



ArcSight ThreatHub

Software Version: CE 25.1

Administrator's Guide for ArcSight ThreatHub

Document Release Date: February 2025

Software Release Date: February 2025

Legal Notices

Open Text Corporation

275 Frank Tompa Drive, Waterloo, Ontario, Canada, N2L 0A1

Copyright Notice

Copyright 2025 Open Text.

The only warranties for products and services of Open Text and its affiliates and licensors ("Open Text") are as may be set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. Open Text shall not be liable for technical or editorial errors or omissions contained herein. The information contained herein is subject to change without notice.

Trademark Notices

"OpenText" and other Open Text trademarks and service marks are the property of Open Text or its affiliates. All other trademarks or service marks are the property of their respective owners.

Documentation Updates

The title page of this document home page of this Help contains the following identifying information:

- Software Version number
- Document Release Date, which changes each time the document is updated
- Software Release Date, which indicates the release date of this version of the software

To check for recent updates or to verify that you are using the most recent edition of a document, go to:

<https://www.microfocus.com/support-and-services/documentation>

Contents

Administrator's Guide for ArcSight ThreatHub CE 25.1	5
About ArcSight ThreatHub	6
ThreatHub Feed	7
ThreatHub Feed Versions	7
ThreatHub Research	9
Installing and Configuring the ThreatHub Feed Connector	12
Preparing to Install the ThreatHub Feed Connector	12
Communication Requirements	13
Installing ESM Default Content	14
Advanced Communication Details	16
Installation Options	17
Installing ThreatHub Feed Plus	18
Installing ThreatHub Feed Basic	20
Installing ThreatHub Feed Custom	21
Completing the Installation	24
Installing ThreatHub Feed Connector in Air-Gapped Environments	35
ThreatHub Feed Active Lists	38
Understanding ThreatHub Feed Active Lists	38
Active List Fields	39
Understanding How Content Leverages ThreatHub Feed Active Lists	43
Threat Intelligence Platform Dashboards	45
ATAP Health Status	46
Data Feed Overview	46
Threat Intelligence Security Incidents Overview	48
TI Confidence Comparison - Open Source vs ArcSight-curated	49
TI Confidence Details	51
Top Malware and CVE	52
Top Malware Types	54
Upgrading ThreatHub Feed Connector	56
Troubleshooting	57
Common Causes of Error	57
Errors Specific to ThreatHub Feed Plus, Basic and Custom MISP versions	57
Connector is unable to receive any events	59
Invalid Parameters Error During ThreatHub Feed Plus Installation	59

Resetting Data Import 59

Send Documentation Feedback 61

Administrator's Guide for ArcSight ThreatHub CE 25.1

This guide describes the ThreatHub portfolio, which includes the ThreatHub Research and ThreatHub Feed. It also explains the steps to install the ThreatHub Feed Connector and configure it for data collection.

Intended Audience

This guide is intended for users responsible for identifying, monitoring, and analyzing cyber threats.

Additional Documentation

For the most recent version of this guide and other ArcSight SmartConnector documentation resources, visit the [documentation site for ArcSight](#).

Contact Information

We want to hear your comments and suggestions about this book and the other documentation included with this product. You can use the comment on this topic link at the bottom of each page of the online documentation, or send an email to MFI-Documentation-Feedback@opentext.com. For specific product issues, contact [Micro Focus Customer Care](#).

For specific product issues, [contact Open Text Support for Micro Focus products](#).

About ArcSight ThreatHub

ArcSight ThreatHub is a portfolio of services that provide actionable and business-centric threat intelligence for cyber security executives, which enables organizations to make informed, business-supported decisions about the relevant threats, and to initiate timely actions.

ArcSight ThreatHub includes the following services:

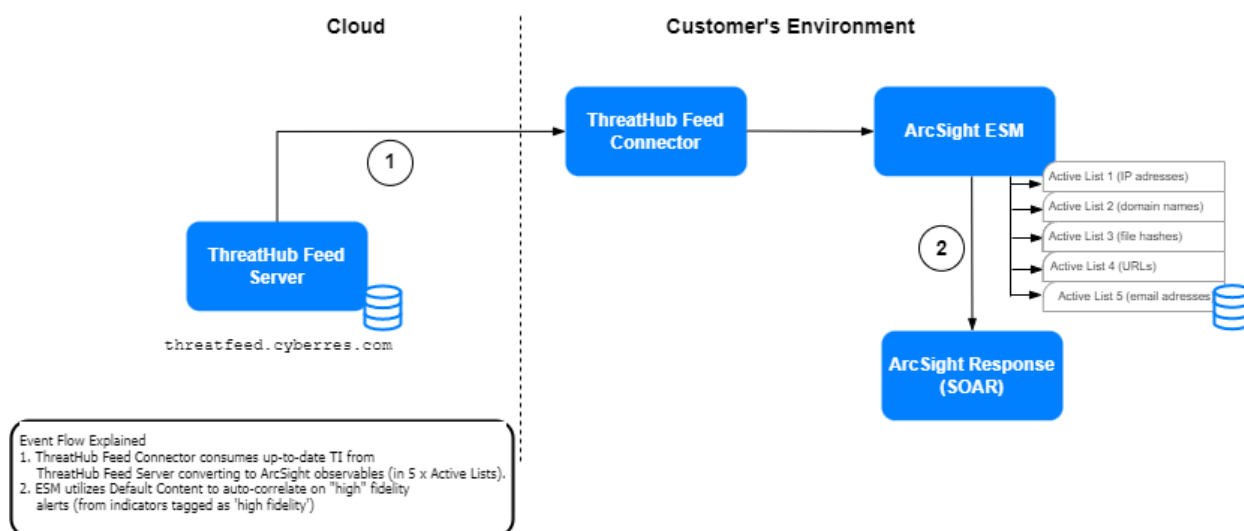
- [ThreatHub Research](#)
- [ThreatHub Feed](#)

ThreatHub Feed

ThreatHub Feed is the feed component of ThreatHub that provides near real-time threat intelligence by synchronizing the ArcSight ESM server with the ThreatHub Feed server in the cloud. The ThreatHub Feed Connector connects the ArcSight ESM server to the ThreatHub Feed server, synchronizing the data multiple times daily. The ThreatHub Feed Connector retrieves threat intelligence events and attribute data from the ThreatHub Feed server and uploads it to the following Active Lists under **All Active Lists > ArcSight Foundation > Threat Intelligence Platform** in ArcSight ESM:

- Suspicious Addresses List
- Suspicious Domain List
- Suspicious Email List
- Suspicious Hash List
- Suspicious URL List

These entries include, IP addresses, domain names, email addresses, hash values, and URLs.



The ThreatHub Feed content is embedded into the [ArcSight ESM Default Content](#), which is used by ArcSight ESM to auto-correlate on "High confidence" alerts. The high confidence tag is added to the `description` field in the 5 Active Lists, and more attack types are added to `indicatorType` field to trigger specific rules (for example phishing attack).

ThreatHub Feed Versions

ThreatHub Feed provides the following two versions:

- [ThreatHub Feed Basic](#)
- [ThreatHub Feed Plus](#)

ThreatHub Feed Basic

ThreatHub Feed Basic provides near real-time threat intelligence, by synchronizing the ArcSight ESM server with the ThreatHub Feed server in the cloud. The threat intelligence received is the Open Source Intelligence (OSINT) from public instance of MISP CIRCL, filtered on TLP:WHITE. ThreatHub Feed Basic is a free-of-charge version and does not require an access key.

ThreatHub Feed Plus

ThreatHub Feed Plus is a subscription-based version that provides premium threat intelligence feed for ArcSight ESM customers. ThreatHub Feed Plus feed is curated by the ArcSight Threat Intel Research Team and it is hosted on the ThreatHub Feed server. The feed is mostly comprised of "low false positive, high fidelity indicators of compromise" that correlate with the most critical cyber security threats an organization needs to identify and resolve on high priority.

ThreatHub Feed Plus requires a valid API key. The API key is delivered to all ThreatHub Feed Plus users who have purchased 1, 2, or 3-year subscriptions to ThreatHub Feed Plus. Users are notified when the ThreatHub Feed Plus API key expires so that the subscription can be renewed. ThreatHub Feed Plus is compatible with the ESM Default Content updates that are periodically released.

ThreatHub Feed Plus provides the following benefits over ThreatHub Feed Basic:

- Offers premium threat intelligence feeds that are curated by the ArcSight Threat Intelligence Research Team.
- Provides high fidelity records with a lower rate of false positives enabling security professionals to respond faster to threats.
- Includes ThreatHub Feed Basic features in addition to ThreatHub Feed Plus features.
- Integrates with ESM default content and high confidence rulesets for automation and resource optimization.
- Integrates with ThreatHub Research portal to enhance threat intelligence capabilities.
- Integrates with SOAR to provide automated responses for critical high priority threats.

Obtaining License Key or API Key for ThreatHub Feed Plus

To purchase the subscription to ThreatHub Feed Plus, contact your account or sales representative.

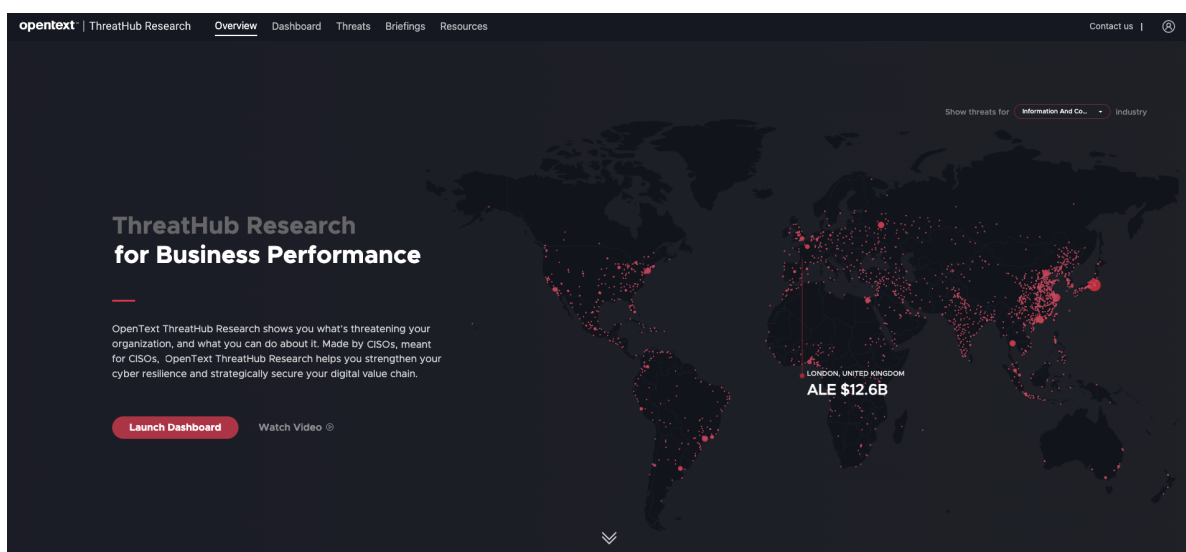
After you purchase the subscription, you can download the software and request the API key from the [Software Licenses and Downloads \(SLD\)](#) portal. Sign in to the portal using your active service contract ID.

ThreatHub Research

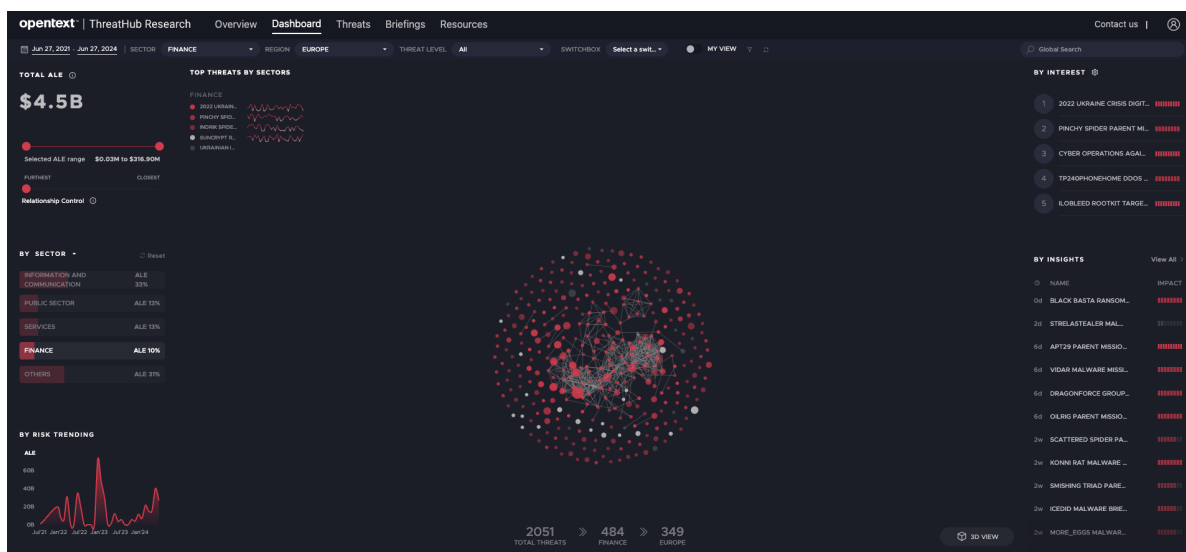
ThreatHub Research is a free-to-use threat research [portal](#) that provides a comprehensive view of the threat landscape for security executives by aggregating data from multiple sources. You can quickly view the latest threats as they emerge, understand what is threatening your organization's business, how attacks are carried out, and respond to it.

