labels associated with description sources.

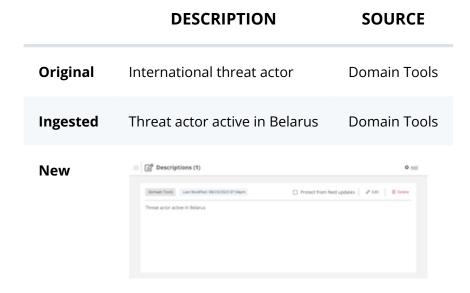


 When an existing indicator which already has a description is consumed with a new description with a different source, the new description is added. However, if the source is already associated with an existing object description and the description is not protected from feed updates, the ingested description updates the existing one.

**Example - New Description and Source** 



**Example - New Description, Same Source, Protect from feed updates Unchecked** 



### **Tips and Tricks**

Images:



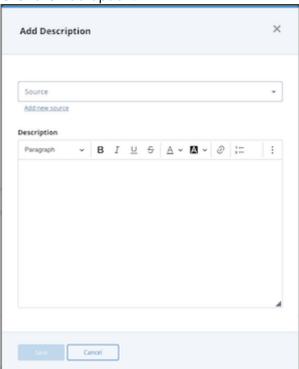
- **Image alignment** Images in an object's description are displayed in the PDF report for the object as left aligned regardless of the alignment you select in the Description pane.
- Image captions Add your image captions after you select your image alignment. If you change alignment after adding a caption, the caption is removed and must be added again.
- Image text alternatives If you add an image text alternative to an image, it is available
  for use by screen reading tools but is only displayed on screen if the image fails to load. It
  is not displayed when you hover on the image.
- Resize an image The resize image option allows you to adjust your image to 25%, 50%, or 75% of the size of the Description field. Or, you can return your image to its original size.

#### · Formatting:

- Add a line above or below When you click an image, the arrow icons located on the bottom left and top right corners allow you to insert a line above (top right arrow) or below (bottom left arrow) the image.
- **Paste rows into an existing table** To paste rows into an existing table, insert a blank row in the table, click in the first cell of the blank row, and then paste the additional rows.
- Resize the Description field Click and drag the right corner to resize the Description field.
- **Text formatting** To apply the HTML tag to text, click the heading field and select the Formatted option.

Adding a Description to an Object

- 1. Locate the Description pane on the object details page.
- 2. Click the **Add** option.



- 3. From the Add Description window, populate the following fields:
  - **Source** Click the Source field to select the description's source from the dropdown list. Or, click the Add new source option to create a new source for the description.





If you type the name of a source already associated with one of the object's descriptions, your new entry will overwrite the existing description.

- **Description** Enter the object description. See the Tips and Tricks section for more information on your description options.
- 4. Click the **Save** button.
- 5. To view the new description, expand the Descriptions pane.
- 6. Optional step. To prevent feed updates from updating the description, click the Protect from feed updates checkbox. If this box is unchecked, the following rules apply when an existing indicator with description is consumed with a new description:
  - If the new description has a different source, then the new description is added to the object.
  - If the new description has the same source, then the existing description is updated.



The Protect from feed updates field is not displayed for descriptions with a source of ThreatQ System.

#### Updating the Description of an Object

- 1. Locate the Description pane on the object details page.
- 2. Locate the description you want to update.
- 3. Click the **Edit** option for the description to add/update the object description's text, tables, or images.
- 4. Enter your changes and click the **Save** button.

#### Deleting a Description

- 1. Locate the Description pane on the object details page.
- 2. Locate the description you want to delete.
- 3. Click the **Delete** option for the description.

  The Are You Sure? window prompts you to confirm the deletion.
- 4. Click the **Delete Description** button.



#### **Spearphish Details Pane**

You can update spearphish file details as well as add or delete recipients from the Spearphish Details pane in a Spearphish event's object details page.

#### Adding a Recipient

- 1. Locate the Spearphish Details pane on the object details page.
- 2. Click the Add Recipients option.
  The Add Recipients window is displayed.
- 3. Populate the following fields:
  - Recipient type This field defaults to a value of To. Use this field to specify whether the
    email was sent directly to the recipient (To) or the recipient received it as a carbon copy
    (CC) or blind carbon copy (BCC).
  - **Email address** Enter the email address that received the spearphish file.
  - **Link all emails as related indicators** This field defaults to checked. Leave this box checked to add a releated indicator record to the system object for each email address.
- 3. To add another recipient, click the + button and repeat step 3.
- 3. To save your recipient additions and return to the Spearphish Details pane, click the Add Recipients button.

#### Deleting a Recipient

- 1. Locate the Spearphish Details pane on the object details page.
- 2. Click the checkbox(es) next to the recipient(s) you want to delete.
- 3. Click the Delete option.
  The Are You Sure? window prompts you to confirm your action.
- 4. Click the Delete Recipients button.

#### Editing a Spearphish File

- 1. Locate the Spearphish Details pane on the object details page.
- 2. Click the Edit button.
- 2. Enter your changes in the Email Content field.
- 2. Click the Save button.



#### Relationships

#### **About Relationships Panes**

The Relationship section of the object details page displays other system objects that have been related to the current object.

From this pane, you can:

- Link/unlink system objects.
- Perform bulk updates (related indicators pane only).
- Select the columns to be displayed for the object type.
- Click on a related object to navigate to its object details page.



Certain related system objects, such as related indicators, will have additional actions available. See the Additional Related Object Actions topic.

#### Linking a System Object

1. Locate the desired system object type pane on the object details page.



Relationships panes will only appear if a system object is already related to the object. Use the **Actions** button to relate the initial object: **Actions > Add Relationship**.

2. Select the & Link icon.

The Add Relationships dialog box opens.



- 3. Use one of the following methods to add an object to the Add Relationships field:
  - For existing objects, enter the object name and select the match from the down list.



Repeat this step to add multiple objects.

 To create a new object, enter the new object name. The, click the **Create** link to add the new object to Threat Library. If you limited your search to a specific object type, you are linked to the corresponding form. For example, if you limited your search to Adversaries,



the Create link opens the Add An Adversary form. If you left the **Limit search to field** set to All Objects, you can select the object type you want to create from a drop-down list.

4. Click Add.

Unlinking a System Object

- 1. Locate the Related <System Object> pane on the object's details page.
- 2. Select the checkbox(es) next to the system objects to unlink.
- 3. Select the & Unlink icon.

Selecting Columns by Object Type

You can choose the columns displayed for each related object type except for File objects. When you add a column, it is displayed to the left of the Linked By, Confidence, and Comments columns. For Maintenance and Admin users, ThreatQ retains column selections by login and applies the selections to all objects of the same object type. For example, if you select the Last Modified column for Adversary1, you will see the same column displayed for all adversaries. Read Only and Primary Contributor users can select columns for display. However, their selections are not saved.

For each related object type, ThreatQ specifies default and required columns. You can remove default columns from your view but you cannot remove required columns.

ОВЈЕСТ ТҮРЕ	DEFAULT COLUMNS	REQUIRED COLUMNS
Adversaries		<ul><li>Name</li><li>Date Created</li><li>Linked By</li><li>Confidence</li><li>Comments</li></ul>
Assets		<ul><li> Value</li><li> Date Created</li></ul>
Attack Pattern		<ul><li>Value</li><li>Date Created</li></ul>
Campaign		<ul><li>Value</li><li>Date Created</li></ul>
Course of Action		<ul><li> Value</li><li> Date Created</li></ul>
Events	<ul><li>Date Created</li><li>Type</li></ul>	<ul><li>Title</li><li>Date of Occurrence</li></ul>



ОВЈЕСТ ТҮРЕ	DEFAULT COLUMNS	REQUIRED COLUMNS
Exploit Target		<ul><li> Value</li><li> Date Created</li></ul>
Files		<ul><li> Title</li><li> Sources</li><li> Date Added</li></ul>
Identity		<ul><li> Value</li><li> Date Created</li></ul>
Incident		<ul><li> Value</li><li> Date Created</li></ul>
Indicators	• Score • Status	<ul><li> Value</li><li> Date Created</li></ul>
Intrusion Set		<ul><li> Value</li><li> Date Created</li></ul>
Malware		<ul><li> Value</li><li> Date Created</li></ul>
Report		<ul><li> Value</li><li> Date Created</li></ul>
Signatures	<ul><li>Type</li><li>Date Created</li></ul>	• Name
Tasks	<ul><li>Assigned To</li><li>Status</li><li>Priority</li></ul>	<ul><li>Name</li><li>ID</li></ul>
Tool		<ul><li> Value</li><li> Date Created</li></ul>



ОВЈЕСТ ТҮРЕ	DEFAULT COLUMNS	REQUIRED COLUMNS
TTP		<ul><li> Value</li><li> Date Created</li></ul>
Vulnerability		<ul><li> Value</li><li> Date Created</li></ul>

- 1. Locate the Related <System Object> pane on the object's details page.
- 2. Click the column button next to the Unlink option.
- 3. Use one of the following methods to locate the columns you want to display/hide:
  - Scroll through the list of column options.
  - Begin typing the column name until it is displayed below the search field.
- 4. To display a column, check the checkbox next to the column name.
- 5. To hide a column, uncheck the checkbox next to the column name.



#### **Additional Related Object Actions**

Certain system object types will offer you additional actions after relating the objects to another object.

#### Adding a comment to a related adversary

- 1. Locate the Adversaries pane on the object details page.
- 2. Select Add Comment.

The Comments text field opens.



- 3. Enter a comment.
- 4. Click Add Comment.

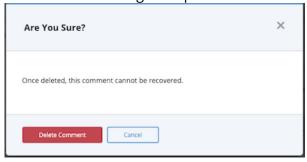
#### **Editing a related adversary comment**

- 1. Locate the Related Adversaries pane on the object details page.
- 2. Select **Edit** under the comment to update.
- 3. Update the comment.
- 4. Click **Save Changes**.

#### **Deleting a related adversary comment**

- 1. Locate the Related Adversaries pane on the object details page.
- 2. Select **Delete** under the comment to update.

A confirmation dialog box opens.



3. Select **Delete Comment**.

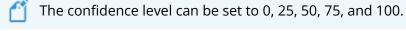


#### **Related Adversaries - Confidence Level**

You can configure a related adversary's confidence level from the Adversaries pane.

