



## ThreatQuotient for DomainTools Operation

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# About This ThreatQuotient for DomainTools Operation

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Author

ThreatQuotient Professional Services

## Document Conventions



Alerts readers to take note. Notes contain suggestions or references to material not covered in the document.



Alerts readers to be careful. In this situation, you may do something that could result in equipment damage or loss of data.



Alerts the reader that they could save time by performing the action described in the paragraph.



Alerts the reader that the information could help them solve a problem. The information might not be troubleshooting or even an action.

# Introduction

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## Application Function

The ThreatQuotient for DomainTools Operation provides context in the form of attributes and indicators of compromise from the DomainTools API.

## Preface

This guide provides the information necessary to implement the ThreatQuotient for DomainTools Operation. This document is not specifically intended as a site reference guide.

It is assumed that the implementation engineer has experience installing and commissioning ThreatQuotient Apps and integrations covered within the document, as well as experience necessary to troubleshoot at a basic level.

## Audience

This document is intended for use by the following parties:

1. ThreatQ and Security Engineers
2. ThreatQuotient Professional Services Project Team & Engineers

## Scope

This document covers the implementation of the application only.

**Table 1: ThreatQuotient Software & App Version Information**

Software/App Name	File Name	Version
ThreatQ	Version 3.6.x or greater	
ThreatQuotient for DomainTools Operation	1.1.0	

## Assumptions

The following criteria is assumed to be in place and functional to allow the implementation of the ThreatQuotient for DomainTools Operation into the managed estate:

- All ThreatQuotient equipment is online and in service.
- Infrastructure/transmission at all sites and between sites is in place to support the network traffic.
- All required firewall ports have been opened.
- All equipment is powered from permanent power supplies.
- A clock source of sufficient accuracy is connected to the network and the network and devices are using it as the primary clock source.

# Implementation Overview

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This document provides direction for installing and configuring the ThreatQuotient for DomainTools Operation found within the ThreatQ instance.

## Prerequisites



You must have a valid DomainTools API Key.

Throughout this implementation document, there will be referrals to several files and directories, some of which will be symbolic, and others may change depending on specifics of the environmental setup.

Ensure all ThreatQ devices are set to the correct time, time zone and date, and using a clock source available to all.

For Example:

**Figure 1: Time Zone Change Example**

```
sudo ln -sf /usr/share/zoneinfo/America/Los_Angeles /etc/localtime
```

## Security and Privacy

For ThreatQuotient Professional Services engineers to configure the system, local network access is required to connect to the managed estate. Therefore, the implementation must occur at an office or data center location.

Passwords have not been provided in this document. Please contact your project team for this information, if required.

All engineers are reminded that all data belonging and pertaining to the business is strictly confidential and should not be disclosed to any unauthorized parties.

The data held within this document is classed as confidential due to its nature.

# ThreatQuotient for DomainTools Operation Installation

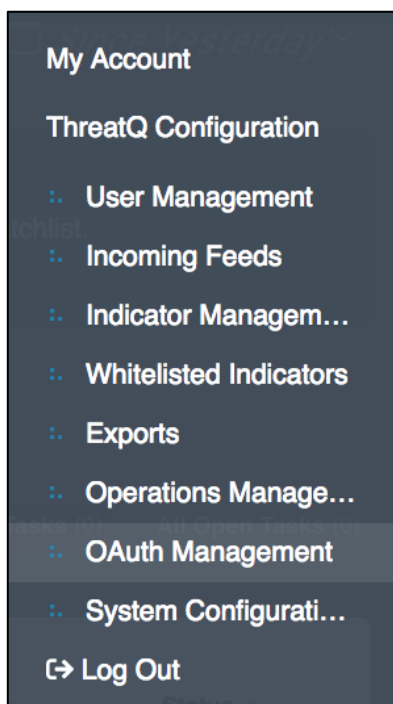
---

## Setting up the Integration

Ensure the file `domaintools_whois_parsed-X.X.X-py3-none-any.whl` is available on the device being used to administer the ThreatQ instance in which the ThreatQuotient for DomainTools Operation is being installed or upgraded.