The following are the key capabilities of ThreatHub Research:

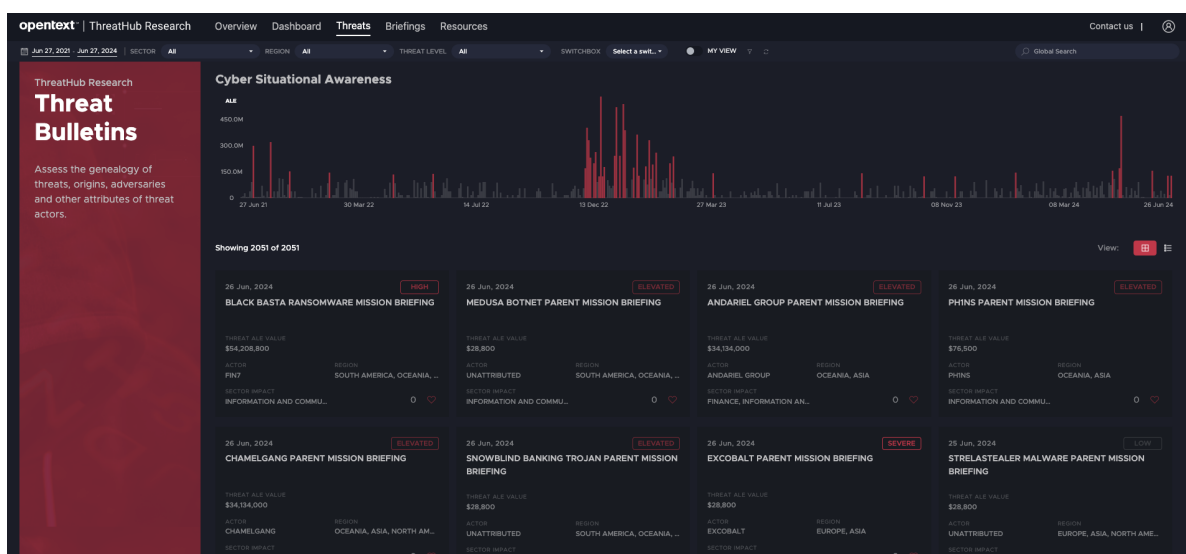
- View the global threat landscape and industry-specific threat landscape.



- Customize the interactive dashboard to view threats that are relevant to your business. You can also filter threats by region, sector, industry, severity, campaigns, motivations, including financial impact of threats to narrow down the threat landscape.



- View bulletins on new threats as they emerge and get in-depth information on the threat in the threat briefing. A threat briefing not only provides information on the IOCs, sectors affected by the threat, and MITRE techniques and tactics associated with the threat, but also provides information on the ways to defend against the threat.



- Provides key highlights for the organization, CISO, and SOC.

opentext | ThreatHub Research

OverviewDashboardThreatsBriefingsResources

Contact us |

CONTENTS

Executive Summary & Highlights

Campaign Timeline

A2 - Technical Details

A3 - MITRE Attack

DOWNLOADS

Indicators

BLACK BASTA (IOC)

BLACK BASTA RANSOMWARE MISSION BRIEFING

Threat Bulletin# e060622AAG

DESCRIPTION

Black Basta is a ransomware-as-a-service (RaaS) syndicate that emerged in April 2022. They are observed using a double-extortion approach where they threaten to leak the victim's data on the "Black Basta Blog" or "Basta News" Tor leak sites. The Black Basta ransomware group has been observed leveraging the QBot malware for lateral movement through compromised corporate environments in their operations since April 2022. While other ransomware groups have usually used GBot for initial access, the Black Basta group leveraged it to spread laterally throughout the network. The Black Basta ransomware is written in C++ and makes use of the ChaCha20 encryption algorithm. Initial access takes place through phishing emails containing a malicious HTML file which invokes an infection chain.

On April 22, 2022, the American Dental Association (ADA) was attacked by Black Basta, causing them to shut down several services. Only 96 hours after the incident, information that was purportedly stolen from the ADA was made public on the Black Basta leak website. Since May 2022, the Black Basta group has been implicated in extortion attempts against more than 89 prominent organizations. In several of these situations, the demanded ransom was greater than \$1 million USD.

As of June 2022, the Black Basta ransomware group has amassed nearly 50 victims in the US, Canada, Australia, the UK, and New Zealand within two months of its emergence. They have been observed targeting a range of industries, including construction, transportation, manufacturing, telcos, pharmaceuticals, cosmetics, services, automobiles, and retail. On June 26, 2022, the syndicate claimed to have breached Ebtel Systems of America, a manufacturer of defense, aerospace, and security solutions. These malware families have intricate and varying attack pathways, but they all begin with the arrival of a malicious email. Therefore, avoiding opening suspicious attachments or clicking on embedded links in any emails is recommended. Again on June 29, 2022, the Black Basta group targeted the German-based building material giant Knauf Group in a cyberattack disrupting its business operation. The organization had to shut down all of its global IT systems to isolate the incident. The threat actor group claimed responsibility for the attack on July 16, 2022, by listing the Knauf Group on their extortion site.

In August 2022, Black Basta was observed posting multiple messages on social media where they offered to buy network access credentials for organizations in the United States, U.K., New Zealand, Australia, and Canada. It has not opened any recruited affiliates although it was still successful in a short span of time. This has led to suspicious about Black Basta starting with

HIGHLIGHT

ALE \$54.2M

PLEF 3.7

Created06/06/2022

Last updated06/26/2024

Related Bulletins

QAKBOT BOTNET MISSION BRIEFING (MULTIPLE CAMPAIGNS), FUJIFILM INFECTED BY QBOT, BLACK BASTA RANSOMWARE GROUP OPERATION AGAINST AMERICAN DENTAL ASSOCIATION, BLACK BASTA RANSOMWARE COLLABORATION WITH QAKBOT TROJAN AND PRINTNIGHTMARE EXPLOIT, SYSTEMBC MALWARE PARENT MISSION BRIEFING, WATER CURUPRA PARENT MISSION BRIEFING, TAS377 PARENT MISSION BRIEFING, DARKGATE LOADER PARENT MISSION BRIEFING, STORM-1811 PARENT MISSION BRIEFING

Affected Sectors

INFORMATION AND COMMUNICATION, HEALTHCARE, MANUFACTURING, DEFENSE, SERVICES, TRANSPORTATION, CONSTRUCTION, FINANCE, RETAIL

Affected Cities

US.ENTERPRISE, CA.ENTERPRISE, GB.ENTERPRISE, DE.ENTERPRISE, AU.ENTERPRISE, FR.ENTERPRISE, AT.ENTERPRISE, IT.ENTERPRISE, CH.ENTERPRISE

Installing and Configuring the ThreatHub Feed Connector

The following sections provide the steps to install and configure the ThreatHub Feed Connector. It is recommended not to install the ThreatHub Feed Connector on the same machine as ESM.



Note: Use a non-root account to install the Connector.

Preparing to Install the ThreatHub Feed Connector

Before installing the connector, verify that **ESM** and **ArcSight ESM Console** is already installed. For complete product information, refer to the Administrator's Guide to ArcSight Platform, available on ArcSight Documentation.

If you are adding a connector to the ArcSight Management Center, see the ArcSight Management Center Administrator's Guide for instructions.



Note: If you are an existing user who has been using the **ThreatHub Feed Basic** version, and want to upgrade to the **ThreatHub Feed Plus** version, then you must purchase the license, get a valid API Key, and reinstall the connector using the [Configuring parameters for ThreatHub Feed Plus](#) option.



Important: It is recommended to clear the data in the Active List.

Before installing the Connector, ensure that you have the following:

- Local access to the machine where you want to install the Connector.
- Local administrator access to the machine on which the connector will be installed.
- Refer to the [Technical Requirements](#) Guide for supported platforms.
- The machine, on which the connector will be installed, has external access over the Internet to any system over port 443 and connectivity to the ESM machine over port 8443 (default) or the configured port if the default was not used.
- ESM IP address, port, administrator user name, and password.
- ESM default content package is installed and is available in **All Packages > ArcSight Foundation > Threat Intelligence Platform**. For more information, see [Installing ESM Default Content](#).
- If you had installed the ArcSight Model Import Connector for MISP on the machine before, then clear the Active Lists before proceeding to install the ThreatHub Feed Connector.

Communication Requirements

You must ensure communication between the ThreatHub Feed Connector and the internet, and between the ThreatHub Feed Connector and a single ArcSight ESM instance, before using threat feeds.

For Internet Connection:

- Ensure that your connector can communicate to API endpoint at [Threatfeed Cyberres](#) at standard HTTPS port 443.
- Ensure that your connector can also communicate to all addresses that can be resolved for AWS CloudFront DNS. These addresses are listed under [List Cloudfront-IP](#) and must be allowed from your connector.
- If your organization has communication policies based on DNS names, then ensure that your connector can communicate to the current CloudFront DNS. Since this address is dynamic, you must verify the current address by accessing [Threatfeed Cyberres](#) in a browser and checking the address to which your request is forwarded.

For Backend Connection:

Ensure your connector can connect to a single ESM instance where the TI information is sent on port <ESM-Address>:8443

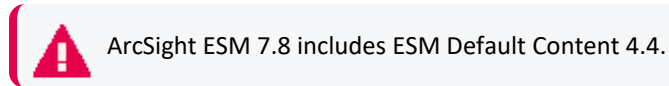
If you configure your connector for ThreatHub Feed Basic, then you must have all the Internet communication settings as described. If you have configured the connector for ThreatHub Feed Plus, you would need only [Threatfeed Cyberres](#).



Note: Since the ThreatHub Feed Plus feed includes the ThreatHub Feed Basic feed at current state, you also need the ThreatHub Feed Basic firewall communication set up correctly, to make the ThreatHub Feed Plus feed work.

Installing ESM Default Content

To use dashboards and active lists, you must install Threat Intelligence Platform 4.5 package, which is an ESM Default Content. The Threat Intelligence Platform package contains default content to monitor the ThreatHub Feed Connector.



For a fresh installation of ESM Default Content 4.5, see [Installing Default Content Package](#).

If you already have ESM Default Content 3.x, you cannot directly upgrade to ESM Default Content 4.x. For more information, see [Upgrading Default Content Package from Version 3.x to Version 4.x](#).

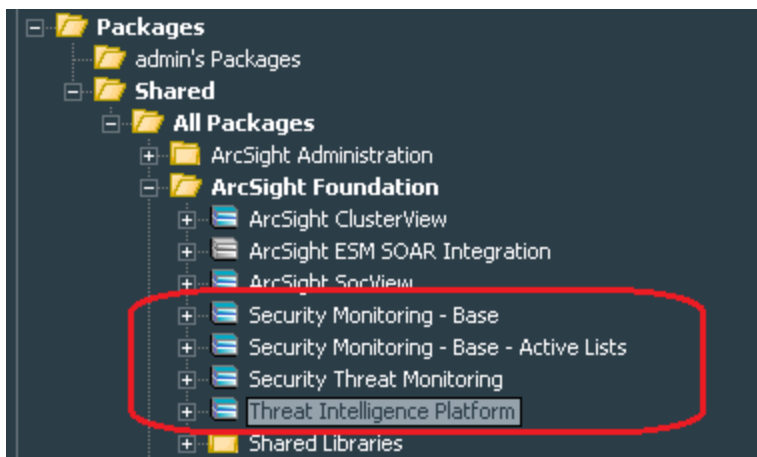
Prerequisites

- ArcSight ESM 7.2 or later.
- Download ESM default content package from [Marketplace](#).

Upgrading Default Content Package from Version 3.x to Version 4.x

To upgrade Default Content Package from Version 3.x to Version 4.x:

1. Sign in to the ESM Console.
2. Uninstall and delete the **Threat Intelligence Platform** package:



Note: It is not mandatory to delete the other three packages.

3. Make sure that all resources in **ArcSight Foundation > Threat Intelligence Platform** folder, including the Active Lists are deleted.
4. Restart the ESM manager:

```
/opt/arcsight/services/init.d/arcsight_services stop manager
```

```
/opt/arcsight/services/init.d/arcsight_services start manager
```

Note: If you do not restart the manager, the following error message will be displayed during installation:

*"Install Failed: Invalid field name: creatorOrg, for class
com.arcsight.common.activelist.ActiveList"*

5. Complete the steps in the [Installing the Default Content Package](#) section.

Installing the Default Content Package

To install the package, complete the following steps:

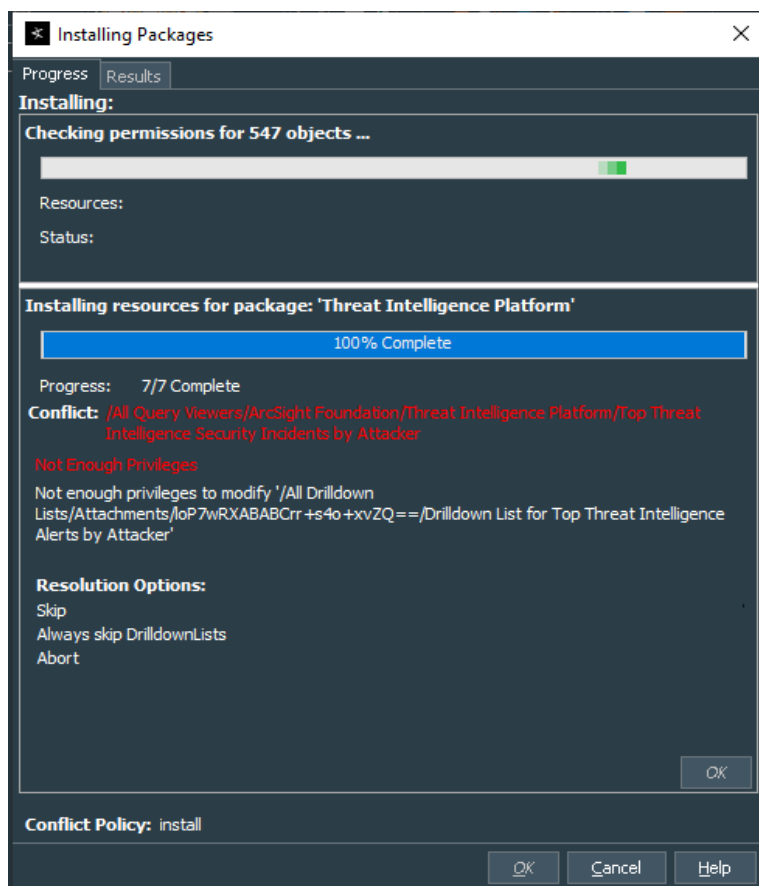
1. Go to the ArcSight Console.
2. Click **Packages**.
3. Click **Import**.
4. Select the package *.arb* file from the *.zip* file.

The *.zip* file contains one Security Threat Monitoring package, and one Threat Intelligence Platform package.

5. Follow the prompts to import and install the packages.

If you were upgrading from a previous version of content package and did not delete the three packages that were not mandatory to be deleted, the Threat Intelligence Platform package will update two Base packages only. Right-click **Threat Intelligence Platform** to finish the installation.

If you get the following error message during installation, Click **Always skip DrilldownLists**, to continue with the installation.



Note: If you clicked **Always Skip DrilldownLists** during installation, some drill-down functions might not work properly.

Advanced Communication Details

ThreatHub Feed Connector configuration for ThreatHub Feed Plus requires the access to the ArcSight ESM instance and [Threatfeed Cyberres](#) only.

ThreatHub Feed Connector for ThreatHub Feed Basic, must have access to the ArcSight ESM instance and internet for using threat feeds from ThreatHub Feed server.