- 1. Locate the Adversaries pane on the object details page.
- 2. Click the dropdown arrow in the Confidence field to select the desired confidence level.





The displayed confidence level will be modified to reflect your selection.

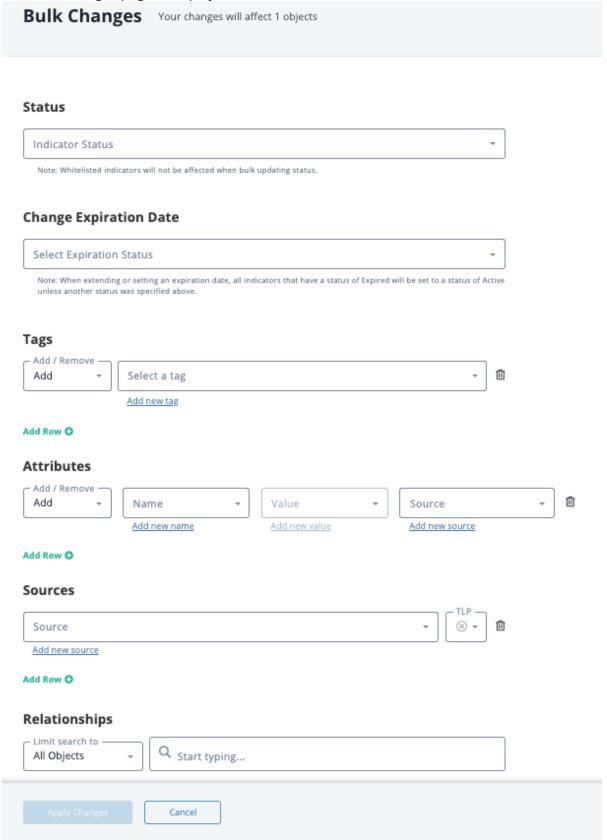
#### **Related Indicators - Bulk Actions**

You can perform bulk updates to linked indicators listed in the Indicators pane of an object.

- 1. Locate the Indicators pane on the object details page.
- 2. Select the checkbox(es) next to the indicator(s) to update.



3. Select the Bulk Update option.
The Bulk Changes page is displayed.



4. Select the desired changes and click **Apply Changes**.



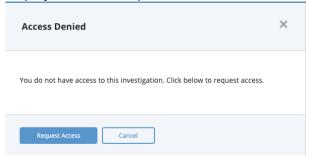
#### **Related Investigations - Request Access**

If you do not have Owner, Editor, or Viewer permissions to an investigation related to a system object, you cannot access it unless the investigation owner assigns you one of these permission levels.

- 1. Locate the Related Investigations pane on the object details page.
- 2. Click the investigation name.

If you have permission to access the Investigation, this link takes you to the investigation's evidence board.

If you do not have permission to access the investigation, the Access Denied window is displayed. Go to step 3.



3. From the Access Denied window, click the **Request Access** button.

The investigation owner receives a Notification Center alert indicating you have requested access to the investigation.



#### **Comments Pane**

The Comments pane allows you to add comments about the system object for other users to see.

#### **Tips and Tricks**

#### · Comment Display:

- By default, each comment displays up to four lines of text. For longer comments, you can click the **Show More** option to view the full details. You can then click the **Show Less** option to return to the truncated view.
- The Expand All/Collapse All option in the Comments pane header allows you to expand/ collapse all of an object's comments. If an object does not have any comments, this option is grayed out.

#### · Formatting:

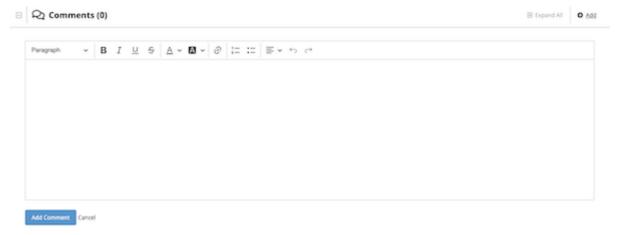
- The comment toolbar gives you the option to:
  - Apply styles to comment text.
  - Apply inline formatting such as bold, italics, underline, or strikethrough to comment text.
  - Select a font color and font background color.
  - Insert a link.
  - Add a numbered or bulleted list.
  - Specify text alignment.
  - Undo or redo a text change.
- The formatting in the comment field is reflected in the PDF export of the system object.

#### **Adding Comments to an Object**



Users can also click on the **Actions** menu and select the **Comment** option.

1. Click the **Add** link located at the top-right of the pane. The new comment text box opens.

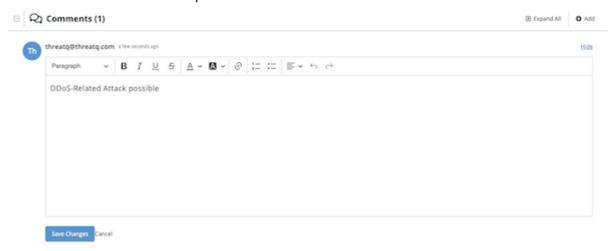


- 2. Enter a comment.
- 3. Click the **Add Comment** button.



#### **Editing Comments for an Object**

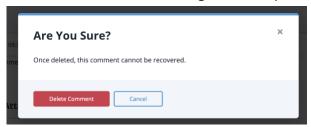
1. Click the **Edit** link located beneath the comment you want to update. The edit comment text box opens.



- 2. Edit the comment.
- 3. Click the **Save Changes** button.

#### **Deleting Comments from an Object**

1. Click on the **Delete** link located beneath the comment to update. The delete confirmation dialog text box opens.



2. Click the **Delete Comment** button.



#### **Audit Log**

The ThreatQ Audit Log tracks every change made to every object in the system. If there is a change to an object, that change is displayed in the audit log. The audit log is only updated if the data itself changes, not just the updated\_at value.

The following questions below address further details about the audit logging process.

# In the case where an activity is triggered (with nothing updated), where will the activity be logged?

The activity will not show in the audit log, as there were no changes to report. While ThreatQ does not track duplicate objects that enter the application, there is a touched\_at date field on primary objects (Adversary , Files , Events , Indicator , and Signatures ) that indicates when a relation of the object has been changed.

Is there another raw audit log within the system where events are logged? No, there are no other raw audit logs where events are logged.

Is there an option in the User Interface to enable all activities to be shown in the Audit Log? There is no option in the User Interface to limit or expand the audit log. All entries are pulled for an object when the Audit Log panel is opened. The audit log displays changes to the individual fields of an object; object comments, sources, attributes, and tags; as well as to object links, object link comments, and object link attributes. Additionally, any changes to the score of an Indicator are included.



# **User Management**

# **About User Management**

ThreatQ uses role-based access control to manage user accounts. The system provides several user roles, each containing a set of permissions for accessing system functionality. You create user accounts, and assign them to a user role. The user role determines each account's set of permissions. After you create a user account, you can modify its user role group, display name, and email address.



## **Managing User Accounts**

While all users can update their own individual accounts, only users with Maintenance Account and Administrative Access user roles have permission to access the User Management functionality. You must be logged in as one of these roles in order to create new user accounts.



When you first install ThreatQ, the system creates a default user account, the Maintenance Account. You cannot delete this account. You can use it to initially create other user accounts. Each user account must have a unique username.

#### **Accessing Your User Account**

1. Click on your avatar icon, located to the top-right of the platform, and select **My Account**. The Edit User screen allows you to review and update your User Account Properties.

#### **Accessing Other User Accounts**



Only users with Maintenance and Administrative accounts can add, edit, and delete other user accounts.

- 1. Click the **Settings** icon and select **User Management**. The User Management screen displays a list of user accounts.
- 2. You can filter and/or sort the user accounts displayed by:
  - · Display Name
  - Status
  - Username
  - Email
  - Group
  - 2-Step Verification
- 3. If you are logged in with a Maintenance or Administrative account, you can also click a display name to access the corresponding User Account Properties.

#### **User Account Properties**

FIELD	DESCRIPTION
Name	Update the user's name.
Title	Update the user's job title.



Email	You can update the user's email address.
Password	You can click on the <b>Change Password</b> link to update the user's password.
API Credentials	You can view the user's API credentials, a unique Client ID, which will allow him/her to connect with ThreatQ's API.
Session Timeout	You can update or disable the user's session timeouts.
Screen Display	If you change your display theme, you will see the update immediately. If you change another user's display theme, the new mode updates the display the next time they log in.
User Avatar	You can update the user avatar.
2-Step Verification	Optional. The toggle switch in this section allows you to enable/disable 2-step verification.
Client CERT Authentication Enabled	If SSL Client Certificate Authentication is enabled, this section displays the user's certificate fingerprint or allows you to add/update a certificate fingerprint.
Activity Log	<ul> <li>You can click on the Activity log tab to view the following information:</li> <li>The last date and time the user logged in.</li> <li>The IP Address where the user logged in.</li> <li>Whether the login was successful or not.</li> </ul>

#### **Adding a User**



Only users with Maintenance and Administrative accounts can add user accounts.

- 1. From the main menu, choose the **Settings icon User Management**.
- 2. Click **Add User**.

The Add User window is displayed.

- 3. Populate the following fields:
  - **Display Name** *Required*. Enter the user's name.
  - **Title** Optional. Enter the user's title.
  - **Group** *Required.* Select the level of access for the user from the **Group** drop-down menu:



- Maintenance Account
- Administrative Access
- Primary Contributor Access
- Read Only Access



See the User Roles topic for more detail on these access levels.

- **Username** *Required*. Enter the user's login ID.
- Email Optional. Enter the user's email address.
- Password Required. Enter the user's password.
- **Retype Password** *Required*. Re-enter the user's password.
- 4. Click the **Add User** button.

The System User tab displays the new user. See the Editing a User topic for information on further customizing the user profile.

#### **Editing a User**



Only users with Maintenance and Administrative accounts can edit another user's account. You cannot edit user details for SAML nor LDAP users from the User Management page.