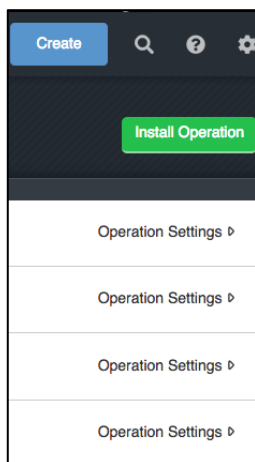
1. Navigate to **Settings** → **Operations Management**.

*Figure 2: Operations Management – Install*



2. Click on the **Install Operation** button in the upper right corner.

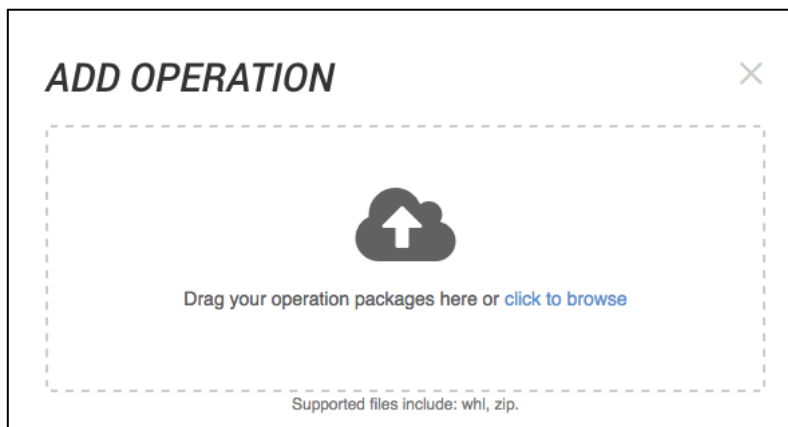
*Figure 3: Install Operation*





3. Drag the `domaintools WHOIS_parsed-X.X.X-py3-none-any.whl` to the Add Operation Popup or click to Browse and browse to the required file.

**Figure 4: Add Operation**

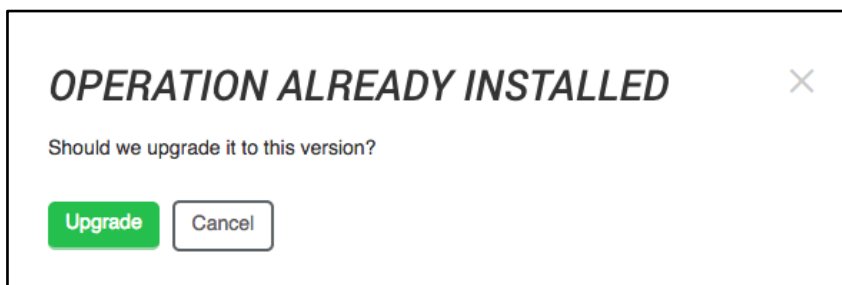


4. Click on the install / upgrade button.



You may be presented with **OPERATION ALREADY INSTALLED** as shown below.

**Figure 5: Add Operation**



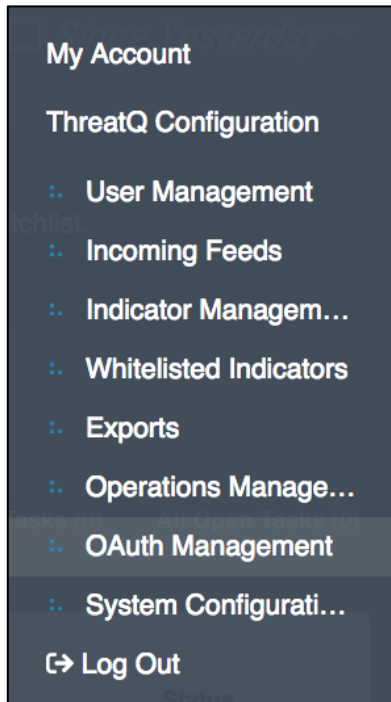
Installation / Upgrade is now complete.