To have a seamless internet connectivity, ensure:

- The connector can communicate with the API endpoint at [Threatfeed Cyberres](#), on standard https port 443.
- The connector must allow and communicate to all addresses that can be resolved for AWS CloudFront DNS. The list of the addresses is available at [List Cloudfront-IP](#).

- If the AWS CloudFront infrastructure changes for AWS operational reasons, see the [AWS documentation](#) to verify current CloudFront IP addresses.
- The connector can communicate to the current CloudFront DNS, if your organization follows DNS names based communication policies. As this address is dynamic, you must verify the current address by opening <https://threatfeed.cyberres.com/feed/manifest.json> in a browser and check the address to which your request gets forwarded.

To have a seamless backend connectivity, ensure:

- The connector can connect to the ESM instance that it sends TI information to, on the port <ESM-Address>:8443---



Note: As the ThreatHub Feed Plus feed also includes the ThreatHub Feed Basic feed at current state, the ThreatHub Feed Basic firewall communication is also required for ThreatHub Feed Plus feed.

Installation Options

If you have ArcSight subscription, then select either **ThreatHub Feed Plus** or **ThreatHub Feed Basic**. However, ThreatHub Feed Plus is a subscription-based license. Before you proceed with this option, make sure that you have purchased the license and have the API key details.

If you already have an MISP license and want to continue with that, then use the **Custom MISP Instance** option.

ThreatHub Feed Connector provides the following installation options that indicate the threat intelligence feed to synchronize with:

- **ThreatHub Feed Plus:** This option requires a valid subscription key to connect to the ThreatHub Feed server. The following firewall port should be opened one-way, from the ThreatHub Feed Connector host to the ThreatHub Feed server:

Protocol/port: TCP port 443

from: the host machine hosting/running the ThreatHub Feed Connector

to: <https://threatfeed.cyberres.com>

For more details on required communications initiated by the connector, see [Advanced Communication Details](#).

- **ThreatHub Feed Basic:** This option does not require any key to connect to the ThreatHub Feed server. The following firewall port must be opened one-way, from the ThreatHub Feed Connector host to the ThreatHub Feed server:

Protocol/port: TCP port 443

from: the host machine hosting/running the ThreatHub Feed Connector

to: <https://threatfeed.cyberres.com>

For more details on required communications initiated by the connector, see [Advanced Communication Details](#).

- **Custom MISP Instance:** This option can be used if you already use a public or private instance of a MISP server as per the needs of your organization. This option does not require a subscription to the ThreatHub Feed solution. However, you must have the authorization key - also known as the MISP API key - for the public or private instance of the MISP server you are connecting to.



Note to Existing ArcSight MISP Connector Users: The ThreatHub Feed Connector is an enhanced version of the previously released ArcSight Model Import Connector for MISP (Open Source Threat Intelligence and Sharing Platform Solution). As upgrading from the ArcSight Model Import Connector for MISP to ThreatHub Feed Connector is not supported, existing users can perform a fresh installation of the ThreatHub Feed Connector.

Installing ThreatHub Feed Plus

You can install the ThreatHub Feed Connector and configure it for ThreatHub Feed Plus by using the installation wizard. Before you begin the installation process, ensure that you have:

- Downloaded the ThreatHub Feed Connector executable.
- Purchased the license for ThreatHub Feed Plus and have the API key details.

To install the connector:

1. Start the installation wizard.
2. Follow the instructions in the wizard to install the core software.
3. Specify the relevant [Global Parameters](#), when prompted. To install the connector in a FIPS-enabled environment, select **Enabled** for **FIPS Mode**.



Note: Make sure that the FIPS Mode configuration matches with the FIPS mode configuration in the ESM application. For example, if the FIPS mode is enabled in ESM, then FIPS mode must be enabled in Connectors as well.

4. Select **ThreatHub Feed SmartConnector** and click **Next**.
5. Select the **ArcSight ThreatHub Feed Plus** and click **Next**.

6. Specify the following details:

Parameter Name	Description
ThreatHub Feed Server URL	Specify <code>https://threatfeed.cyberres.com</code> as the URL for the ThreatHub Feed server instance.
ThreatHub Feed Server API Key	Specify the API Key that you received after purchasing the license.
Enforce Warning List	Select True . <div> Note: misp-warninglists are lists of well-known indicators that can be associated with potential false positives, errors, or mistakes. The <code>enforceWarninglist</code> parameter of <code>MISP restSearch</code> can be used to exclude attributes that have a warninglist hit. </div>
Proxy Host (HTTPS)	Specify a URL of the proxy host without <code>https://</code> . For example: <code>web-proxy.am.example.net</code> .

Parameter Name	Description
Proxy Port	Enter the port number for the proxy.
Proxy User Name	Enter the name of the proxy user.
Proxy Password	Enter the password of the proxy user. This value is populated when the proxy requires authentication and if you have specified a proxy user name.

- Click **Next**, then proceed to [complete the installation](#).



Note: If you get the error message "The parameters are invalid, Do you want to Continue", click **No**. Make sure that you have entered the correct API Key. If you do not have a valid API Key, then purchase the license, and get a valid API Key before you install ThreatHub Feed Plus.

Installing ThreatHub Feed Basic

You can install the ThreatHub Feed Connector and configure it for ThreatHub Feed Basic by using the installation wizard. Before you begin the installation process, ensure that you have downloaded the ThreatHub Feed Connector executable.

To install the connector:

- Start the installation wizard.
- Follow the instructions in the wizard to install the core software.
- Specify the relevant [Global Parameters](#), when prompted. To install the connector in a FIPS-enabled environment, select **Enabled for FIPS Mode**.



Note: Make sure that the FIPS Mode configuration matches with the FIPS mode configuration in the ESM application. For example, if the FIPS mode is enabled in ESM, then FIPS mode must be enabled in Connectors as well.

- Select **ThreatHub Feed SmartConnector** and click **Next**.
- Select the **ArcSight ThreatHub Feed Basic** and click **Next**.
- Specify the following details:

Parameter Name	Description
ThreatHub Feed Server Public URL	Specify https://threatfeed.cyberres.com as the URL for the ThreatHub Feed Server instance.
Enforce Warning List	Select True .
Proxy Host (HTTPS)	Specify a URL of the proxy host without https://. For example: web-proxy.am.example.net.
Proxy Port	Enter the port number for the proxy.
Proxy User Name	Enter the name of the proxy user.
Proxy Password	Enter the password of the proxy user. This value is populated when the proxy requires an authentication and if you have specified a proxy user name.

- Click **Next**, then proceed to [complete the installation](#).

Installing ThreatHub Feed Custom

You can install the ThreatHub Feed Connector and configure it for ThreatHub Feed Custom by using the installation wizard. Before you begin the installation process, ensure that you have downloaded the ThreatHub Feed Connector executable.

To install the connector:

1. Start the installation wizard.
2. Follow the instructions in the wizard to install the core software.
3. (Conditional) If you are planning to install the connector in a FIPS-enabled environment, then perform the following actions:
 - a. Exit the installation wizard.
 - b. Download the MISP instance certificate:



Note: You must export the MISP instance certificate from the browser as a DER encoded binary x.509 (.CER) file.

- i. Open a browser and enter the URL of the MISP server instance.
- ii. **Specify** the email and password.
- iii. Click the **Lock** symbol in the browser next to where you have entered the URL.
- iv. Click **Connection secure**.
- v. Click **Certificate is valid** to download and save the certificate.



Note: It displays the date and validity of the certificate, which is for one year.

- vi. Navigate to **Details**, then click **Copy to file** by clicking the option to save it in your local.
 - vii. Click **Next**, in the certificate export wizard.
 - viii. The **x.CER** format is automatically selected. Click **Next**.
 - ix. Add the **File Name** and the **Path** where you want to download the certificate.
 - x. Click **Save**.
 - xi. Click **Finish**.
 - xii. Click **OK** to successfully export the certificate.
- c. Import the exported certificate into the connector framework FIPS keystore, using a command similar to the following from the current directory: `./jre/bin/keytool -importcert -file /opt/certificate.cer -keystore $ARCSIGHT_HOME/current/user/agent/fips/bcfips_ks -storepass changeit -storetype BCFKS -providername BCFIPS -providerclass org.bouncycastle.jcajce.provider.BouncyCastleFipsProvider -providerpath $ARCSIGHT_HOME/current/lib/agent/fips/bc-fips-1.0.2.jar -J-Djava.security.egd=file:/dev/urandom -alias mispInstance`
Specify the path to the folder where you have downloaded the certificate file in Step a.
 - d. Use the `runagentsetup` file in the `./current/bin/` to proceed with the connector installation.

- Specify the relevant [Global Parameters](#), when prompted. To install the connector in a FIPS-enabled environment, select **Enabled for FIPS Mode**.



Note: Make sure that the FIPS Mode configuration matches with the FIPS mode configuration in the ESM application. For example, if the FIPS mode is enabled in ESM, then FIPS mode must be enabled in Connectors as well.

- Select **ThreatHub Feed SmartConnector** and click **Next**.
- Select the **Custom MISP Instance** option.
- Specify the following details:

Parameter Name	Description
Custom MISP Instance URL	Specify the URL for your MISP instance.
MISP API Key	Specify the API Key for your MISP instance.
Enforce Warning List	Select True to remove warning list attributes in the result.
Proxy Host (HTTPS)	Specify a URL of the proxy host without https://. For example: web-proxy.am.example.net.

Parameter Name	Description
Proxy Port	Enter the port number for the proxy.
Proxy User Name	Enter the name of the proxy user.
Proxy Password	Enter the password of the proxy user. This value is populated when the proxy requires an authentication and if you have specified a proxy user name.

- Click **Next**, then proceed to [complete the installation](#).

Completing the Installation

- Select **ArcSight Manager (Encrypted)**, then click **Next**.
- Specify the following destination parameters:



You can configure only one destination per installation.

Parameter Name	Description
Manager Hostname	Enter the hostname for Manager.
Manager Port	Enter 8443 .
User	Enter the user name
Password	Enter the password for the user.

- Click **Next** and enter a **Name** for the connector and a description.
- Click **Next**.
- Review the **Add connector Summary** and click **Next**.
- Select either **Install as a service** or **Leave as a standalone application** as the mode to run the connector and click **Next**.
- [Increase the Java Heap size](#).
- [Set up the user in ESM](#).
- [Start the data import](#).
- (Optional) If you have installed the connector in the standalone mode, then [run the connector](#) manually.

Advanced Communication Details

ThreatHub Feed Connector configuration for ThreatHub Feed Plus requires the access to the ArcSight ESM instance and [Threatfeed Cyberres](#) only.

ThreatHub Feed Connector for ThreatHub Feed Basic, must have access to the ArcSight ESM instance and internet for using threat feeds from ThreatHub Feed server.

To have a seamless internet connectivity, ensure:

- The connector can communicate with the API endpoint at [Threatfeed Cyberres](#), on standard https port 443.
- The connector must allow and communicate to all addresses that can be resolved for AWS CloudFront DNS. The list of the addresses is available at [List Cloudfront-IP](#).
- If the AWS CloudFront infrastructure changes for AWS operational reasons, see the [AWS documentation](#) to verify current CloudFront IP addresses.
- The connector can communicate to the current CloudFront DNS, if your organization follows DNS names based communication policies. As this address is dynamic, you must verify the current address by opening <https://threatfeed.cyberres.com/feed/manifest.json> in a browser and check the address to which your request gets forwarded.

To have a seamless backend connectivity, ensure:

- The connector can connect to the ESM instance that it sends TI information to, on the port <ESM-Address>:8443---



Note: As the ThreatHub Feed Plus feed also includes the ThreatHub Feed Basic feed at current state, the ThreatHub Feed Basic firewall communication is also required for ThreatHub Feed Plus feed.

Increasing the Java Heap Size

You can increase the java heap memory for the connector by doing the following:

- If you are running the connector as a **Windows service** or **Linux daemon**, open the `~./current/user/agent/agent.wrapper.conf` file and set the heap size as follows:

```
#Initial Java Heap Size (in MB)
```

```
wrapper.java.initmemory=1024
```

```
#Maximum Java Heap Size (in MB)
```

```
wrapper.java.maxmemory=4096
```

- If you are running the connector in a **Standalone mode**:
 - **Linux:** Create an executable shell script `~/ARCSIGHT_HOME/current/user/agent/setmem.sh`, with the following content:

```
ARCSIGHT_MEMORY_OPTIONS=" -Xms1024m -Xmx4096m"
```

- **Windows:** Create the batch file `$ARCSIGHT_HOME\current\user\agent\setmem.bat` with the following content:

```
SET ARCSIGHT_MEMORY_OPTIONS=" -Xms1024m -Xmx4096m"
```

To verify if the connectors are running, select the ArcSight **Console Navigator** in the **Resources** tab, under **Connectors**. If the connector is running, you will see `<connector_name> (running)` listed. For more information, see [Running Connectors](#).

Setting Up the User in ESM

After installing, configuring, and starting the connector, you must set the user for the connector from the ArcSight Console. Setting the user links the user to the resources, and that user is then treated as the **Creator** of resources. The connector is then run on that user's behalf.



Note: The user must have console administrative privileges. Else, the import fails.

1. In the ArcSight Console, go to **Navigator > Connectors**.
2. On the **Resources** tab, expand **All Connectors** and navigate to your ThreatHub Feed Connector.
3. Right-click the connector and select **Configure**.
4. On the **Inspect/Edit** panel, select the **Connector** tab.
5. Enter **Model Import User** as **admin** and **Owner** as **admin**.