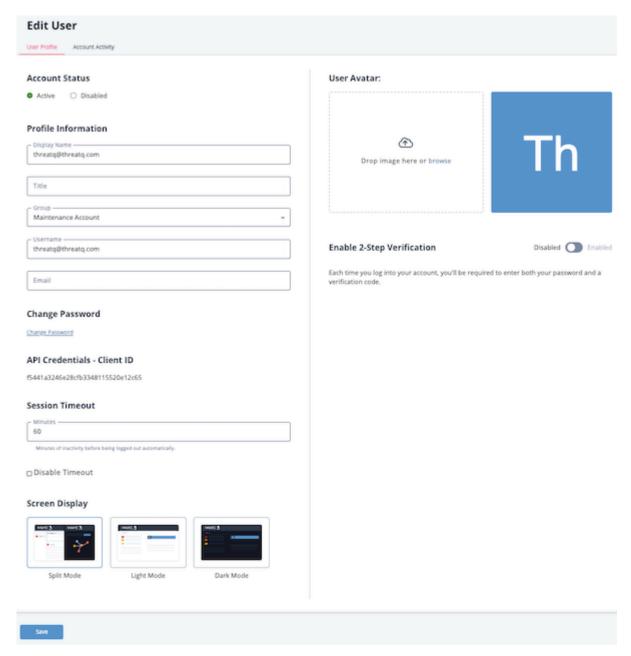
1. Click the **Settings** icon **and** select **User Management**.



To edit your own account, click your avatar icon and select My Account. Proceed to step 3 below.

2. Click the user's display name. The User Profile page loads.





3. On the User Profile tab, you can view and/or edit the following settings:

# Name Update the user's name.

**DESCRIPTION** 

Title Update the user's job title.

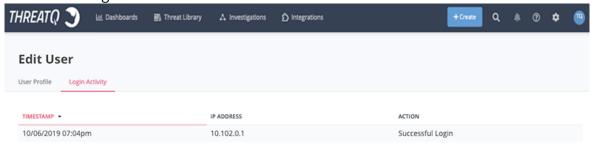
Email You can update the user's email address.

**FIELD** 



FIELD	DESCRIPTION
Password	You can click on the <b>Change Password</b> link to update the user's password.
API Credentials	You can view the user's API credentials, a unique Client ID, which will allow him/her to connect with ThreatQ's API.
Session Timeout	You can update or disable the user's session timeouts.
Screen Display	Allows you to update a user's display theme. If you change another user's display the new mode updates the display the next time they log in.
User Avatar	You can update the user avatar.
2-Step Verification	Optional. The toggle switch in this section allows you to enable/ disable 2-step verification.
Client CERT Authentication Enabled	If SSL Client Certificate Authentication is enabled, this section displays the user's certificate fingerprint or allows you to add/update a certificate fingerprint.

- 4. You can also click on the **Login Activity** tab to view:
  - The last date and time the user logged in.
  - The IP Address where the user logged in.
  - Whether the login was successful or not.



5. After you enter your changes, click the **Save** button.



#### **Resetting User Password from the Command Line**

If you have root access to your ThreatQ installation, you can reset any user's password from the command line. See the Resetting User Passwords from the Command Line section in the Commands topic.

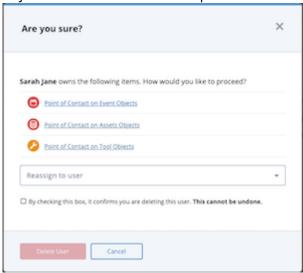
#### **Deleting a User**



Deleting a user cannot be undone.

- 1. From the main menu, choose the **Settings icon > User Management**.
- 2. In the System Users tab, click the checkbox next to each user you want to delete.
- 3. Click the trashcan button.

ThreatQ reviews the user ID to determine if it has any shared data collections, data feeds, dashboards, or investigation. In addition, it determines if the user is listed as point of contact on any system object or is assigned with a task. If so, the **Are you sure?** window displays and prompts you to select a new user to replace the deleted user. To view more information on the items a user is linked to, you can click the corresponding link on the item name. For instance, click the **Point of Contact on Event Objects** link to view a Threat Library listing of all event objects for which the user is a point of contact.



- 4. Click the **Reassign to user** field and do one of the following:
  - **Reassign Ownership** Select the new owner of the data collections, data feeds, dashboards, and/or investigations. This user will also replace the deleted user as an object's point of contact and/or a task's assignee.
  - Delete Select the Do not reassign. Delete these items and remove users from objects. option to delete all of the user's data collections, data feeds, dashboards, and/or investigations. In addition, the user is removed as a point of contact or task assignee.
- 5. Check the confirmation checkbox and click the **Delete User** button.



### **Updating a User Avatar**

User avatars provide a personalized look to your ThreatQ dashboard. ThreatQ supports the use of all standard image types for avatars and a maximum image size of 260 x 260 pixels.

- Click the avatar icon and select **My Account**.
   The Edit User page is displayed.
- 2. From the Use Avatar section, you can:
  - Click the browse link and select the icon to upload.
  - Click and drag the new icon onto the page.
- 3. Click the **Save** button.



#### **User Roles**

The following details the user roles and their base-level permissions. A user account's access to data collections and dashboards can be further customized by the Sharing permissions assigned to it.

#### **USER ROLE**

#### **PERMISSION**

#### Maintenance Account

Members have access to the entire ThreatQ user interface and can edit all data.

#### **Important Notes:**

- Each ThreatQ instance must have at least one Maintenance Account.
- Local Maintenance Accounts (manually created within ThreatQ) cannot be migrated to SAML authentication groups

# Administrative Access

Members have access to the entire ThreatQ user interface and can edit all data.

#### Primary Contributor Access

#### Members can:

- Edit their own user info
- · Manually create system objects
- Create and manage ThreatQ Investigations
- Access Whitelist Management (Data Controls)
- Perform a basic search
- Access the Threat Library, object metadata, export search results, and manage Data Collections
- Create custom dashboards and add shared dashboards to their user view.

#### **Read Only Access**

#### Members can:

- · Access the Threat Library, object metadata, export search results
- · Add shared dashboards to their user view
- · Load saved Data Collections



Members cannot edit any data.



# 2 Step Verification

Users can configure a second layer of security for their user accounts.



Transcript: TEXT

Footage from ThreatQ Version 4.55.0

#### Reference

- 2-Step Verification
- About Accessing the Platform
- Managing User Accounts



#### LDAP Authentication

#### About LDAP Authentication



**AGDS Users** -If you are using LDAP or SAML authentication on your **Source** ThreatQ instance, and require users transferred via import to have authentication capabilities on your **Target** ThreatQ instance, then you must enable the same authentication method on your **Target** ThreatQ instance prior to performing import.

ThreatQ allows you to configure system access via LDAP, the Lightweight Directory Access Protocol. You have two configuration options:

- Anonymous Bind (previously referred to as basic)
- · Authenticated Bind

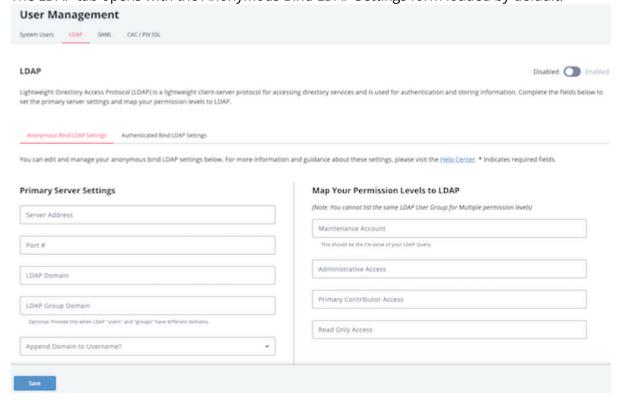


It is highly recommended that you review the Required Information for Creating LDAP Authentication section of the About LDAP Authentication topic before configuring your LDAP settings.

#### To Access the LDAP tab:

- 1. From the main menu, select the Settings icon > User Management.
- 2. Click the **LDAP** tab.

The LDAP tab opens with the Anonymous Bind LDAP Settings form loaded by default.





#### **Required Information for Creating LDAP Authentication**

Before you configure a connection to your LDAP server, you should work with your LDAP administrator to collect, at minimum, the following information:

#### **Anonymous Bind**

- LDAP Server URL
- LDAP Port
- LDAP Group Field Name
- LDAP Filter Field Name
- LDAP group mappings for super, maintenance, analyst, and observer

#### **Authenticated Bind**

- LDAP Server name or IP Address
- LDAP port
- LDAP base DN
- LDAP Group Member Field Name
- · LDAP Primary Group Name
- Whether to use LDAP over SSL (Idaps or Idap)
- · LDAP User Id Key Field Name
- LDAP User Group Member Key Field Name
- LDAP group mappings for super, maintenance, analyst, and observer

#### **Switching LDAP Connections**

To switch between using the Anonymous (Legacy) and Authenticated (Updated) Bind LDAP connections, open the desired connection type's form in the LDAP section and click on the Save button.



**Example:** You are using the Anonymous Bind LDAP option. You switch to the Authenticated Bind LDAP Settings tab and click Save. ThreatQ will now use these settings. If you switch back to the Anonymous Bind LDAP Settings tab and click Save again, ThreatQ will start using the Anonymous Bind LDAP settings again.



#### **Anonymous Bind**



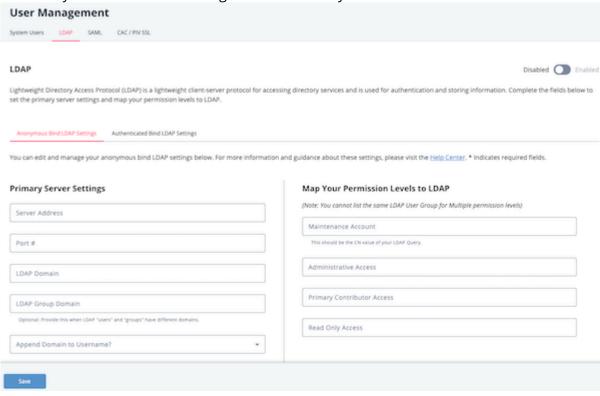
Only users with an Administrative or Maintenance account can access LDAP settings.



ThreatQuotient strongly recommends that you perform a full backup before changing your authentication method.

- 1. Navigate to Settings > User Management.
- 2. Click on the LDAP option.

The Anonymous Bind LDAP Settings form will load by default.