## Configuring the Operation

The following section covers the configuration of the ThreatQuotient for DomainTools Operation.

1. Navigate to **Settings** → **Operations Management**.

*Figure 6: Operations Management – Configuration*



2. Expand the **DomainTools WHOIS Parsed** configuration.

*Figure 7: Operation Configuration*

A screenshot of the 'DomainTools WHOIS Parsed' configuration page. At the top, there is a green toggle switch labeled 'DomainTools WHOIS Parsed' and a link 'Enrichment data made available by domaintools.com'. On the right, there is a 'Delete Operation' button. The main content area includes a gear icon, 'Author: ThreatQ', 'Version: 1.1.0', 'Required ThreatQ Version: 2.1', and 'Works with: Indicator'. Below this is a checkbox labeled 'Bypass system proxy configuration for this operation'. There are two input fields: 'api\_username' with a placeholder '<Username>' and 'api\_key' with a placeholder '<API Key>'. A green 'Save Changes' button is at the bottom left.

3. Input the API Username from DomainTools into the **api\_username** field.
4. Input the API Key from DomainTools into the **api\_key** field.
5. Click **Save Change**.
6. Click the toggle in next to the **DomainTools Whois Parsed** name to enable the operation.

## Actions

**Table 2: Operation Actions Information**

Action	Indicator Types	Description
IP Address WHOIS	IP Address	WHOIS information for an IP including network CIDR Blocks, registrant, ASN, and more
FQDN Address WHOIS	FQDN	WHOIS Information for an FQDN including related name servers, email addresses, registrant, and more
Reverse IP Lookup	IP Address, FQDN	Gets related IP Addresses for FQDN and related domains for IP Addresses
FQDN Address WHOIS History	FQDN	Enriches FQDNs with information from DomainTools WHOIS History so it can be determined if an FQDN is still a threat and how it has changed throughout time
Reverse Name Server Lookup	FQDN	Shows the primary and secondary domains hosted by the Name Server hosting this FQDN
Hosting History Lookup	FQDN	Enriches FQDNs with information from DT Hosting History *so that I* can understand the changes to the hosting for a specific FQDN

## WHOIS

### Risk Repudiation

**Figure 8: WHOIS Risk Reputation Lookup**

OPERATIONS

DomainTools  
Reverse IP Lookup

DomainTools WHOIS Parsed:  
Risk Reputation Lookup

DomainTools WHOIS Parsed:  
FQDN WHOIS

DomainTools WHOIS Parsed:  
WHOIS History

DomainTools WHOIS Parsed:  
Hosting History

DomainTools WHOIS Parsed:  
Reverse Name Server Lookup

DomainTools Risk Lookup

Risk Score

☐ Risk Score

☐ 100

Add Risk Score

Scoring Components

☐ DomainTools Scoring Component

☐ Risk Score

☐ blacklist 100

☐ threat\_profile 99

☐ threat\_profile\_phishing 99

☐ threat\_profile\_malware 99

## FQDN

Figure 9: WHOIS Operation FQDN

**OPERATIONS**

**DOMAINTOOLS**  
Reverse IP Lookup

DomainTools WHOIS Parsed:  
Risk Reputation Lookup

DomainTools WHOIS Parsed:  
FQDN WHOIS

DomainTools WHOIS Parsed:  
WHOIS History

DomainTools WHOIS Parsed:  
Hosting History

DomainTools WHOIS Parsed:  
Reverse Name Server Lookup

**Registrant**  
BV Dot TK

**WHOIS**  
**Date**  
2018-05-06

**Relevant Attributes**

<input type="checkbox"/>	Name	Value
<input type="checkbox"/>	WHOIS Registrant	BV Dot TK
<input type="checkbox"/>	WHOIS Record	Domain name: CONSCIOUSMYSELF.TK Organisation: BV Dot TK administrator P.O. Box 11774 1001 GT Amsterdam Netherlands Phone: +31 20 5315725 Fax: +31 20 5315721 E-mail: abuse@freenom.com, copyright infringement: copyright@freenom.com Domain Nameservers: NS1.SEARCH-IPOK.INFO NS2.SEARCH-IPOK.INFO