Inspect/Edit																	
Event Inspector	Connector:THF																
Default	Alternate#1																
Connector	Notes																
Connector <table border="1"> <tr><td>Name</td><td>THF</td></tr> <tr><td>ID</td><td>371ldCo4BABCW2DbXm...</td></tr> <tr><td>Status</td><td>running</td></tr> <tr><td>Connector Location</td><td></td></tr> <tr><td>Device Location</td><td></td></tr> <tr><td>Version</td><td>8.4.5.16224.0</td></tr> <tr><td>Comment</td><td></td></tr> <tr><td>Model Import User</td><td>admin</td></tr> </table>		Name	THF	ID	371ldCo4BABCW2DbXm...	Status	running	Connector Location		Device Location		Version	8.4.5.16224.0	Comment		Model Import User	admin
Name	THF																
ID	371ldCo4BABCW2DbXm...																
Status	running																
Connector Location																	
Device Location																	
Version	8.4.5.16224.0																
Comment																	
Model Import User	admin																
Common <table border="1"> <tr><td>Resource ID</td><td>371ldCo4BABCW2DbXm...</td></tr> <tr><td>External ID</td><td></td></tr> <tr><td>Alias (Display Na...</td><td></td></tr> <tr><td>Description</td><td></td></tr> <tr><td>Version ID</td><td></td></tr> <tr><td>Deprecated</td><td><input type="checkbox"/></td></tr> </table>		Resource ID	371ldCo4BABCW2DbXm...	External ID		Alias (Display Na...		Description		Version ID		Deprecated	<input type="checkbox"/>				
Resource ID	371ldCo4BABCW2DbXm...																
External ID																	
Alias (Display Na...																	
Description																	
Version ID																	
Deprecated	<input type="checkbox"/>																
Assign <table border="1"> <tr><td>Owner</td><td>admin</td></tr> <tr><td>Notification Groups</td><td></td></tr> </table>		Owner	admin	Notification Groups													
Owner	admin																
Notification Groups																	
Parent Groups <table border="1"> <tr><td>Site Connectors</td><td>/All Agents/Site Agents...</td></tr> </table>		Site Connectors	/All Agents/Site Agents...														
Site Connectors	/All Agents/Site Agents...																
Creation Information <table border="1"> <tr><td>Created By</td><td>admin</td></tr> <tr><td>Creation Time</td><td>4 Mar 2024 22:17:53 IST</td></tr> </table>		Created By	admin	Creation Time	4 Mar 2024 22:17:53 IST												
Created By	admin																
Creation Time	4 Mar 2024 22:17:53 IST																

6. Click **Apply/ OK**.

Starting and Stopping Data Import

By default, the connector's data import capability is not started. You must start the import manually in the ArcSight Console.



Note: Data import needs to be started only once from the ArcSight Console. Unless it is stopped from the ArcSight Console, there is no need to restart the data import.

To start and stop import data for the ThreatHub Feed Connector:

1. In the ArcSight Console, go to **Navigator > Connectors**.
2. On the **Resources** tab, expand **All Connectors** and navigate to your ThreatHub Feed Connector.
3. Select the ThreatHub Feed Connector and right-click.
4. Specify the following commands:

- **To Start:** Select **Send Command > Model Import Connector > Start Import**
- **To Stop:** Select **Send Command > Model Import Connector > Stop Import**

Configuring the Start Date

When the ThreatHub Feed Connector is installed in **ThreatHub Feed Plus** and **Custom MISP Instance** options, it starts retrieving data from a month before the date of installation. However, you can configure the connector to retrieve older data as well.

To set data retrieval to a different date, modify the agent.properties as **agent(0).start.date**, then restart the connector.

For **ThreatHub Feed Basic** option, after the connector is installed all the events will be downloaded.

Optimizing Data Transfer by Using a Timer

The time interval between archives sent by the connector to ESM can be controlled by the **buildmodeldelay** property. The default value is 1 minute.

To increase or decrease this time interval, you can add the **buildmodeldelay** property to the file **agent.properties** (located at **\$ARCSIGHT_HOME\current\user\agent**). The property **buildmodeldelay** is expressed in milliseconds.

For example, the following property sets the time interval to 10 seconds:

```
agent.component[35].buildmodeldelay=10000
```

Running the Connector

ThreatHub Feed Connector can be run in stand-alone mode or as a service, depending on the mode selected during installation.



Note: Before you start the Connector, make sure that ArcSight ESM is up and running.

To verify that a connector is running, go to **Navigator** in the ArcSight ESM Console, and in the **Resources** tab, select **Connectors**. If the connector is running, you will see **<connector_name> (running)** listed.

Running in Standalone Mode

If the connector is installed in stand-alone mode, it must be started manually and is not automatically active when a host is restarted.

- To run all Connectors installed in stand-alone mode on a particular host, open a command window, go to the `$ARCSIGHT_HOME\current\bin` directory, and run the following command:

```
arcsight connectors
```

- To view the Connector log, read the following file:

```
$ARCSIGHT_HOME/current/logs/agent.log
```

- To stop all Connectors, enter **Ctrl+C** in the command window.

Running as a Windows Service

- To start or stop Connectors installed as services on Windows platforms:
 - a. Right-click **My Computer**, then select **Manage** from the **Context** menu.
 - b. Expand the **Services and Applications** folder and select **Services**.
 - c. Right-click the Connector service name and select **Start** to run the Connector or **Stop** to stop the service.
- To verify that a Connector service has started, view the following file:

```
$ARCSIGHT_HOME/logs/agent.out.wrapper.log
```

- To reconfigure a Connector as a service, open a command window on `$ARCSIGHT_HOME/current/bin` and run the following command to start the Connector **Configuration Wizard**:

```
runagentsetup
```

Running Connectors as a UNIX Daemon



Note: When installing the connector as a Linux daemon, run the following command as root and ensure the `-u` parameter is a non-root user:

```
$ARCSIGHT_HOME/current/bin/arcsight agentsvc -i -u user -sn <service_name>
```

Connectors installed as a daemon can be started and stopped manually by using platform-specific procedures.

On UNIX systems, when you configure a Connector to run automatically, ArcSight creates a control script in the `/etc/init.d` directory.

- To start or stop a particular Connector, find the control script and run it with either a start or stop command parameter.

For example:

```
/etc/init.d/arc_serviceName {start|stop}
```

- To verify that a Connector service has started, view the file:

```
$ARCSIGHT_HOME/logs/agent.out.wrapper.log
```

- To reconfigure the Connectors as a daemon, run the Connector **Configuration Wizard** again. Open a command window on `$ARCSIGHT_HOME/current/bin` and enter:

```
runagentsetup
```



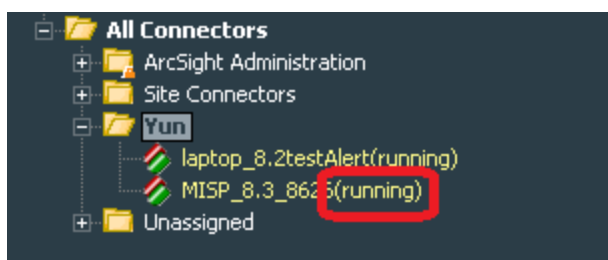
Note: By default, the connector collects events starting from a month prior to the installation day. To start retrieving older events, modify the `start.date` parameter in the `../current/user/agent/agent.properties` file. The format of the field is `YYYY-MM-DD`. The connector can only collect data up to 12 months from the date of installation. If the `start.date` set, is a period longer than 12 months, the default time of one month will be used. The MISP Instance time zone is defined in the `PHP.ini` file on the MISP Instance host.

Verifying the Connector Functionality

After you have installed and configured the connector, you must verify the connector functionality.

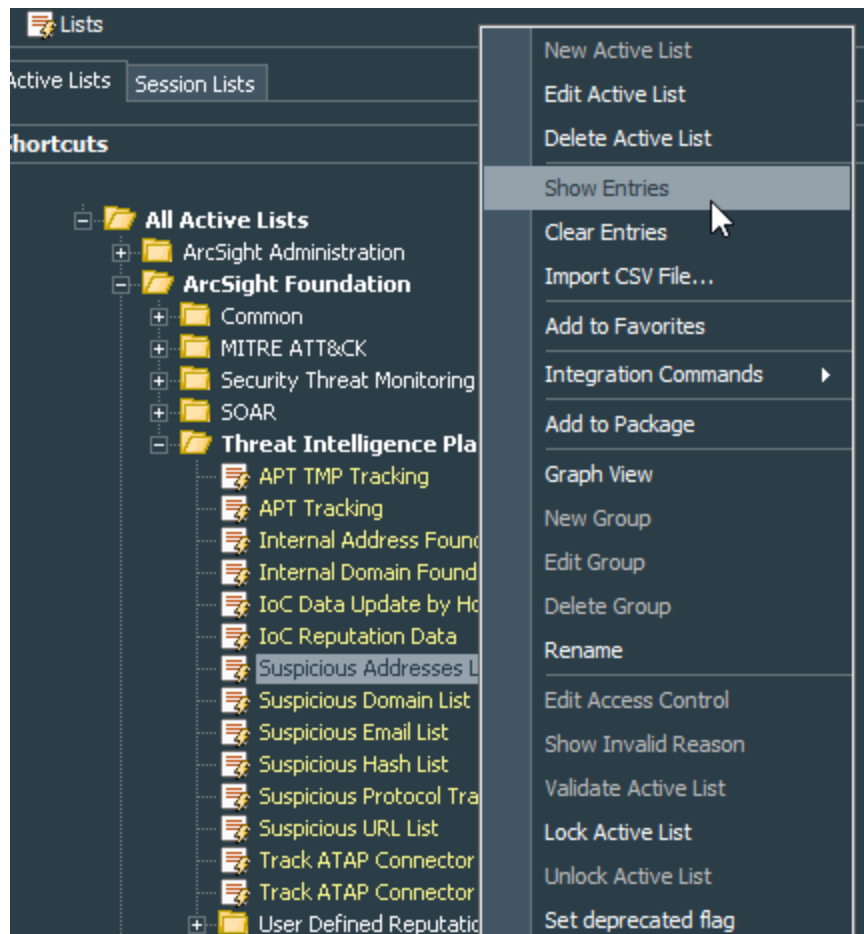
Verification Using ESM:

1. Sign in to the ArcSight ESM Console.
2. Go to **All Connectors** > *<installation_folder>* > *<connector_name>*, then verify that the status is displayed as *running*.



3. Go to **All Active Lists** > **Threat Intelligence Platform**, then right-click the following active lists and select **Show Entries** to verify if data is populated in the active lists:
 - /All Active Lists/ArcSight Foundation/Threat Intelligence Platform/Suspicious Addresses List
 - /All Active Lists/ArcSight Foundation/Threat Intelligence Platform/Suspicious Domain List
 - /All Active Lists/ArcSight Foundation/Threat Intelligence Platform/Suspicious Email List
 - /All Active Lists/ArcSight Foundation/Threat Intelligence Platform/Suspicious Hash List

/All Active Lists/ArcSight Foundation/Threat Intelligence Platform/Suspicious URL List

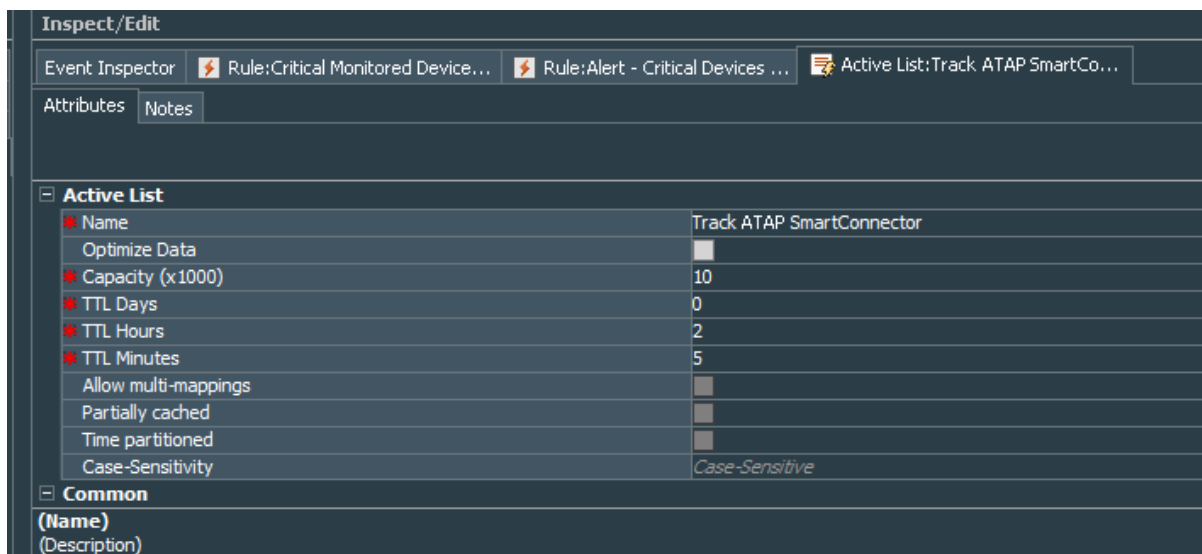
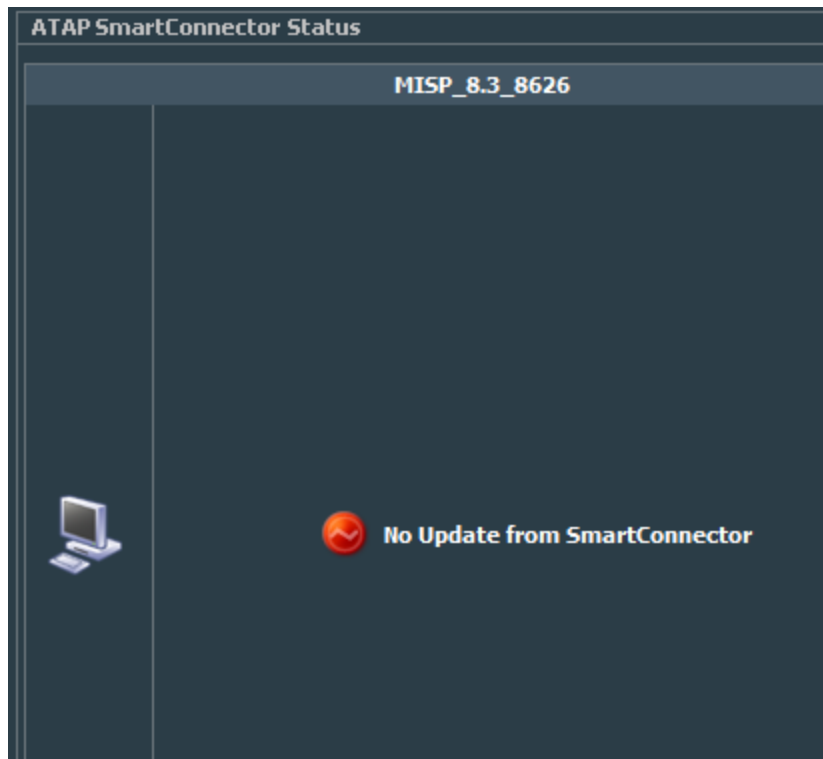


The Connector requires approximately 5-15 minutes to sync data into active lists for the first time after installation.

4. To verify if the Connector is working properly, go to **All Dashboards > ArcSight Foundation > Threat Intelligence Platform > ATAP Health Status**. Check if the ThreatHub Feed Connector status is green.

If the status is red, it might indicate one of the following:

- ESM has received an error message from the connector.
- Active lists have not been updated during the time specified in the **TTL Hours** field under **All Active Lists > ArcSight Foundation > Threat Intelligence Platform > Track ATAP Connector**. By default, this value is set to 2 hours.