3. Populate the fields in the **Primary Server Settings** section:

# Server Address Enter the name of the server where LDAP is hosted. Example: Idap://[servername] Port # 389 for LDAP 636 for LDAPS If LDAPS is used, the Port # will default to 636.



FIELD	DESCRIPTION
LDAP Domain	Enter the domain for which LDAP is configured to authenticate. <b>Example:</b> threatq.com
LDAP Group Domain	
Append Domain to Username?	<ul><li>Choose from the following options:</li><li>Yes for most Active Directory servers</li><li>No for most Open LDAP servers</li></ul>
Filter Field Name	This field is specific to your LDAP directory configuration. <b>AD Example:</b> memberuid <b>OpenLDAP Example:</b> uid
Group Field Name	This field is specific to your LDAP directory configuration. <b>AD Example:</b> memberof <b>OpenLDAP Example:</b> cn
Use RDN?	<ul> <li>Choose from the following options:</li> <li>Yes to use Relative Distinguished Names. When you select this option, the Organization Unit (OU) and User Lookup Name fields are displayed.</li> <li>No to use full Distinguished Names</li> </ul>
Organizational Unit (OU)	This field is specific to your LDAP directory configuration. Your LDAP administrator should provide the correct value for this field.
User Lookup Name	This field is specific to your LDAP directory configuration. <b>AD Example:</b> memberUid <b>OpenLDAP Example:</b> uid

#### 4. Complete the **MAP your Permission Levels to LDAP** section:



You cannot list the same LDAP User Group for multiple permission levels. For roles not mapped, you should enter a hyphen: "-." You cannot save the configuration without entering a value in each field.



FIELD	EXAMPLE
Maintenance Account	<b>OpenLDAP Example:</b> ldapSuper <b>AD Example:</b> CN=tq-maintenance,CN=Builtin,DC=yourdomain,DC=com
Administrative Access	<b>OpenLDAP Example:</b> administrator <b>AD Example:</b> CN=linux-admins,CN=Builtin,DC=yourdomain,DC=com
Primary Contributor Access	OpenLDAP Example: IdapAnalyst AD Example: CN=primary -contributor,CN=Builtin,DC=yourdomain,DC=com
Read Only Access	OpenLDAP Example: ldapObserver AD Example: CN=read-onlyCN=Builtin,DC=yourdomain,DC=com

- 5. Click Save.
- 6. Click on the Enable/Disable toggle switch to enable LDAP.



If your LDAP fails to enable or fails to function properly, validate your inputs. If the configuration continues to fail, please contact ThreatQ Support.

#### **Configuring Secure LDAP**

The following instructions are for Anonymous Bind LDAP connections only. The steps needed to create a secured connection authenticated bind are included in the Configuring Authenticated Bind LDAP Settings topic.

ThreatQuotient strongly recommends that you perform a full backup before changing your authentication method.

To configure secure LDAP, you must complete the following steps:

- 1. Enter your LDAP settings in the ThreatQ user interface. See the Anonymous Bind steps above for more details.
- 2. Access the ThreatQ appliance command line as root and edit and navigate to the following directory: /etc/openldap/.
- 3. Use vi to edit Idap.conf and update/confirm that your settings are as follows:

```
#
# LDAP Defaults
#
```



```
# See ldap.conf(5) for details
# This file should be world readable but not world writable.

BASE dc=[your domain],dc=com
URI ldap://[your servername]:389 ldaps://[your servername]:636

#SIZELIMIT 12
#TIMELIMIT 15
#DEREF never

TLS_CACERTDIR /etc/openldap/certs

# Turning this off breaks GSSAPI used with krb5 when rdns = false
SASL_NOCANON on
TLS_REQCERT allow
```



ThreatQ recommends that you edit Idap.conf on the appliance, rather than editing off box and uploading it. If you do edit the file off box, ensure that you use a linux editor. Windows and Mac editors may corrupt the file.



If your LDAP fails to enable or fails to function properly, validate your inputs. If the configuration continues to fail, please contact ThreatQ Support.



#### **Authenticated Bind**

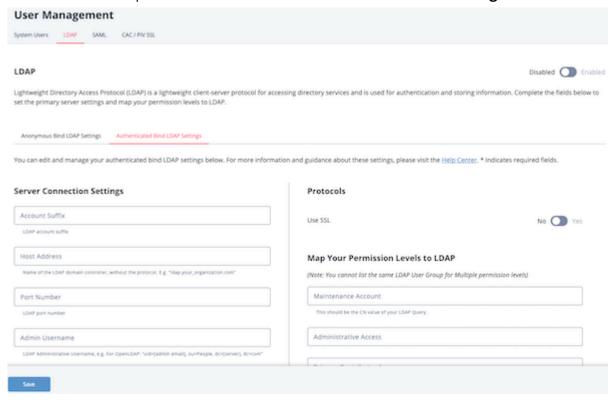


It is recommended that you contact ThreatQ Support before configuring an authenticated bind connection.



Only users with an Administrative or Maintenance account can access LDAP settings.

- 1. Navigate to Settings > User Management.
- 2. Click on the LDAP option and select the Authenticated Bind LDAP Settings tab.



3. Complete the **Server Connections Settings** section:

# FIELD DESCRIPTION

Account Suffix

The LDAP account suffix.

Host Address

Name of the LDAP domain controller without the protocol.

Example: tqldap.threatq.com



FIELD	DESCRIPTION
Port Number	The LDAP port; either <b>636</b> or <b>389</b> . Only standard ports for secured and unsecured connections are supported. Use port 636 if using SSL to create a secured connection.
Admin Username	The LDAP administrative username.
Admin Password	The LDAP administrative password.

- 4. Click on **Test Connections** to verify the settings are correct.
- 5. Complete the **LDAP Schema** section:

FIELD	DESCRIPTION
Base DN	The Base DN of the LDAP server connection. <b>Example:</b> DC=[server], DC="com"
DN Field Name	The field used to retrieve the DN or users and groups. This field should be <b>DN</b> for both OpenLDAP and Active Directory.
User Search Filter	The field to search for users. For <b>OpenLDAP</b> : objectClass=poslxAccount For <b>Active Directory</b> : objectClass=user
Group Search Filter	The field to search for grpups. For <b>OpenLDAP</b> : objectClass=poslxGroup For <b>Active Directory</b> : objectClass=group
Primary Group Name	The primary group name.
Group Member Field Name	This field is used to search for groups that a user belongs to. For <b>OpenLDAP</b> : cn For <b>Active Directory</b> : memberof



FIELD	DESCRIPTION
User ID Key Field Name	Field used to search for users based on email. For <b>OpenLDAP</b> : uid For <b>Active Directory</b> : sAMAccountName
User Group Member Key Field Name	Field used to search for groups that user belongs to. For <b>OpenLDAP</b> : memberUid For <b>Active Directory</b> : uid

6. Under the Protocols section, use the **Yes/No** toggle switch to select whether the connection will use SSL.

If the connection will use SSL, confirm that the port number, set in step 3, is 636 to create a secured connection.

7. Complete the **MAP your Permission Levels to LDAP** section:

You cannot use the same LDAP User Group for multiple permission levels. For roles not mapped, you should enter a hyphen: "-." You cannot save the configuration without entering a value in each field.

FIELD	DESCRIPTION
Maintenance Account	The LDAP account the ThreatQ Maintenance group will map to for permissions.  Open LDAP Example: IdapSuper AD Example: CN=tq-maintenance,CN=Builtin,DC=yourdomain,DC=com
Administrative Access	The LDAP account the ThreatQ Administrative group will map to for permissions. <b>Open LDAP Example:</b> administrator <b>AD Example:</b> CN=linux-admins,CN=Builtin,DC=yourdomain,DC=com
Primary Contributor Access	The LDAP account the ThreatQ Primary Contributor group will map to for permissions.  Open LDAP Example: IdapAnalyst AD Example: CN=linux-admins,CN=Builtin,DC=yourdomain,DC=com
Read-Only Access	The LDAP account the ThreatQ Read-Only group will map to for permissions.



**FIELD** 

#### **DESCRIPTION**

**Open LDAP Example:** IdapObserver

**AD Example:** CN=read-onlyCN=Builtin,DC=yourdomain,DC=com

- 8. Use the **Connect To Receive Data** section connect to your LDAP using the settings on this page to pull group information and user lists
- 9. Click Save.
- 10. Click the Enable/Disable toggle switch to enable LDAP.



Green indicates the feature is active.



#### **SAML Authentication**

#### **About SAML Authentication**

Security Assertion Markup Language (SAML) is a single sign-on (SSO) standard that allows you to log into your ThreatQ instance using a credentials service outside of the platform.

Email addresses and passwords are authenticated outside of ThreatQ and user roles are determine using the permissions mappings located on the ThreatQ SAML configuration page.

Upon enabling SAML, users will see a SSO login option on the ThreatQ login page - see the About Accessing the Platform topic.



Users cannot use SSO to log into a ThreatQ Local Maintenance account.



**AGDS Users** -If you are using LDAP or SAML authentication on your **Source** ThreatQ instance, and require users transferred via import to have authentication capabilities on your **Target** ThreatQ instance, then you must enable the same authentication method on your **Target** ThreatQ instance prior to performing import.

#### **Configuring SAML**

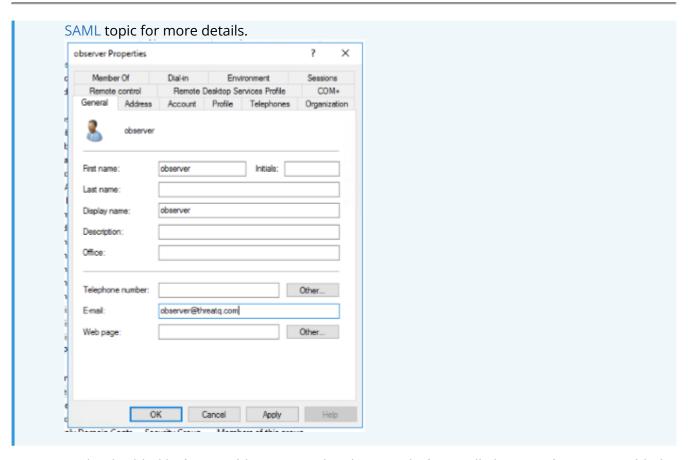


ThreatQuotient strongly recommends that you perform a full backup before changing your authentication method.