[Add Selected Attributes](#)

## Hosting History Lookup

Figure 10: WHOIS Hosting History Lookup

**OPERATIONS**

**DOMAINTOOLS**  
Reverse IP Lookup

DomainTools WHOIS Parsed:  
Risk Reputation Lookup

DomainTools WHOIS Parsed:  
FQDN WHOIS

DomainTools WHOIS Parsed:  
WHOIS History

DomainTools WHOIS Parsed:  
Hosting History

DomainTools WHOIS Parsed:  
Reverse Name Server Lookup

**Hosting History for consciousmyself.tk**

**Name Server History**

<input type="checkbox"/>	WHOIS Action Type	WHOIS Action	Action Date
<input type="checkbox"/>	WHOIS New	Search-ipok.info on 2018-05-06	2018-05-06

[Add Selected Name Servers](#)

Raw Response [Show](#)

## WHOIS History Lookup

Figure 11: WHOIS History

**OPERATIONS**

**DOMAINTOOLS**  
Reverse IP Lookup

DomainTools WHOIS Parsed:  
Risk Reputation Lookup

DomainTools WHOIS Parsed:  
FQDN WHOIS

DomainTools WHOIS Parsed:  
WHOIS History

DomainTools WHOIS Parsed:  
Hosting History

DomainTools WHOIS Parsed:  
Reverse Name Server Lookup

**WHOIS History**  
WHOIS History for Domain consciousmyself.tk

**WHOIS Information Servers**

WHOIS Information Server

whois.dot.tk

**WHOIS Records**

<input type="checkbox"/>	WHOIS History Date	WHOIS Record
<input type="checkbox"/>	2018-05-02	Domain name: CONSCIOUSMYSELF.TK Organisation: BV Dot TK Dot TK administrator P.O. Box 11774 1001 GT Amsterdam Netherlands Phone: +31 20 5315725 Fax: +31 20 5315721 E-mail: abuse@freenom.com, copyright infringement: copyright@freenom.com

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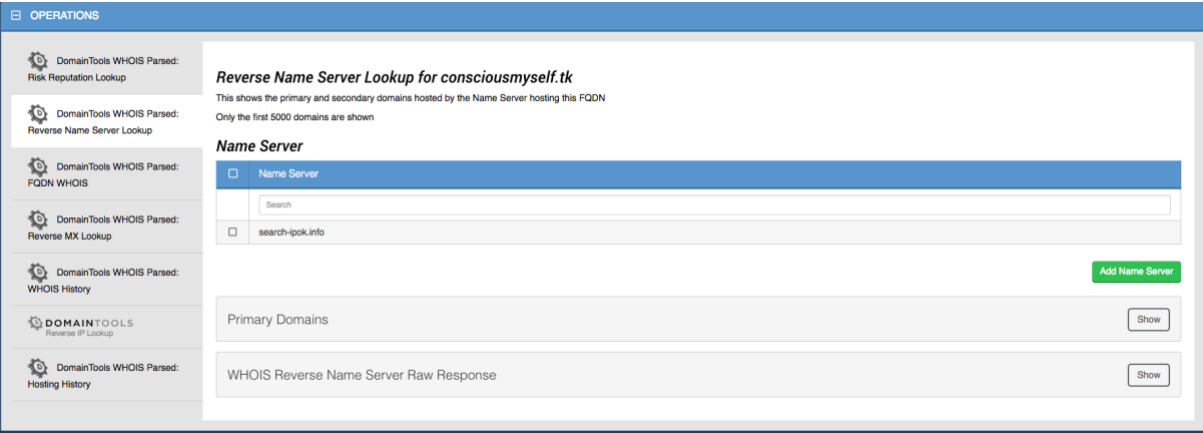
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# Reverse Name Server Lookup

Figure 12: WHOIS Reverse Name Server Lookup



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