Verification Using Connector Logs:

In the %ARCSIGHT_HOME%/current/logs/agent.log file, look for the following entries:

- The following entry indicates a successful connection to the ESM:

```
[2023-12-22 17:36:02,025][INFO ][com.arcsight.agent.transport.c.c]
[setIsUp]Event Transport to [https://<esm_server>:8443] up
```


- The following entry provides information on the Connector status:

```
[2023-12-22 07:26:20,814][INFO ][com.arcsight.agent.f0] [logStatus]{C=0, ET=Up, HT=Up, N=<connector_name>, S=573161, T=0.0}
```

where,

N = Name of the ThreatHubFeed Connector

ET = Indicates whether the ESM is accepting events from the ThreatHubFeed Connector. This status must be "Up".

HT = Indicates the status of the connection between the ThreatHubFeed Connector and ESM. This status must be "Up".

- The following entry indicates successful event synchronization between ThreatHubFeed Connector and ESM:

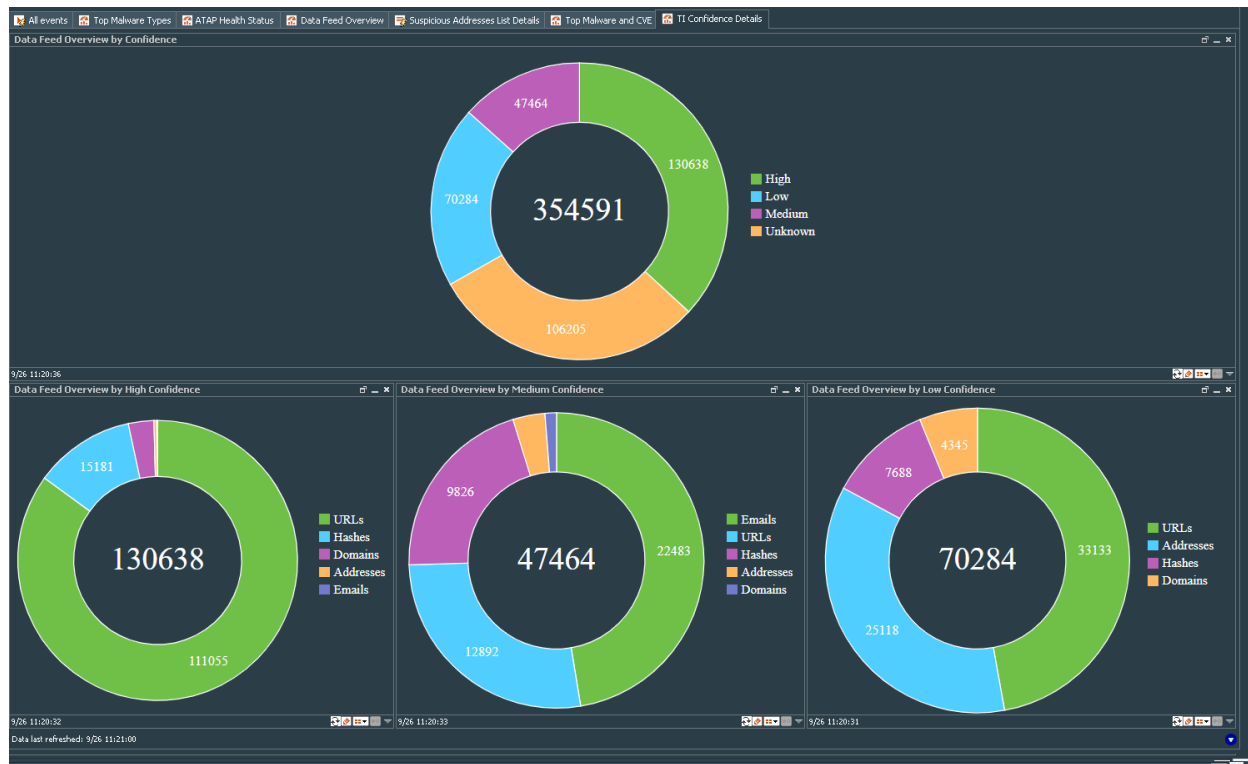
```
First event from [ThreatHub Feed|ThreatHub Feed|] received.
```

Identifying Basic and Plus Content When ThreatHub Feed Plus is Installed

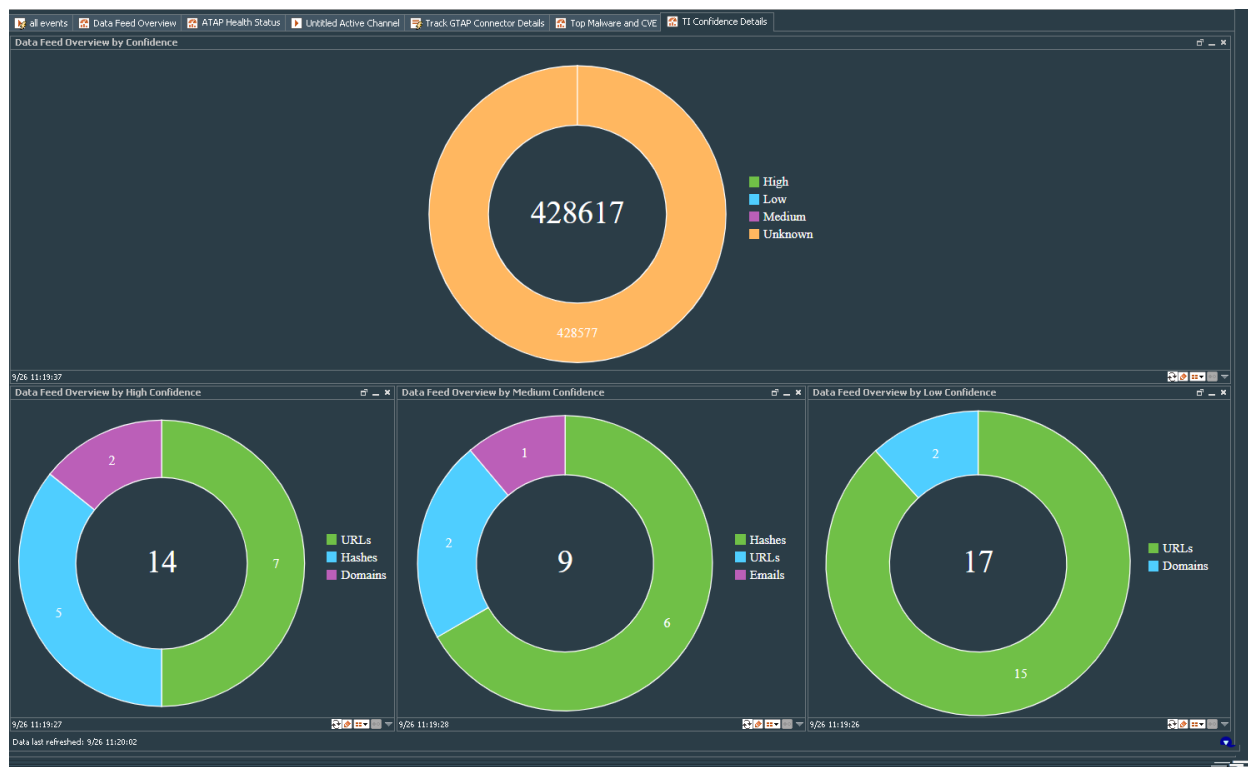
The dashboard for ThreatHub Feed Basic displays the confidence of threat intelligence feed as "Unknown" whereas the ThreatHub Feed Plus displays *High/Medium/Low* confidence data for threat intelligence feed so that organizations can identify and resolve threats on priority.

To view the threat intelligence confidence details, go to **All Dashboards > ArcSight Foundation > Threat Intelligence Platform > TI Confidence Details**.

The dashboard for ThreatHub Feed Plus displays *High/Medium/Low* confidence as shown in the following image:

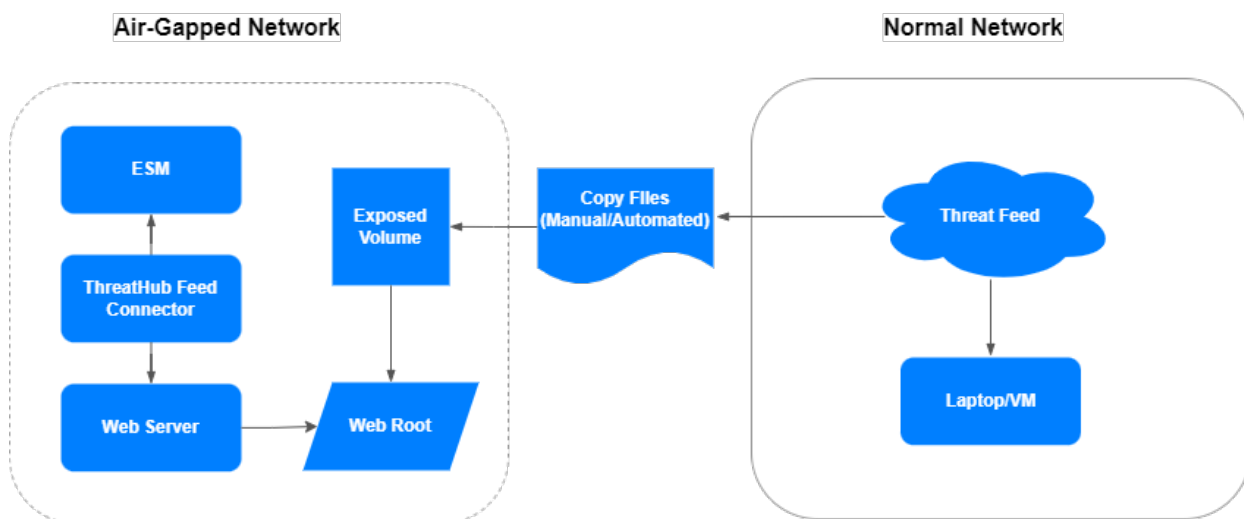


The dashboard for ThreatHub Feed Basic displays *Unknown* confidence, as shown in the following image:



Installing ThreatHub Feed Connector in Air-Gapped Environments

In an air-gapped environment, the ThreatHub Feed Connector can be configured to use the basic feed by reading Threat Intelligence data as JSON files from a local web server. The JSON files can be downloaded from the internet on a machine outside of the air-gapped network and the files can be transferred to the web server that is in the air-gapped network.



To use the basic feed data in the air-gapped environment, perform the following steps:

1. Download the `manifest.json` and all other JSON data files from [Threatfeed Cyberres](#) using a system outside of the air-gapped network. The names of the JSON data files are in the UUID (Universally Unique Identifier) format, and these files are described in the `manifest.json` file.



The ThreatHub Feed Connector needs the `manifest.json` file to work correctly.

You can download the files by using a bash script. A sample [bash script](#) is provided for your reference.

2. Copy the downloaded `manifest.json` and all other JSON data files to the web server's `<webroot>/feed/` directory and make sure that all the files have the correct permissions set.

For optimal parsing of the files, copy all UUID names of the JSON data files first and the `manifest.json` at last, or stop the ThreatHub Feed Connector, if running, before removing or replacing the files.

3. Configure the ThreatHub Feed Connector Basic, to point to the custom web server. For example, if the web server's root is under `/opt/www/http-root/` and your web server is listening on `http://<address_abc>`, point the connector to `http://<address_abc>/`.

The basic feed configuration can read the JSON data files in MISP format from any web server.

- By setting up a local web server that is only accessible by the ThreatHub Feed Connector, you can simulate the behavior of the ThreatHub Feed Connector with the basic threat feed. However, instead of downloading the Threat Intelligence data from [Threatfeed Cyberres](#), the ThreatHub Feed Connector downloads the Threat Intelligence data from the local web server.
- The ThreatHub Feed Connector automatically appends `/feed/` to the given URL.

Sample Bash Script

```
#!/bin/bash

DOWNLOAD_FOLDER="/tmp/basic_feed"

BASIC_FEED_URL="https://threatfeed.cyberres.com/feed"

echo "Downloading $BASIC_FEED_URL/manifest.json"
curl -L -s "$BASIC_FEED_URL/manifest.json" -o "$DOWNLOAD_FOLDER/manifest.json"

if [[ ! -f "$DOWNLOAD_FOLDER/manifest.json" ]]
then
echo "$DOWNLOAD_FOLDER/manifest.json not found, exiting"
exit 3
fi
echo "Downloading all JSON files using $DOWNLOAD_FOLDER/manifest.json as the source"

while IFS= read -r uuid && [[ "uuid" ]]
do
echo "Downloading $BASIC_FEED_URL/$uuid.json"
curl -L -s "$BASIC_FEED_URL/$uuid.json" -o "$DOWNLOAD_FOLDER/$uuid.json"

if [[ ! -f "$DOWNLOAD_FOLDER/$uuid.json" ]]
then
echo "Failed to download $DOWNLOAD_FOLDER/$uuid.json"
fi
done <<< $(cat "$DOWNLOAD_FOLDER/manifest.json" | jq -r 'keys_unsorted[]' 2>/dev/null)
```

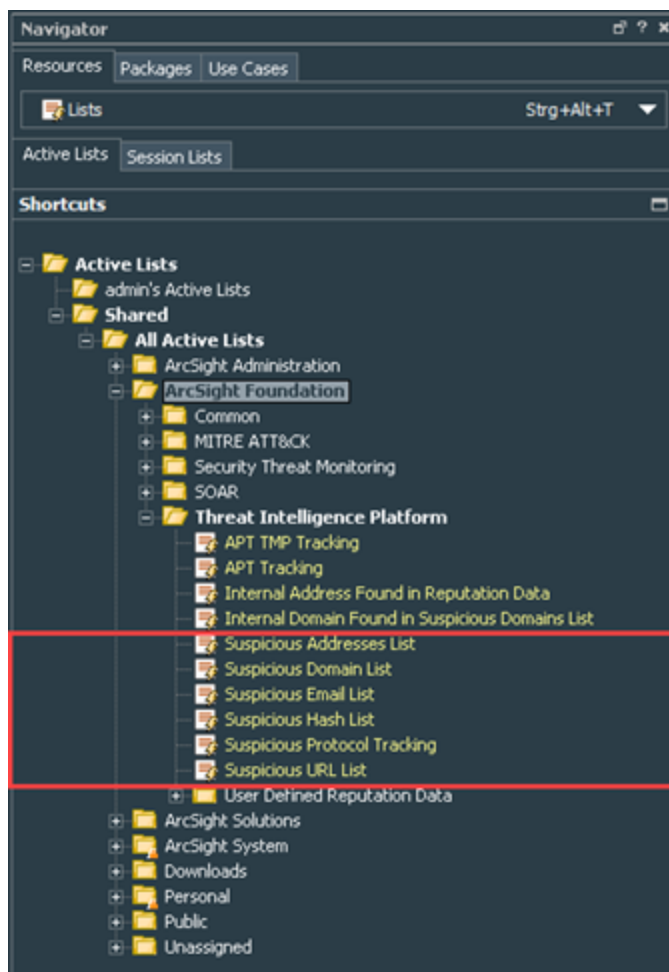
```
unset IFS
```

```
exit 0
```

ThreatHub Feed Active Lists

ThreatHub Feed Basic and ThreatHub Feed Plus use the following active lists that are in the **All Active Lists > ArcSight Foundation > Threat Intelligence Platform** folder in the ArcSight ESM Console:

- Suspicious Addresses List
- Suspicious Domain List
- Suspicious Email List
- Suspicious Hash List
- Suspicious URL List



Understanding ThreatHub Feed Active Lists

Active list entries include IP addresses, domain names, email addresses, hash values, and URLs.