SAML users are required to add their email address to their user profiles in order to use the SSO. As part of the integration process, the ThreatQ platform expects that the user's email address has already been added to their IdP. See the Setting Up LDAP Users/Groups for





LDAP must be disabled before enabling SAML. The ThreatQ platform will alert you if LDAP is enabled when you try to enable SAML and will instruct you to disable LDAP.

- 1. From the main menu, select Settings 🖸 > User Management.
- 2. From the User Management page, click the **SAML** tab.



The SAML configuration page opens. **User Management** System Users LDAP SAML CAC / PIV SSL SAML Security Assertion Markup Language (SAML) is a single sign-on standard used for logging users into applications based on their sessions in another context. Complete the fields below to set the primary server settings and map your permission levels to SAML. Connection Information - Identity Provider **Mapping Permission Levels** Provide either an XML configuration file or a configuration URL below. If you provide a (Note: You can not list the same SAMI, User Group for multiple permission levels) configuration URL, the XML configuration file will be downloaded automatically. Administrative Access Provide IDP Metadata File SAML Attribute Key SAML Attribute Value Primary Contributor Access SAML Attribute Value SAML Attribute Key Read Only Access Provide IDP Metadata URL SAML Attribute Key SAML Attribute Value IDP URL

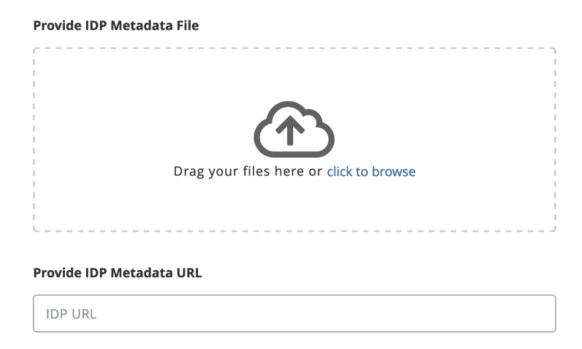
- 3. Complete the **Identity Provider (IdP)** section by either:
  - Uploading your IdP metadata file by dragging and dropping the file onto the field or using the browse button to locate the file saved on your local machine.



• Entering your IdP metadata file's URL in the Provide IdP Metadata URL field.

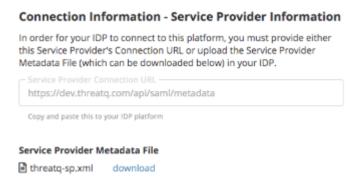
#### **Connection Information - Identity Provider**

Provide either an XML configuration file or a configuration URL below. When you provide one method, the other method will autopopulate.



Whichever method you choose to use will result in the auto-completion of the other field. **Example:** Uploading a metadata file will result in the IdP Metadata URL being populated with data parsed from the file.

4. Use either the **Service Provider Connection URL** or **Service Provider Metadata file** listed in the Connection Information - Service Provider Information section to provide your ThreatQ platform metadata to your Network Administrator to add ThreatQ as a service provider. The steps to add ThreatQ as a Service Provider may differ based on your environment - see the Adding ThreatQ as a Service Provider topic.



5. Check the **User Server Certificate and Key** option under the Platform Server Certificate Information section if your environment requires a certificate. You can upload the Certificate and .key file by either:



- Drag and drop the file into the field.
- Select browse to locate the file on your local machine.
   You Network Administrator will need the certificate and key later when applying the ThreatQ platforms connection information supplied in step 4.
- 6. Complete the Mapping Permissions Levels section by providing a SAML Attribute Key and SAML Attribute Value for each ThreatQ user role. See the Setting Up LDAP Users/Groups for SAML topic for information on how to setup LDAP users and groups for SAML integration.

# **Mapping Permission Levels**

(Note: You can not list the same SAML User Group for multiple permission levels)

Administrative Access	
SAML Attribute Key	C SAML Attribute Value
SSO Group	SSO Administrator
Primary Contributor Access	
SAML Attribute Key	C SAML Attribute Value
SSO Group	SSO Analyst
Read Only Access	
SAML Attribute Key	SAML Attribute Value
SSO Group	SSO Observer

#### **Mapping Notes:**

- SAML cannot be used for Maintenance Accounts.
  - Local Maintenance Accounts cannot be mapped when enabling SAML.
  - If converting from LDAP authentication, LDAP groups that were mapped to the ThreatQ Maintenance role will have to be mapped to another user role.
- You cannot use the same SAML Key and Values for multiple roles.
- You do not have to map all ThreatQ roles but at least one role has to be mapped to use SAML. **Example:** Administrator and Primary Contributor will be mapped but the Read Only Access role will be blank.
- SAML accounts imported with the same user name and email as a local account will be converted.
- 7. Click on **Save** located at the bottom of the page.
- 8. Confirm that your network administrator has completed Adding ThreatQ as a Service Provider before proceeding with the final steps listed below.
- 9. Click on **Test Authentication** to confirm that the ThreatQ platform and your IdP can connect.



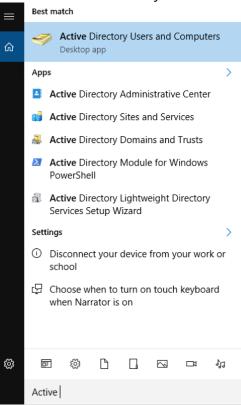
10. Click on the **Enable** toggle switch located at the top-right of the page to enable SAML.



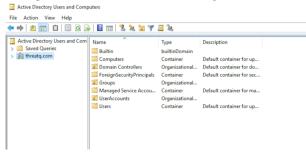
# **Setting Up LDAP Users/Groups for SAML**

The following steps detail how to set up LDAP users and groups for SAML integration.

- 1. Log into the Windows Server.
- 2. Start the Active Directory Users and Computers application from the Start Menu.

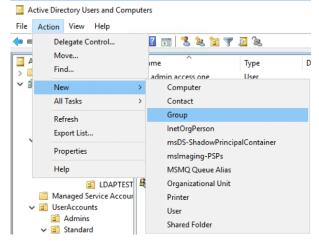


3. Navigate to and select the **Groups** folder under your LDAP domain.

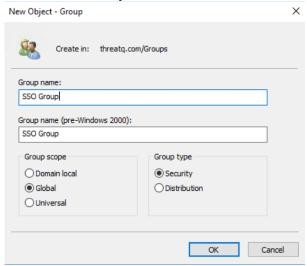




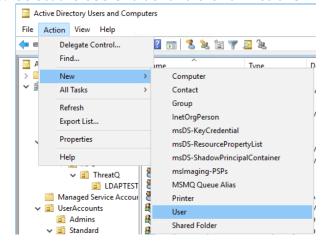
4. Click on **Actions > New > Group**.



5. Enter in the **Group name** and click on **OK**.

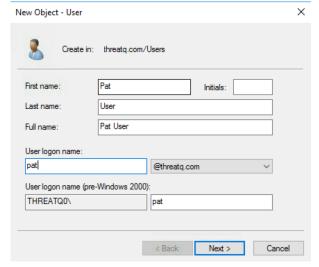


6. Select the **Users** folder and click on **Actions > New > User**.

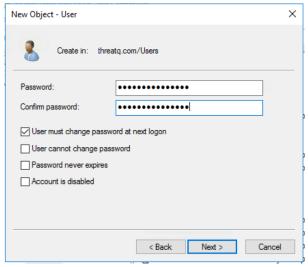




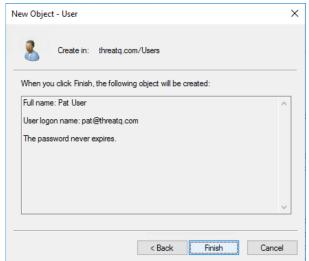
7. Enter in the **User Information** and click on **Next**.



8. Enter the **Password** and click on **Next**.



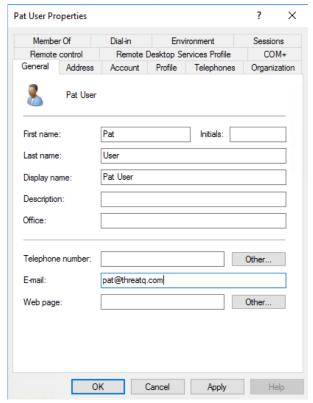
9. Confirm that the details are correct an then click on **Finish**.



10. Find and double-click on the newly created user to edit the **User Properties**.



11. Confirm that the E-Mail has the user's correct email address.

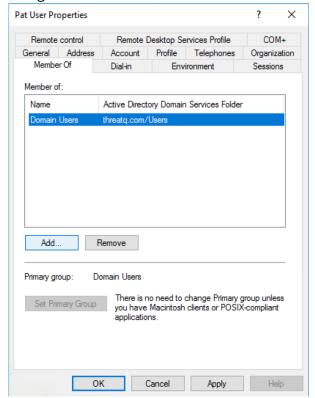




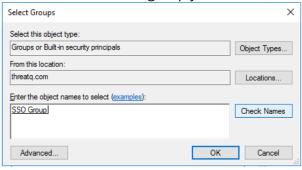
It is important that the E-mail field be filled in order for the SSO integration to work with this user.



12. Navigate to the **Member of** tab and click on **Add**.



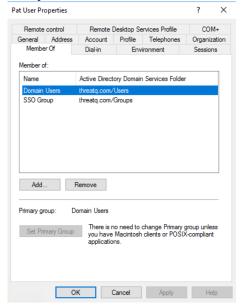
13. Enter the name of the group you created earlier in steps 4-5 in the field provided.



14. Click on **Check Names** to verify the group name and then click **OK**.



15. Verify that the User is now a member of the group.



16. Click **OK** to close the properties window.



# Adding ThreatQ as a Service Provider

ThreatQ supports SAML configurations for all identity providers that are compliant with the Security Assertion Markup Language v2.

The sections listed in this topic serve as identity provider examples and include the required steps to add ThreatQ as a service provider for your IdP. Contact ThreatQ Support if your identity provider is not listed and you require assistance with configuration.

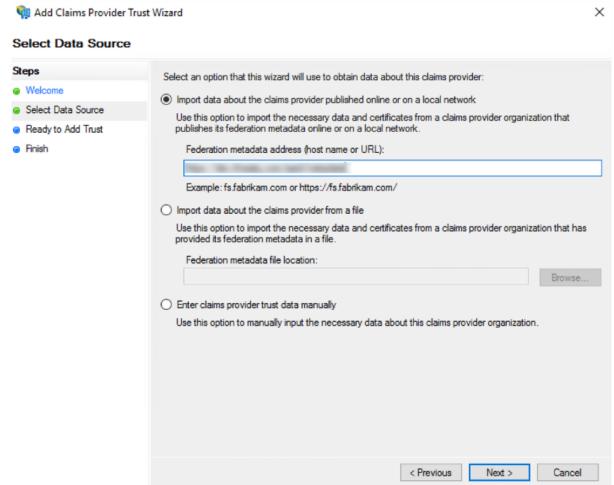
#### **ADFS 2016**

The steps below detail how to add ThreatQ as a service provider in ADFS 2016.

From your server manager:

- 1. Select AD FS under the Dashboard heading.
- 2. Click on the **Tools** option and select **AD FS Management**.
- 3. Navigate to the Relying Party Trusts folder In the left-hand directory.
- 4. Click on the Relying Party Trusts > Add Relying Party Trust under the Actions heading.
- 5. Leave the Claims Aware option selected and click on Start.

The Select Data Source section loads.



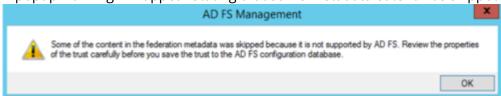


- 6. Confirm that the first radio option, **Import data about the claims provider published online...**, is selected.
- 7. Paste the **Platform Connection URL** located on the ThreatQ SAML page, step 4 on the Configuring SAML topic, into the Federation Metadata Address field in the following format:

https://<your IdP hostname>/FederationMetadata/2007-06/
FederationMetadata.xml

8. Click Next.

A popup warning will appear stating that some metadata cotent was skipped.



- 9. Click **Ok** to proceed.
- 10. Continue through the next few sections by clicking **Next** until you reach the Ready to Add Trust page.
- 11. Review the information listed in the multiple tabs provided. Confirm that the proper certificates are listed under the **Certificate** and **Signature** tabs and upload any that are missing.
- 12. Click Next.

The ThreatQ Relaying Party Trust has now been added. The next step to create 4 new Claims Rules for the new service provider.

Contact your Network Administrator to receive the appropriate group mapping.

- 13. Click on Add Rule.
- 14. Select the **Send LDAP Attribute as Claims** claim rule template and click **Next**.
- 15. Enter a name for the rule. **Example:** email and UID.
- 16. Select the **Active Directory** as the Attribute Store.

Active Directory must already be installed and enabled in order to complete this step

17. Add the following rows in the LDAP Mapping Attributes table:

LDAP ATTRIBUTE	OUTGOING CLAIM TYPE	NOTES
E-Mail-Addresses	email	
Email-Addresses	uid	Email-Addresses is the recommended value. However, you can use SAM-Account-Name as an alternative.

- 18. Click on **OK** to create the rule.
- 19. Click on Add Rule.
- 20. Select the **Send LDAP Attribute as Claims** claim rule template and click **Next**.
- 21. Enter a name for the rule. **Example:** Email.
- 22. Select the **Active Directory** as the Attribute Store.



23. Add the following row in the LDAP Mapping Attributes table:

# LDAP ATTRIBUTE OUTGOING CLAIM TYPE

E-Mail-Addresses E-Mail Address

- 24. Click on **OK** to create the rule.
- 25. Click on **Add Rule**.
- 26. Select the Send LDAP Attribute as Claims claim rule template and click Next.
- 27. Enter a name for the rule. **Example:** Groups.
- 28. Select the **Active Directory** as the Attribute Store.
- 29. Add the following row in the LDAP Mapping Attributes table:

LDAP ATTRIBUTE	OUTGOING CLAIM TYPE
Token-Groups - Unqualified Names	SSO

- 30. Click on **OK** to create the rule.
- 31. Click on **Add Rule**.
- 32. Select the **Transform an Incoming Claim** claim rule template and click **Next**.
- 33. Enter a name for the rule. **Example:** Named ID Transform.
- 34. Complete the following fields:

FIELD	SELECTION
Incoming Claim Type	E-Mail Address
Outgoing Claim Type	Name ID
Outgoing Name ID Format	Email

- 35. Select the **Pass through all claim value** radio option.
- 36. Click on **OK** to create the rule.
- 37. Click **OK** to close the Issuance Transform Rules dialog box.

#### **Azure AD**

ThreatQ supports SP-Initiated SSO in Azure AD. The steps below detail how to add ThreatQ as a service provider in Azure AD. This process is required in order to complete the SAML setup.

#### **Setting Up the SAML App**

- 1. Log into the Azure portal with administrator permissions.
- 2. Go to Azure Active Directory > Enterprise applications
- 3. Click on +New Application then Create your own application.
- 4. Choose Integrate any other application you don't find in the gallery (Non-gallery).



- 5. Enter an application name such as **ThreatQ** then click **Add**.
- 6. Select Set up single sign on then choose SAML.
- 7. Select Edit on Basic SAML Configuration.
- 8. Enter the **Entity ID** and **Reply URL(Assertion Consumer Service URL)** as follows:



FIELD	VALUE	DESCRIPTION
ACS / Single Sign on URL	https:// threatq.example.com/api/ saml/acs	Assertion Consumer Service (ACS) is the ThreatQ URL + appended the "/api/saml/acs" string.
SP Entity ID	https:// threatq.example.com/api/ saml/metadata	This is the ThreatQ entity ID which is the ThreatQ URL + appended with the "/api/saml/metadata" string.

- 9. Under Attributes & Claims, set the Unique User identifier (Name ID) format to Email Address.
- 10. In the Additional claims section add uid and set the value as user.mail.

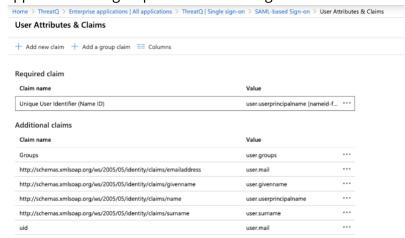




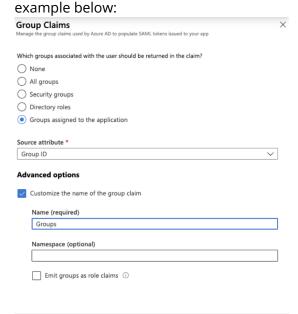
11. You also need to add an attribute you want to map to the roles in ThreatQ. In this example we added a Claim and created a **Groups** attribute and mapped it to all **user.groups** assigned to the



application. The group id the user belongs to is then included in the SAML assertion upon login.



When adding a group claim it is recommended to customize name as this is what is required to be entered on the ThreatQ side as the SAML Attribute Key. This should not contain a namespace otherwise the full claim name will need to be entered - see <a href="http://schemas.xmlsoap.org/ws/2005/05/identity/claims/givenname">http://schemas.xmlsoap.org/ws/2005/05/identity/claims/givenname</a> for more information. See the



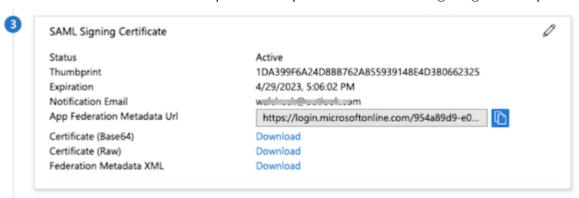


In the example above, **Groups** would be entered as the Attribute Key in ThreatQ. The Attribute Value would be one of the Group IDs (Group Object ID) assigned to the application in Step 9.

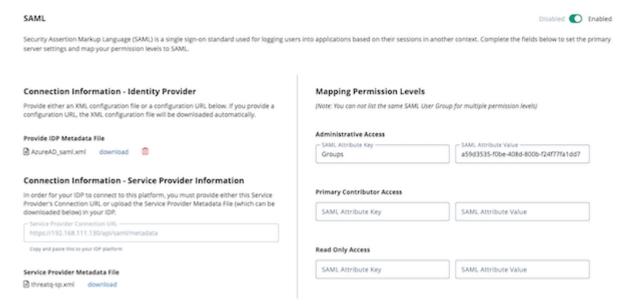
12. On the Assignments tab, verify that each of the users or groups that should have access have been assigned to the application.



13. Under **SAML Signing Certificate**, click the **Download** link for the **Certificate (Base64)** and the **Metadata** file. These files are required in steps 4 and 5 in the Configuring SAML topic.



14. After you complete the Configuring SAML process, add the SAML Attribute Key and SAML Attribute Value for each ThreatQ user role to the Mapping Permissions section. In the example below, we mapped an Azure AD Group to the Administrative Access using the group's Object ID as the SAML attribute value.



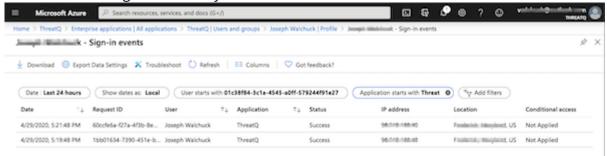


When you test the application from the Azure Portal, you will receive the following error message: SAML authenticated but missing Client ID parameter. This happens because we do not yet support IdP-initiated SSO. You must validate the authentication from the ThreatQ application.

- 15. In the Azure Portal, you can navigate to the User Sign-Ins under the user to view the login attempts.
  - If your authentication is successful but you receive a SAML authenticated but missing group requirements message this indicates that the required attributes mapped to the TQ



roles are not configured correctly.

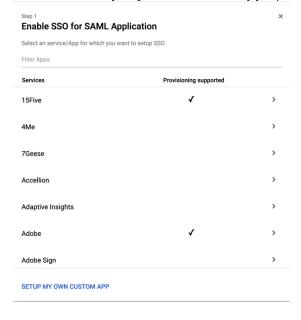


# **Google G Suite**

The steps below detail how to add ThreatQ as a service provider in Google's G Suite. This process is required in order to complete the SAML setup.