List	Type of Information	Works With (Example)
Suspicious Addresses	IP Addresses	Proxies, Firewalls, Flows, DNS, EDR
Suspicious Domains	Domain Names	Proxies, Firewalls, EDR, DNS
Suspicious Emails	Email Addresses	E-Mail Gateway, Mail Servers
Suspicious Hashes	Hash Values (various algorithms)	EDR, AV
Suspicious URLs	Full URL being requested	Proxies, Firewalls, EDR

Active List Fields

The following table lists the Active List fields that are available for ThreatHub Feed Basic and ThreatHub Feed Plus. If you subscribe to ThreatHub Feed Plus, you get exclusive premium content that help you quickly identify positive threats.

Sl. No.	Field	ThreatHub Feed Basic	ThreatHub Feed Plus	Description	Example
1	actors	x	✓	Actual individuals, groups, or organizations believed to be operating with malicious intent.	GUARDIANS OF PEACE, LOCKBIT GANG, ATMZOW
2	address or domain or email or url or hashValue	✓	✓	Suspicious address, domain, email, URL or hashValue found and shared as harmful indicators.	12.44.11.22, badcorp.tld, badguy@badcorp.tld, HTTPS://VEROFORD.COM/SETUP/B RUME.PHP, 4685811c853ceaebc991c3a8406694bf
3	avSignatureName	x	✓	One or more virus signatures that were used to detect malware associated with the indicator.	TR/Inject.xbbeicg
4	campaign	x	✓	A set of malicious activities or attacks carried out by threat actors using specific techniques for some particular purpose.	FOLLINA, EMOTET, LOG4J

Sl. No.	Field	ThreatHub Feed Basic	ThreatHub Feed Plus	Description	Example
5	confidence	x	✓	Confidence level of the indicator. The possible values are: very high, high, medium, and low	High, Medium, Low
6	creatorOrg (origin)	✓	✓	Organization that created the indicator.	ArcSight, CERT.SI, ADMIN, CISRT KNF
7	cve	✓	✓	A unique and common identifier for a publicly known security vulnerability that is associated with the indicator. When more than one value exists, they are separated by a comma.	CVE-2022-30190
8	description	✓	✓	Detailed information about indicators of compromise (IOC).	
9	extraInfo	✓	✓	Additional details about IOC.	
10	firstDetectTime	✓	✓	First time this indicator was detected by the threat research team.	6/19/2022
11	arcsightBulletinId (ThreatResearch Bulletin ID)	x	✓	Bulletin identifier that references the bulletin record at https://threatresearch.arcsight.com/ .	e071922AAC
12	arcsightsearchterm	x	✓	Search pattern needed to get the associated threads with reference to the current IOC.	
13	atapPlusCS1	x	✓	Additional field specific to ThreatHub Feed Plus	
14	atapPlusCS2	x	✓	Additional field specific to ThreatHub Feed Plus	
15	atapPlusCS3	x	✓	Additional field specific to ThreatHub Feed Plus	
16	atapPlusCS4	x	✓	Additional fields specific to ThreatHub Feed Plus	
17	atapPlusCS5	x	✓	Additional field specific to ThreatHub Feed Plus	

Sl. No.	Field	ThreatHub Feed Basic	ThreatHub Feed Plus	Description	Example
18	indicatorType	✓	✓	One or more publicly known malware types that are associated with this indicator.	suspicious, cobalt strike, benign, adware c2 cnc server
19	lastDetectTime	✓	✓	Last time this indicator was detected by the threat research team.	6/20/2022
20	malwareName	x	✓	One or more malware names associated with the indicator.	CONTI, HERMETICWIPER, PEGASUS
21	malwareTypes	x	✓	Malware class determining the type of behavior of the malware.	RANSOMWARE, DATA WIPER, ER, LOADER
22	mitigation	✓	✓	Recommendations, security concepts, technologies that can be used to prevent a technique or sub-technique (used for cyber attacks) from being successfully executed.	
23	mitreAttack	x	✓	Type of Tactics, Techniques, and Procedures that describe ways that adversaries attempt to compromise targets.	T1060
24	port	✓	✓	Suspicious port number used for the attack.	
25	reference	✓	✓	Category which describes and puts the indicator in a context.	Payload delivery, Network activity
26	sector	x	✓	Industrial and commercial sectors that the threat belongs to.	Energy, Finance, Chemical
27	sightings	✓	✓	Number of times something in the indicator of compromises (such as malware, tool, threat actor, and so on) was seen.	
28	targetLocationRegion	x	✓	Target regions impacted by the indicator.	EUROPE, MIDDLE EAST, AMERICA, AFRICA, OCEANIA

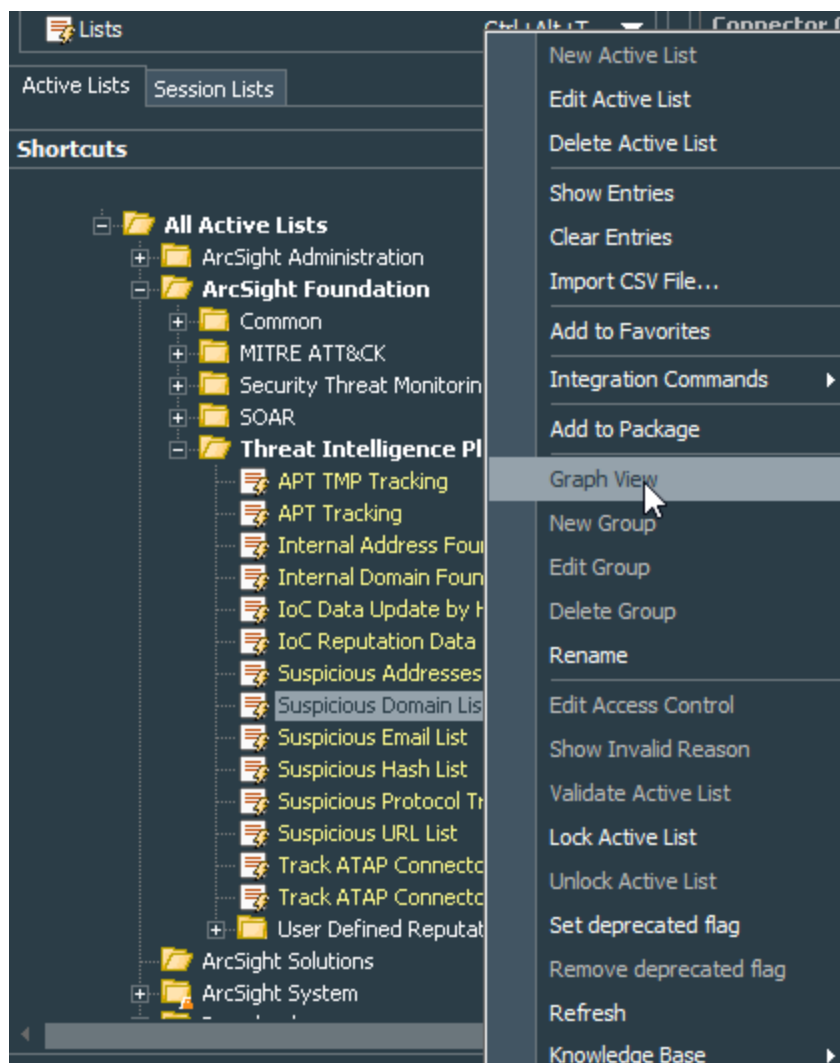
Sl. No.	Field	ThreatHub Feed Basic	ThreatHub Feed Plus	Description	Example
29	targetLocationCountry	x	✓	Target countries impacted by the indicator.	UKRAINE, ISRAEL, INDIA, STATES, BRAZIL, EGYPT, AUSTRALIA
30	toolName	x	✓	Tool invoked in the indicator activity.	POWERSHELL, RDP, CURL
31	toolTypes	x	✓	Type of tools used to carry out bad activity.	RCE, BRUTEFORCE, ACCESS, SERVICE
32	threatActorTypes	✓	✓	Actor group type behind a particular entity.	NATION-STATE, BROKER, CRIMINALS, COMPETITOR, HACKER
33	threatOrigin	✓	✓	Country from where the threat originates or the country sponsoring the threat.	GAMAREDON - RUSSIA
34	threatOperations	x	✓	The threat itself which is particularly based on the event. The possible values can be threat actors, malware, ransomware or popular vulnerabilities highly exploited in the wild.	FOLLINA, GAMAREDON, LOCKBIT 3.0
35	threatLevel	✓	✓	Severity level of the event, which can be low, medium, or high. Low: General mass malware Medium: Advanced Persistent Threats (APT) High: Sophisticated APTs and 0 day attacks.	Low, Medium, High
36	tiEventID	✓	✓	Global unique identifier of an event across all MISP Servers.	dba88c50-6dd4-447e-9253-c783738eace0
37	virusTotalCount	x	✓	Number of reliable review committees who consider this indicator harmful.	24



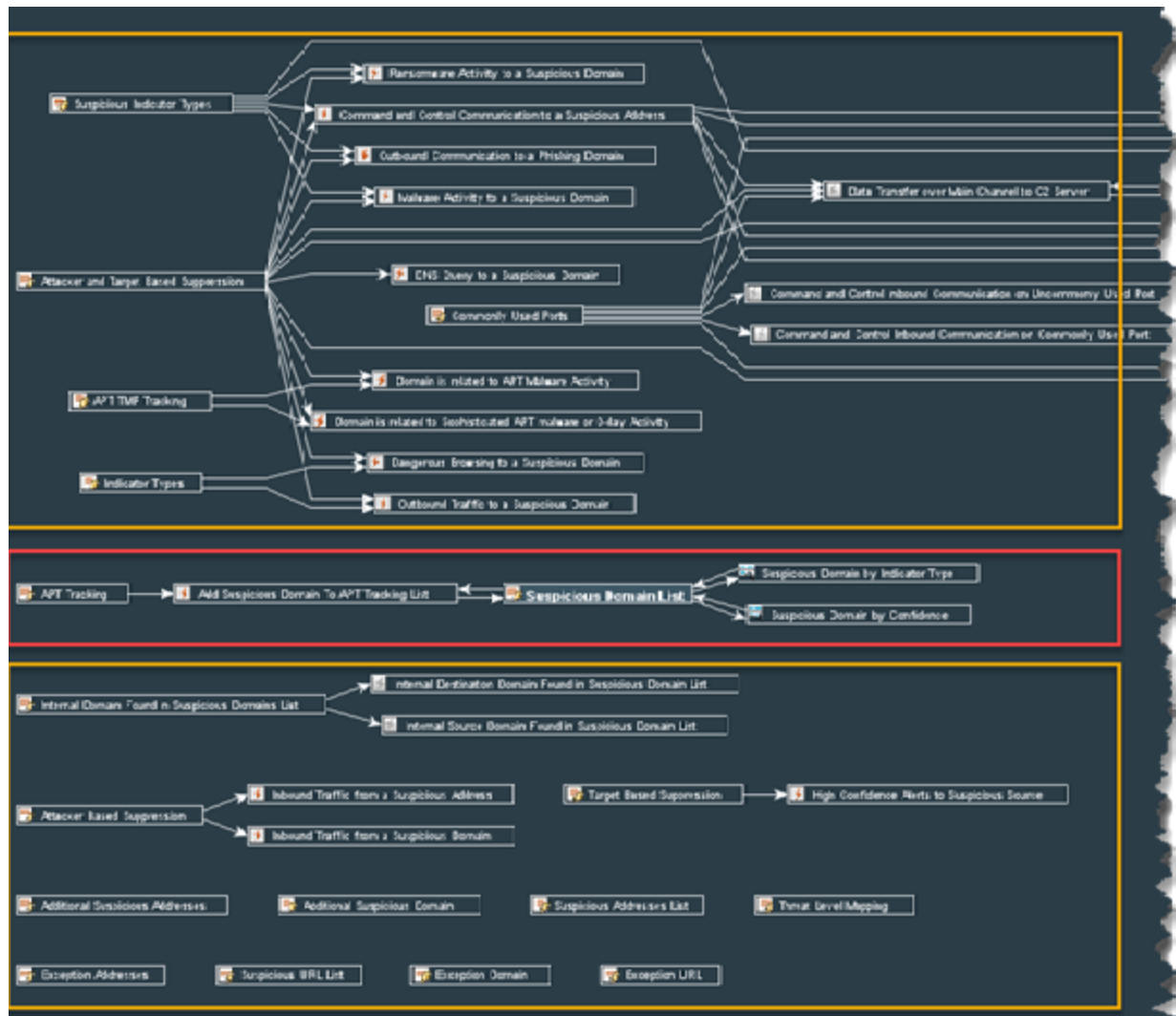
Note: The examples given are not comprehensive dictionaries for the field. Other values could occur.

Understanding How Content Leverages ThreatHub Feed Active Lists

Various content elements use the lists indirectly. You can generate a graphical view of a particular list to understand its indirect usage.



This would look like the following, where YELLOW indicates indirect usage and RED indicates direct usage:



Threat Intelligence Platform Dashboards

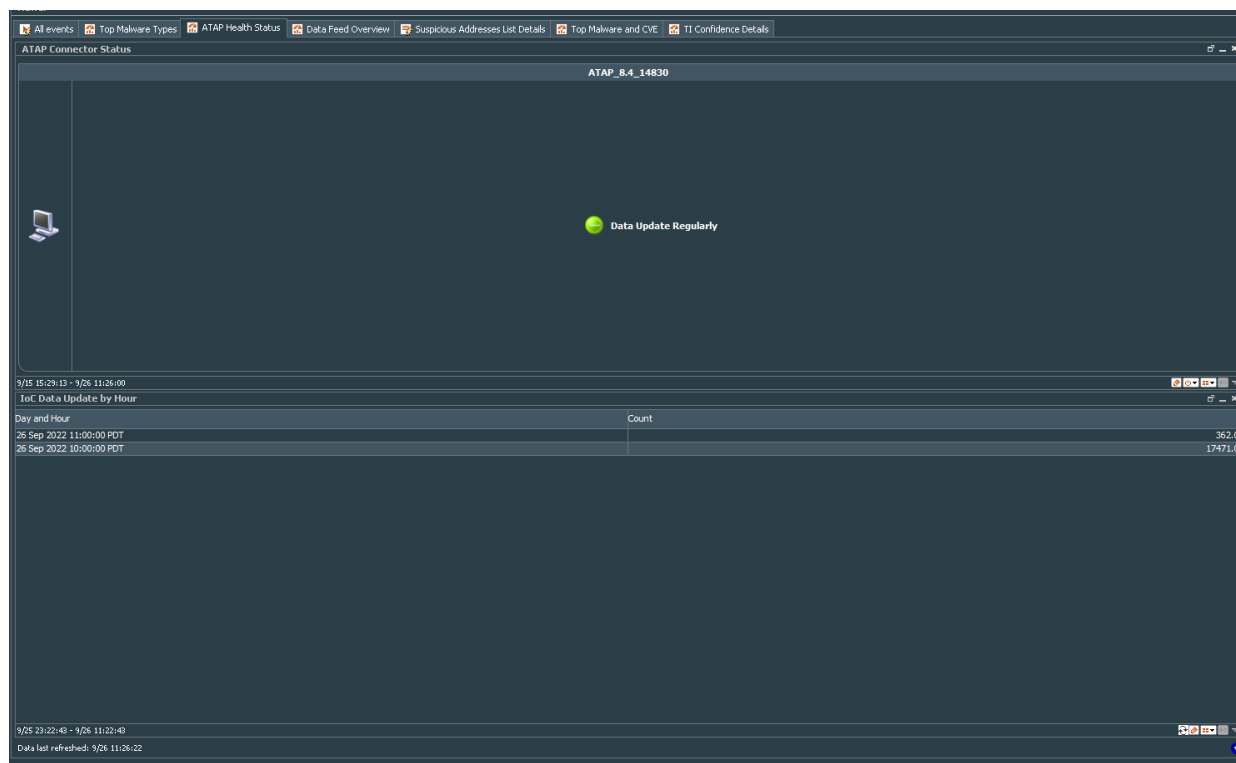
ThreatHub Feed provides several dashboards for both ThreatHub Feed Basic and ThreatHub Feed Plus users. These dashboards display various charts based on data received from all Active Lists. However, the data displayed for ThreatHub Feed Plus users is different from the data displayed for ThreatHub Feed Basic users.

To use these dashboards, you must install the Threat Intelligence Platform content package, which is available as a part of the ESM default content. You can download the Threat Intelligence Platform content package from [Marketplace](#).

The following dashboards are a part of Threat Intelligence Platform content package in the ESM Console:

- [ATAP Health Status](#)
- [Data Feed Overview](#)
- [Threat Intelligence Security Incidents Overview](#)
- [TI Confidence Comparison - Open Source vs ArcSight-curated](#)
- [TI Confidence Details](#)
- [Top Malware and CVE](#)
- [Top Malware Types](#)

ATAP Health Status

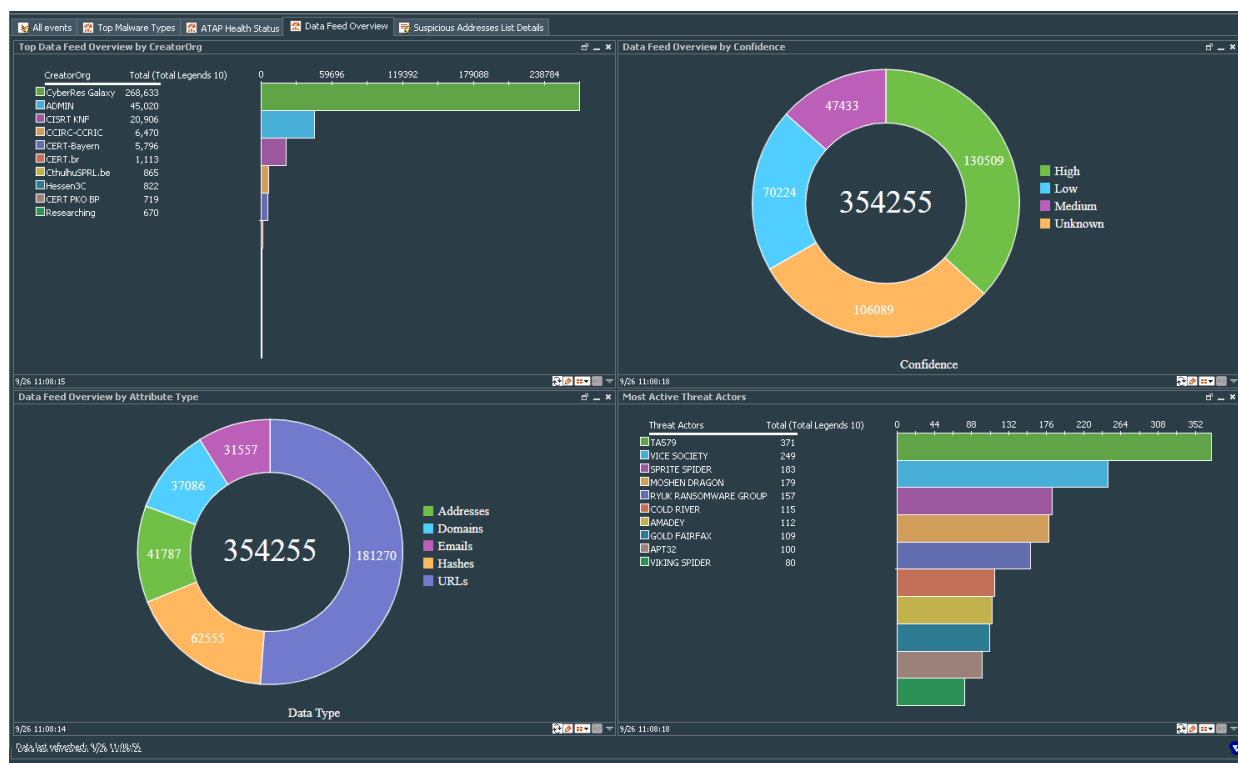


- **ATAP Connector Status:** Provides the latest status of the ThreatHub Feed Connector. The status is red is when there are no updates for a certain time of period or if there are error messages from the connector. The status is green when the data is getting updated regularly and the connector is up.
- **IoC Data Update by Hour:** Provides hourly update on the IoC data. Updates per hour received by the feed indicates of how lively the feeds are.

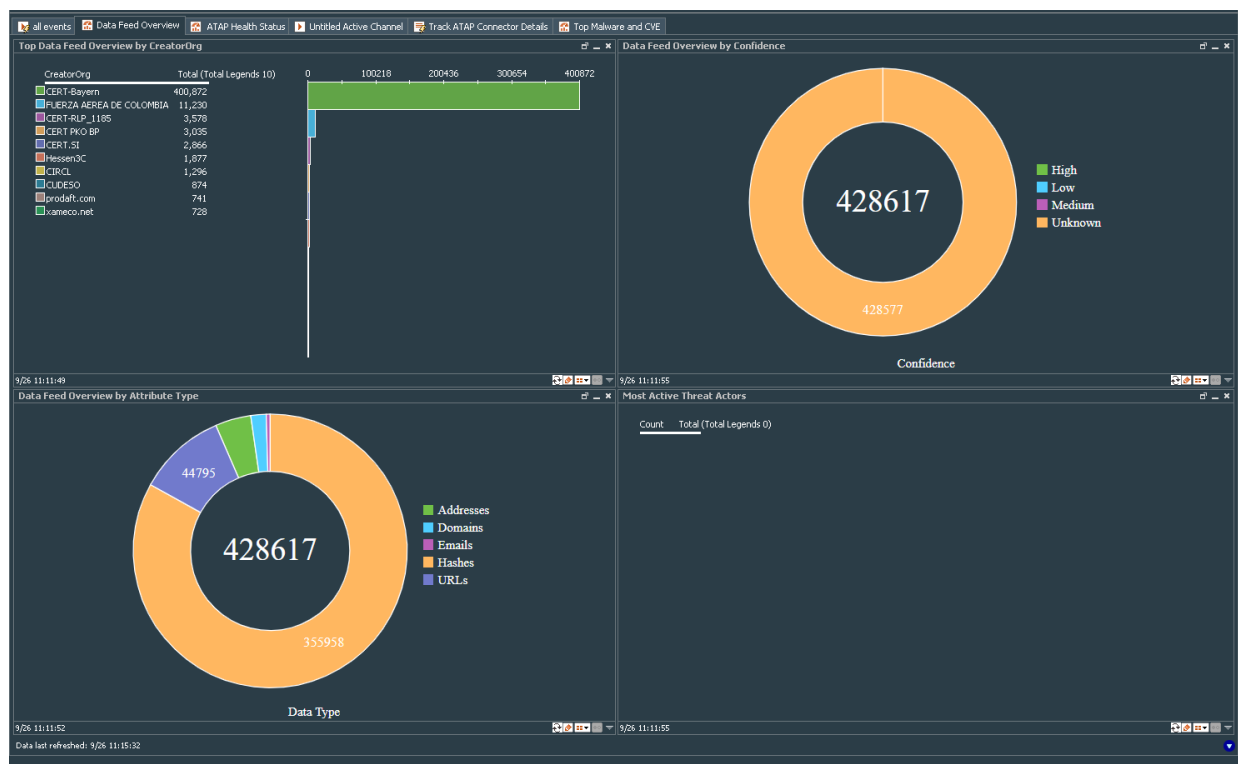
Data Feed Overview

To access the Data Feed Overview dashboard, go to **All Dashboards > ArcSight Foundation > Threat Intelligence Platform > Data Feed Overview**.

Data Feed Overview Dashboard for ThreatHub Feed Plus:



Data Feed Overview Dashboard for ThreatHub Feed Basic:



This dashboard contains the following charts:

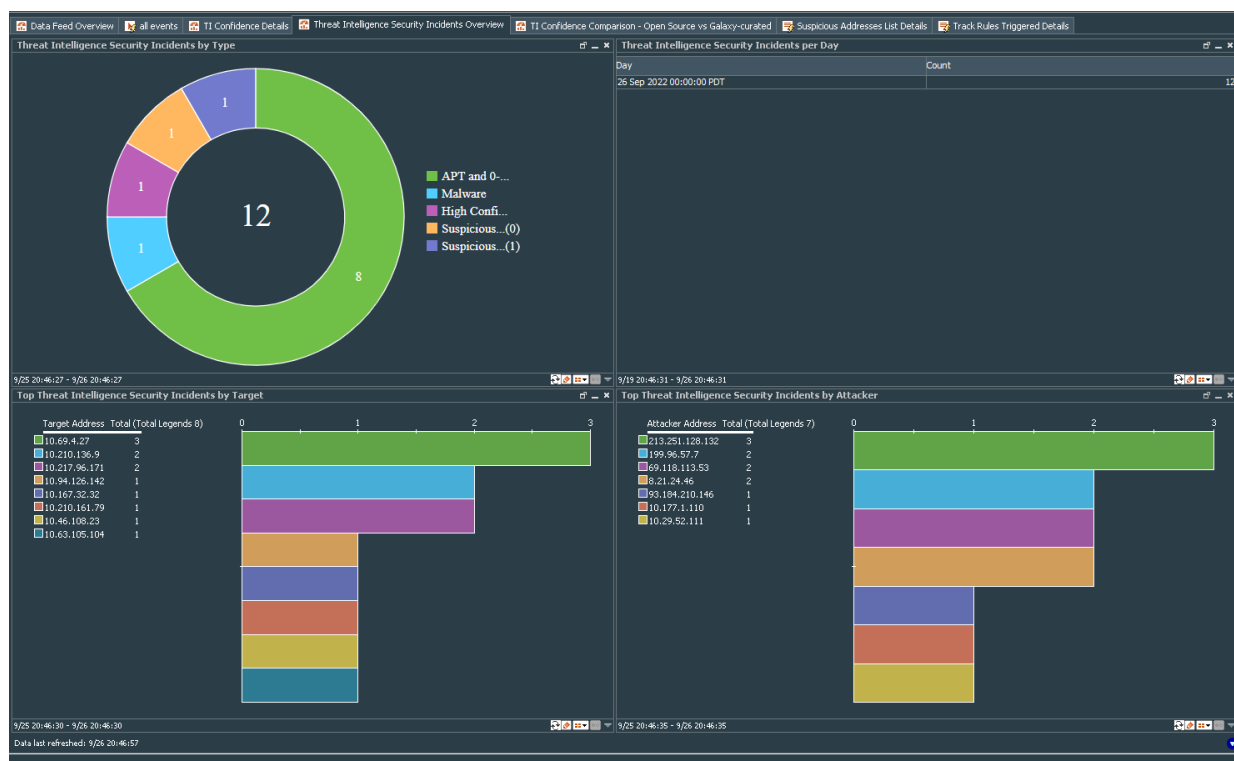
- **Data Feed Overview by Attribute Type:** Provides the number of indicators that are delivered by indicator type. Security Operations personnel can gain insight into the most prevalent types of indicators found in our research activities. A high indicator count increases the number of highly confident indicators usable for automation.
- **Most Active Threat Actors:** Provides the top 10 threat actors in the indicators. The chart provides a context on how active a threat actor is in general. A high level of activity of a threat actor increases your overall threat condition. This information can be used as a booster to your evaluation of risk in SIEM.
- **Top Data Feed Overview by CreatorOrg:** Provides the top 10 organizations that create indicators along with the indicator count. If you have subscribed to ThreatHub Feed Plus, this chart lists CyberRes Galaxy also as the creator organization.
- **Data Feed Overview by Confidence:** Provides the indicator count by confidence levels - High, Medium, and Low.

Threat Intelligence Security Incidents Overview

This dashboard provides charts, which display an overview of security incidents by type, alerts per day, alerts by target, and alerts by attacker.

To access the Threat Intelligence Overview dashboard, go to **All Dashboards > ArcSight Foundation > Threat Intelligence Platform > Threat Intelligence Security Incidents Overview**.