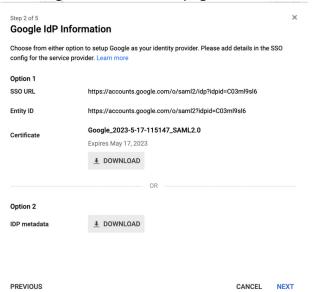
#### **Setting Up the SAML App**

- 1. Log into your **Google Administrative Console**.
- 2. Navigate to **Apps > SAML Apps**.
- 3. Click on the + icon located at the bottom-right on the page.
- 4. Select the **Setup my own custom app** option.

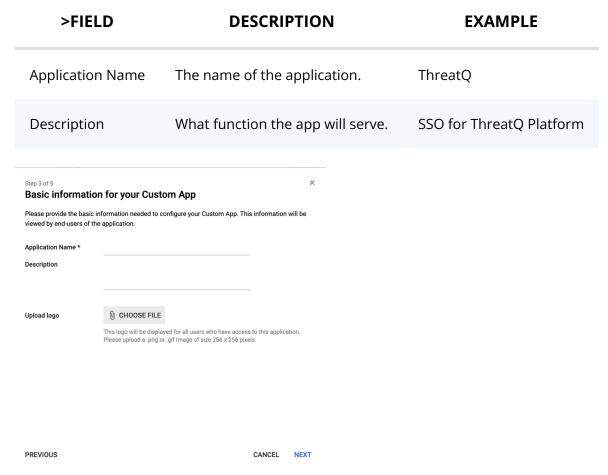




The Google IdP information page loads.



- 5. Click on Next.
- 6. Complete the *Basic Information for Your Custom App* fields:



- 7. Click on **Next**.
- 8. Complete the Service Provider Details fields:

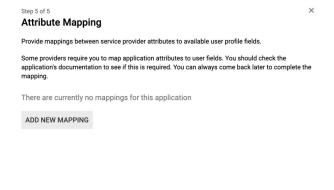


FIELD	DESCRIPTION	EXAMPLE
ACS URL	Assertion Consumer Service is your ThreatQ URL + appended the "/api/saml/acs" string.	https://threatq.example.com/ api/saml/acs
Entity ID	The Entity ID is your ThreatQ URL + appended with the "/api/saml/metadata" string.	https://threatq.example.com/ api/saml/metadata
Name ID Format	Set this field to <b>Email</b> .	N/A
Step 4 of 5  Service Provide  Please provide service p ID are mandatory.	r Details rovider details to configure SSO for your Custom App. The ACS url and Entity	
ACS URL *		
Entity ID *		
Start URL		
Signed Response		
Name ID	Basic Information   Primary Email  Primary Email	
Name ID Format	UNSPECIFIED	
PREVIOUS	CANCEL NEXT	

9. Click on **Next**.



#### The Attribute Mapping page loads.



PREVIOUS

CANCEL FINISH

#### 10. Click on Add New Mapping.



The **email** and **uid** attributes must be mapped to the **Primary Email** field.

11. Create the **email** mapping:

ATTRIBUTE	TYPE	GOOGLE DATA FIELD
email	Basic Information	Primary Email

- 12. Click on Add New Mapping.
- 13. Create the **uid** mapping:

ATTRIBUTE	TYPE	GOOGLE DATA FIELD
uid	Basic Information	Primary Email

- 14. Click on Add New Mapping:
- 15. Create the **SSOGroup** mapping for ThreatQ roles:

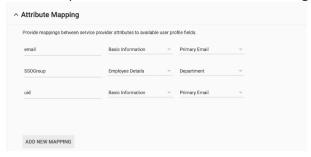
ATTRIBUTE	TYPE	GOOGLE DATA FIELD
SSOGroup	Employee Details	< specific to your company >



Any attribute can be used for this mapping other than **Employee ID**. See the Creating custom attributes using the user schema Google support article for instructions on creating custom attributes to use for role mapping.

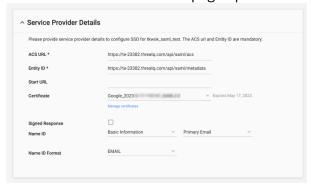


16. Your setup should now resemble the following screenshot:



- 17. Click on Finish.
- 18. Locate your new app under **Apps > SAML Apps**, click on the vertical ellipsis, and select **On for Everyone**.
- 19. Click on the app to open its settings details.
- 20. Click on Service Provider Details.

The Service Provider Details page opens.



- 21. Click on **Manage Certificates**.
- 22. Download the **certificate** and the **IdP Metadata** files that are required in steps 4 and 5 in the *Configuring SAML* section in the About SAML Authentication topic.

#### Okta

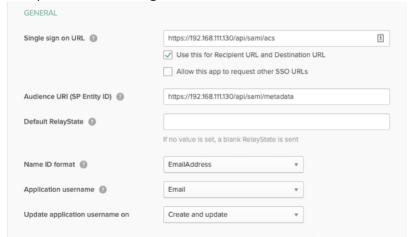
The steps below detail how to add ThreatQ as a service provider in Okta. This process is required in order to complete the SAML setup.

- 1. Log into the Okta web application.
- 2. Click on the **Admin** button located to the top-right of the screen. The Dashboard page loads.
- 3. Click on the **Applications** tab. The Application page loads.
- 4. Click on **Add Application**.
- 5. The Add Applications page loads.
- Click on Create New App.
   The Create New Application dialog box opens.
- 7. Select **Web** from the Platform dropdown.
- 8. Select **SAML 2.0** for the Sign on method.
- 9. Click on the Create button.

The Create SAML Integration page opens with the General Settings tab selected.

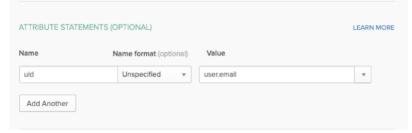


- 10. Enter a name for the app in the **App Name** field.
- Click on **Next**.
   The Configure SAML section loads.
- 12. Complete the following fields:



FIELD	ENTRY/SELECTION	NOTES
Single sign on URL	https://< Host-name >.com/api/saml/acs	The Assertion Consumer Service (ACS) is your ThreatQ URL + appended the "/api/saml/acs" string.
Audience URI (SP Entity ID)	https://< Host-name >/ api/saml/metadata	The Audience URI is your ThreatQ URL + appended with the "/api/saml/metadata" string.
Name ID format	EmailAddress	
Application username	Email	ThreatQ requires that this field be set to Email.

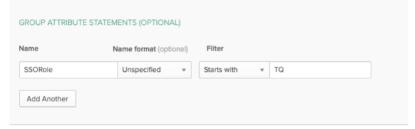
13. Scroll down to the **Attribute Statements** section and add the following attribute:





NAME	NAME FORMAT	VALUE
uid	Unspecified	user.email

14. Add the required attributes to the **Group Attribute Statements** that will be used to map Okta groups to ThreatQ user roles. In the example image below, an attribute called **SSORole** was created and is mapped to all Okta group names that starts with **TQ**.





See Okta's Custom Expression help article for additional information on assigning an attribute.

- 15. Click on **Preview the SAML Assertion** to confirm that the settings are correct.
- 16. Click on Next.

The Feedback section loads.

17. Select I'm a software vendor. I'd like to integrate my app with Okta and then click on Finish.

The Application details page loads.

- 18. Click on the **Assignments** tab.
- 19. Click on the **Assign** dropdown and select **Assign to Groups**.
- 20. Assign the app to groups that will be used to map ThreatQ roles.
- 21. Click on Save and Go Back.
- 22. Click on **Done**.
- 23. Click on the **Sign On** tab.
- 24. In the Sign On Methods section, right-click and download the Identity Provider metadata file.
- 25. Click on the **View Setup Instructions** button.



You will be able to review URL information such as the **Identity Provider Single Sign-On URL**, **Identity Provider Issuer**, and the **X.509 Certificate**.

26. Click on **Download Certificate**. The certificate and Identity Provider metadata file downloaded in step 23 are required in steps 4 and 5 in the Configuring SAML section of the About SAML Authentication topic.



# **SSL Client Certificate Authentication**

#### **About SSL Client Certificate Authentication**

ThreatQ supports SSL Client Certificate Authentication by allowing on-premise customers to upload PEM-encoded CA certificate files. After this file is uploaded and configured, individual ThreatQ logins can be associated with a user's certificate SHA-1 fingerprint. This allows users to authenticate and access ThreatQ via their:

- Common Access Cards (CACs)
- Personal Identity Verification (PIV) cards
- Smart cards
- SSL client certificates



If you want to migrate from LDAP or SAML authentication to SSL Client Certificate Authentication, please contact ThreatQ Support for assistance.

# Requirements

- On-premise instance of the ThreatQ Platform 5.9 or greater.
- PEM-encoded, X.509 CA certificate file
- CAC, PIV card, Smart card, or SSL client certificate
- Administrative or maintenance login

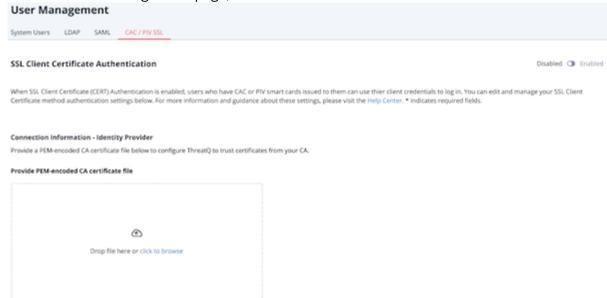
## **Configuring Client Certificate Authentication**



Only Administrative or Maintenance logins have access to the CAC/PIV SSL tab in the User Management page. This tab is used to configure SSL Client Certificate Authentication.



1. From the User Management page, click the CAC/PIV SSL tab.



- 2. Upload the CA certificate file using one of the following methods:
  - Drag and drop the file into the dialog box.
  - Select the click to browse link to locate the file on your local machine.
- 3. After you upload the file:
  - The system displays the following message:
     Once enabled, CAC / PIV SSL Authentication will take effect for system users upon the next login.
  - The Disabled/Enabled toggle switches to Enabled.
  - The certificate's serial number and expiration date is displayed.



If SAML authentication is active on your ThreatQ instance, the Are you sure? window returns the following warning and prompts you to confirm your choice: Currently you have SAML authentication enabled on your system. By enabling CAC / PIV SSL authentication, SAML will become disabled immediately. Upon next login, SAML users will no longer be able to authenticate via that method. Would you like to proceed?

You must click the **Confirm** button to continue.

4. Now that SSL Client Certificate Authentication is enabled, use one of the following methods to add a certificate fingerprint to your profile.



Until you add a certificate fingerprint to your user profile, each time you access a new ThreatQ page you will be prompted to select a certificate.

- Log out of ThreatQ and add your certificate fingerprint during log in.
- Use the System Users tab to add your certificate fingerprint to your user profile.
- 5. Use one of the following methods to add certificate fingerprints for users:
  - Users can add their own certificate fingerprint during their next login. If needed, you can set up usernames and passwords in the System Users tab on the User Management page.

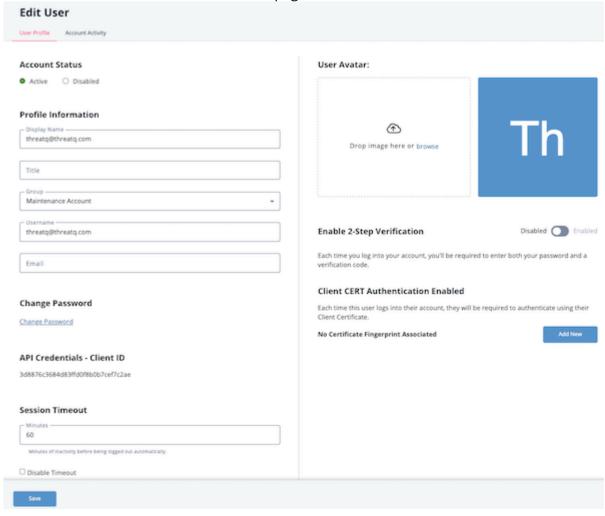


 Maintenance or Administrative users can use the System Users tab to add the new certificate fingerprint to user profiles.

#### Adding a User's Certificate Fingerprint - User Profile

After Client Certificate Authentication is enabled, an Administrative or Maintenance user can add a certificate fingerprint to a ThreatQ user profile.

- 1. From the User Management screen, click the User Management tab.
- 2. Locate and click the user's display name.
- 3. From the User Profile tab in the Edit User page, click the **Add New** button.



- 4. Enter the user's certificate fingerprint.
- 5. Click the **Submit** button.

#### **Adding Your Certificate Fingerprint - Login Page**

1. Access your certificate, and enter your PIN. Your certificate must be active in the browser before you navigate to your ThreatQ instance.



2. Navigate to your ThreatQ instance.



Username	
Password	
Log in	
	OR —
	Log in CAC / PIV Card

- 3. Enter your username and password.
- 4. Click the **Log in** button.
- 5. The Store Fingerprint to Profile window prompts you to save your certificate fingerprint to your ThreatQ user profile.
- 6. Click the **Acknowledge & Login** button.

  ThreatQ saves your certificate fingerprint. The next time you login, you can click the **Log in**with **CAC/PIV Card** button to access ThreatQ.

#### **Using Certificate Authentication to Log In**



Maintenance users can log into ThreatQ using either username/password or certificate authentication. Administrative, Primary Contributor, and Read-Only users are required to use certificate authentication to log into ThreatQ if it is enabled.

After you or an Administrative/Maintenance user add a certificate fingerprint to your ThreatQ user profile, click the **Log in with CAC/PIV Card** button to access ThreatQ.



# **Managing Certificate Files**

After you upload a certificate file and enable SSL Client Certificate Authentication, you may need to disable authentication to troubleshoot an issue or to migrate to a new authentication method. Or, you may want to remove or replace you current certificate file.



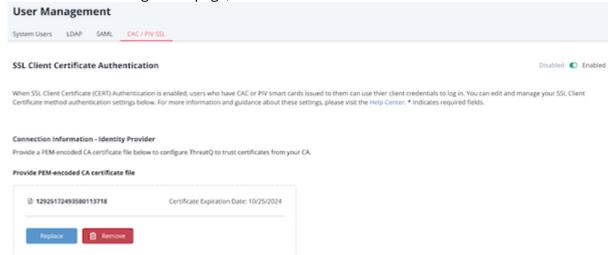
Only Administrative or Maintenance logins have access to the CAC/PIV SSL tab in the User Management page which is used to manage SSL Client Certificate Authentication.

#### **Disabling SSL Client Certificate Authentication**



After you disable SSL Client Certificate Authentication, you must reset all Admin, Primary Contributor, and Read Only access user passwords so that users can log in with their ThreatQ username and password. Maintenance Account users do not require a password reset and can continue to use their current password.

1. From the User Management page, click the CAC/PIV SSL tab.



- 2. Click the Disabled/Enabled toggle to change the status to Disabled. The Are You Sure? window prompts you to confirm the change.
- 3. Click the **Confirm** button. Even though SSL Client Certificate Authentication is disabled, the file that contains the certificate information is not deleted. This makes it easier for you to re-enable authentication.
- 4. Reset user passwords to allow users to log in with their ThreatQ username/password.

#### **Removing a Certificate File**



After you remove the certificate file, you must reset all Admin, Primary Contributor, and Read Only access user passwords so that users can log in with their ThreatQ username and



password. Maintenance Account users do not require a password reset and can continue to use their current password.

- 1. From the User Management page, click the CAC/PIV SSL tab.
- 2. Click the **Remove** button.
  - The Are You Sure? window prompts you to confirm the change.
- Click the **Remove** button.
   SSL Client Certificate Authentication is disabled and all information is deleted from the certificate file.
- 4. Rest user passwords to allow users to log in with their ThreatQ username/password.

## Replacing a Certificate File

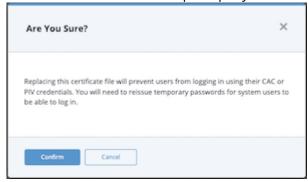


After you replace a certificate file, you must either reset all Admin, Primary Contributor, and Read Only access user passwords so that users can log in and associate a new certificate with their user profile or add the new certificate fingerprints to each user profile.

Maintenance Account users do not require a password reset and can continue to use their current password. However, they will also need to select a new certificate to log in using SSL Client Certificate Authentication.

- 1. From the User Management page, click the CAC/PIV SSL tab.
- 2. Click the **Replace** button.

The Are You Sure? window prompts you to confirm the change.



- 3. Click the **Confirm** button.
- 4. Upload the new certificate file using one of the following methods:
  - Drag and drop the file into the dialog box.
  - Select the click to browse link to locate the file on your local machine.
- 5. After you upload the file, the new certificate's serial number and expiration date is displayed
- 6. Use one of the following methods to add new certificate fingerprints for users:
  - Reset user passwords so that they can add their own certificate fingerprint during their next login.
  - Maintenance or Administrative users can use the System Users tab to add the new certificate fingerprint to user profiles.



# **Managing Certificate Fingerprints**

Maintenance and Administrative users can use the User Management page to update or remove the certificate fingerprint associated with a username. Primary Contributor and Read-Only users can view certificate fingerprints but cannot edit them.

#### **Updating Certificate Fingerprints**

After SSL Client Certificate Authentication is enabled, you can change the certificate fingerprint on a user profile.

- 1. From the User Management screen, click the User Management tab.
- 2. Locate and click the user's display name.
- 3. From the User Profile tab in the Edit User page, click the pencil icon next to the user's CERT fingerprint.
- 4. Enter the new certificate fingerprint.
- 5. Click the **Submit** button.

## **Removing Certificate Fingerprints**

- 1. From the User Management screen, click the User Management tab.
- 2. Locate and click the user's display name.
- 3. From the User Profile tab in the Edit User page, click the pencil icon next to the user's CERT fingerprint.
- 4. Click the **Remove** button.

The Are You Sure? window prompts you to confirm the removal.



5. Click the **Remove** button.



# **Troubleshooting SSL Client Certificate Authentication**

The following is a list of common authentication errors a user may encounter when accessing ThreatQ.

#### **ERROR MESSAGE**

#### **CAUSE**

#### **RESOLUTION**

#### Password Expired

Your temporary password has expired. Please use your CAC / PIV credentials to log in to this system. If your client credentials do not authenticate, please contact your administrator.

An Administrative, Primary Contributor, or Read-Only user attempted to use a password to log in after a CAC / PIV SSL fingerprint was added to the user profile. From the ThreatQ login page, click the **Log in with CAC/ PIV Card** button to access ThreatO.

#### Certificate Error

Your stored fingerprint indicates that your CAC / PIV certificate has encountered an error or has expired. Please contact your administrator for new credentials.

A user attempted to use an expired CAC / PIV SSL certificate.

Ask a Maintenance or Administrative user to add your new certificate fingerprint to your user profile.

The fingerprint has already been taken.

A user attempted to log in using a certificate/fingerprint that is already associated with another user profile.

Contact a Maintenance or Administrative user to determine the root cause of the certificate duplication.

The following is a list of common authentication errors a user may encounter when configuring SSL Client Certificate Authentication.

**ERROR MESSAGE** 

**CAUSE** 

**RESOLUTION** 



Upload a valid RSA certificate to enable.

An Administrative or Maintenance user tried to move the Disabled/Enabled toggle to Enabled without uploading a CA certificate file. See the SSL Client Certificate Authentication topic for the steps required to enable SSL Client Certificate Authentication.

The certificate file is not a valid X.509 certificate.

An Administrative or Maintenance user tried to upload a certificate file that was not a PEM-encoded, X.509 CA certificate file. Upload a PEM-encoded, X.509 CA certificate file.

This certificate is expired.

An Administrative or Maintenance user tried to upload a certificate file with an expiration prior to the current date. Upload a certificate file with an expiration date after than the current date.



<b>A</b> Adversaries 273, 275, 274, 542, 546, 547, 543	Job Management 202
Air Gapped Data Sync (AGDS) 0, 26, 29, 40, 0	Job Management 202
Audit Log 552	L
Authentication 0, 20	Licensing 206, 205
Automatic Expiration 115	Logging In 23, 24
В	N
Bulk Actions 509, 512, 520, 515, 520, 517, 522	Navigation 207 Notifications 210
С	Notifications 210
Command Line Interface 51	0
Commands 53	Object Details 532, 542, 530, 550, 533, 541, 536
	Object Management 219
D	D.
Dashboard (default) 69, 68, 70, 70	P
Dashboards (custom) 73, 112, 93, 112, 106	Proxy 262
Data Collections 499	R
Data Controls 113	Reports 247, 247, 247, 247
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