Threat Intelligence Security Incidents Overview Dashboard



This dashboard contains the following charts:

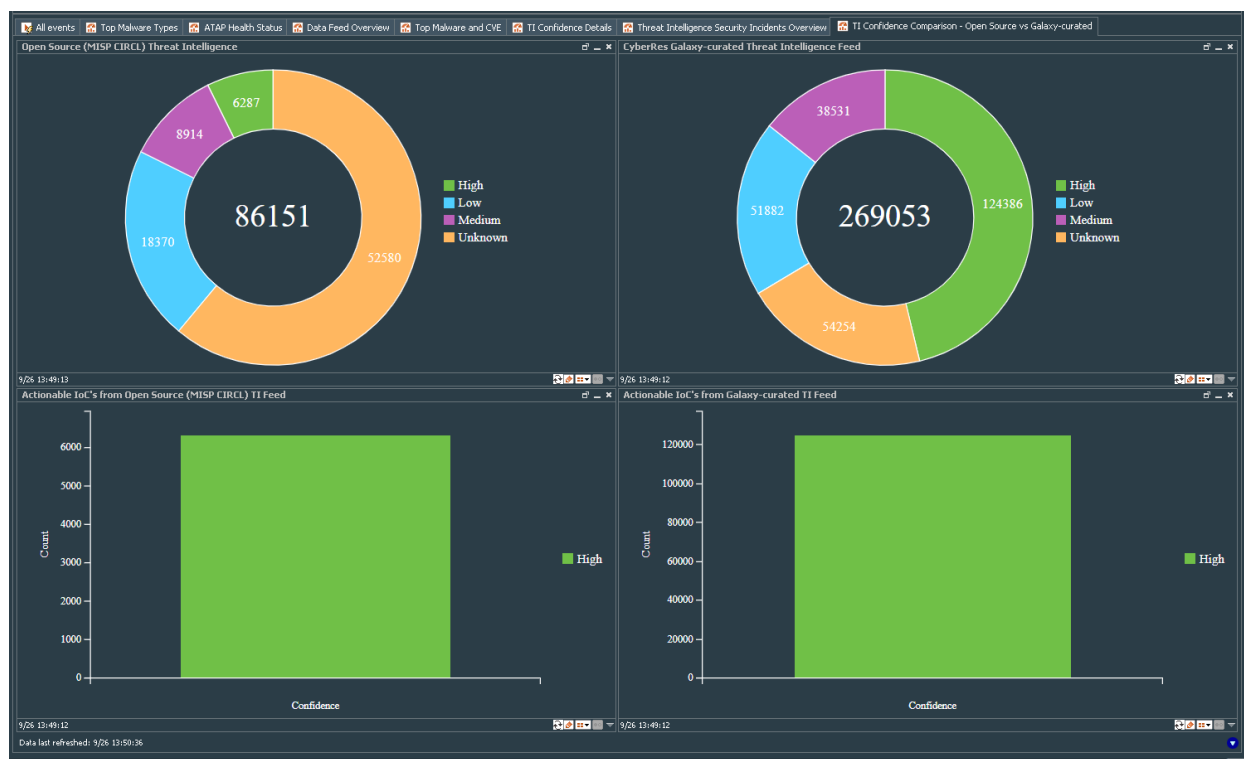
- **Threat Intelligence Security incidents by Type:** Provides security incident counts grouped by attack type, such as Malware, Phishing, High Confidence, and so on.
- **Threat Intelligence Security incidents per Day:** Provides an indication of how intense ThreatHub Feed's monitoring techniques trigger based on TI information. If filtered on high confident TI records only, this can give a very good indicator of whether the customer is under attack if the number of hits is extraordinarily high. Ideally, if you see a low and constant number, it is nevertheless a good reason to investigate the triggers.
- **Threat Intelligence Security incidents by Target:** Provides security incident counts grouped by target addresses. Hosts, which are particularly exposed by alerts enriched by our feeds. In a ThreatHub Feed Plus only environment, this is a very strong indicator for "deeper monitoring of hosts" and might trigger forensic analytics for the top hosts in that list.
- **Threat Intelligence Security incidents by Attacker:** Provides security incident counts grouped by attacker addresses.

TI Confidence Comparison - Open Source vs ArcSight-curated

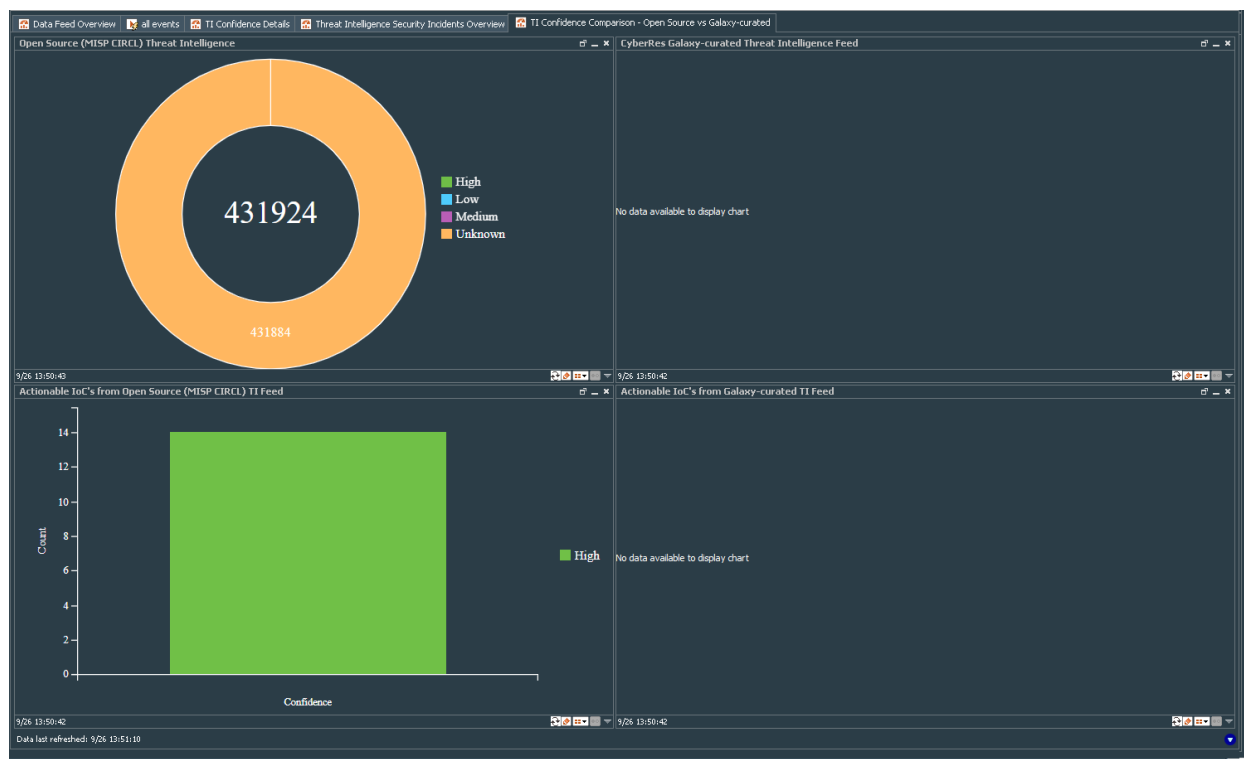
This chart displays the level of confidence, and thus the potential for automation and resource savings in your security operations practice are much better in the curated-only feed (middle donut - ArcSight Curated TI Feed/ThreatHub Feed Plus Only). This high level of confidence is a direct indicator of potential false positive rates (wasted resources) and potential for automation (resource savings). Open source feeds, due to their nature and how they are created and delivered, have a much higher level of ambiguity and a higher level of manual rework in security operations teams.

To access the TI Confidence Comparison - Open Source vs ArcSight-curated dashboard, go to **All Dashboards > ArcSight Foundation > Threat Intelligence Platform > TI Confidence Comparison - Open Source vs ArcSight-curated**.

TI Confidence Comparison Dashboard for ThreatHub Feed Plus:



TI Confidence Comparison Dashboard for ThreatHub Feed Basic:

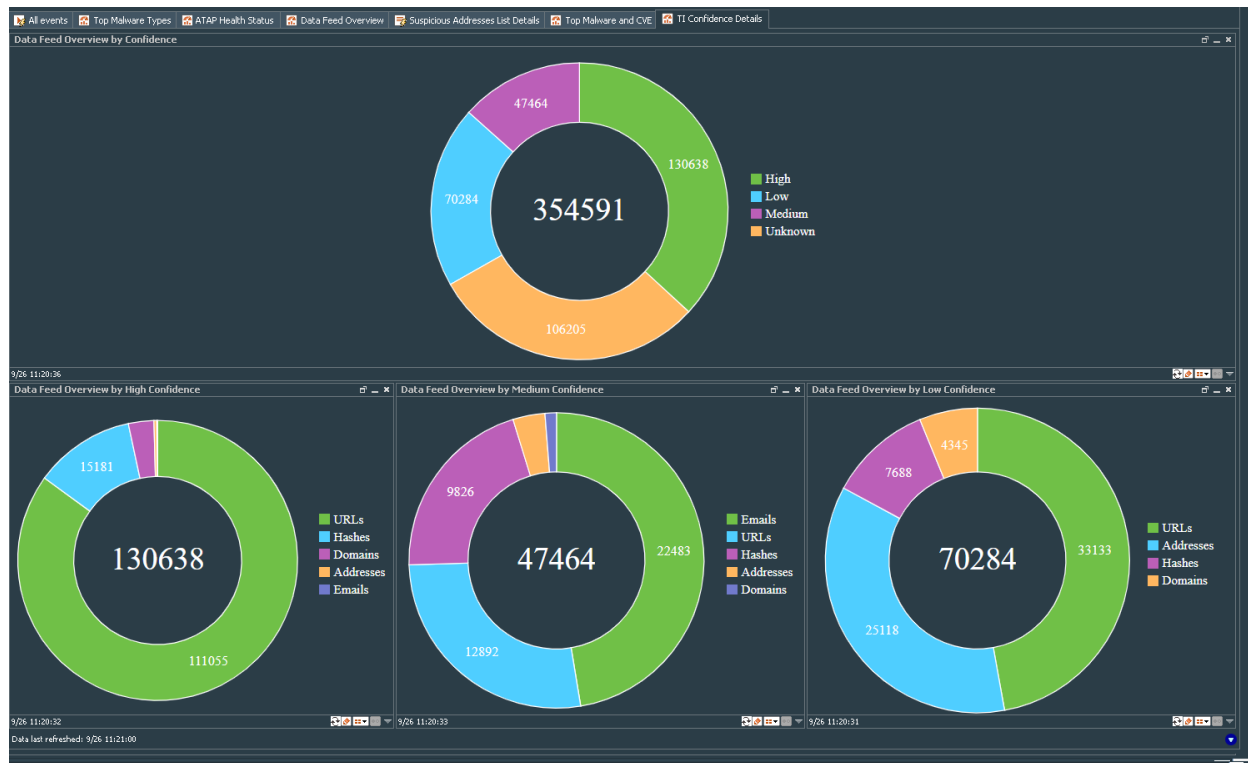


TI Confidence Details

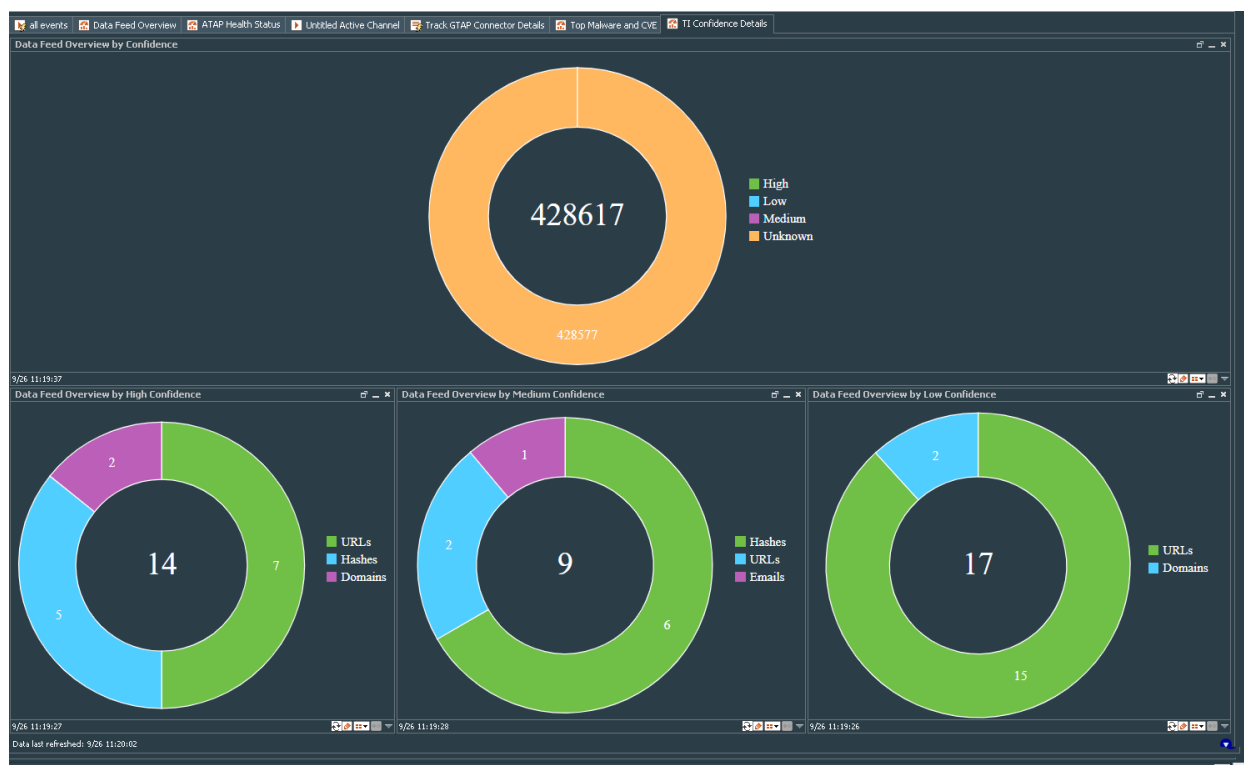
The TI Confidence Details dashboard indicates confidence based on our research whether an attribute is malicious or not. A high confidence-level indicates that we are highly confident that the attribute is malicious and can be auto-blocked.

To access the TI Confidence Details dashboard, go to **All Dashboards > ArcSight Foundation > Threat Intelligence Platform > TI Confidence Details**.

TI Confidence Details Dashboard for ThreatHub Feed Plus:



TI Confidence Details Dashboard for ThreatHub Feed Basic:



This dashboard has the following charts:

Data Feed Overview by Confidence: This dashboard displays the level of confidence, and thus the potential for automation and resource savings in your security operations practice. This high level of confidence is a direct indicator of potential false positive rates (wasted resources) and potential for automation (resource savings).

Data Feed Overview by High Confidence: This chart shows total count with high confidence in each TI data feed, which are stored in five active lists (address, domain, hash, email, and URL).

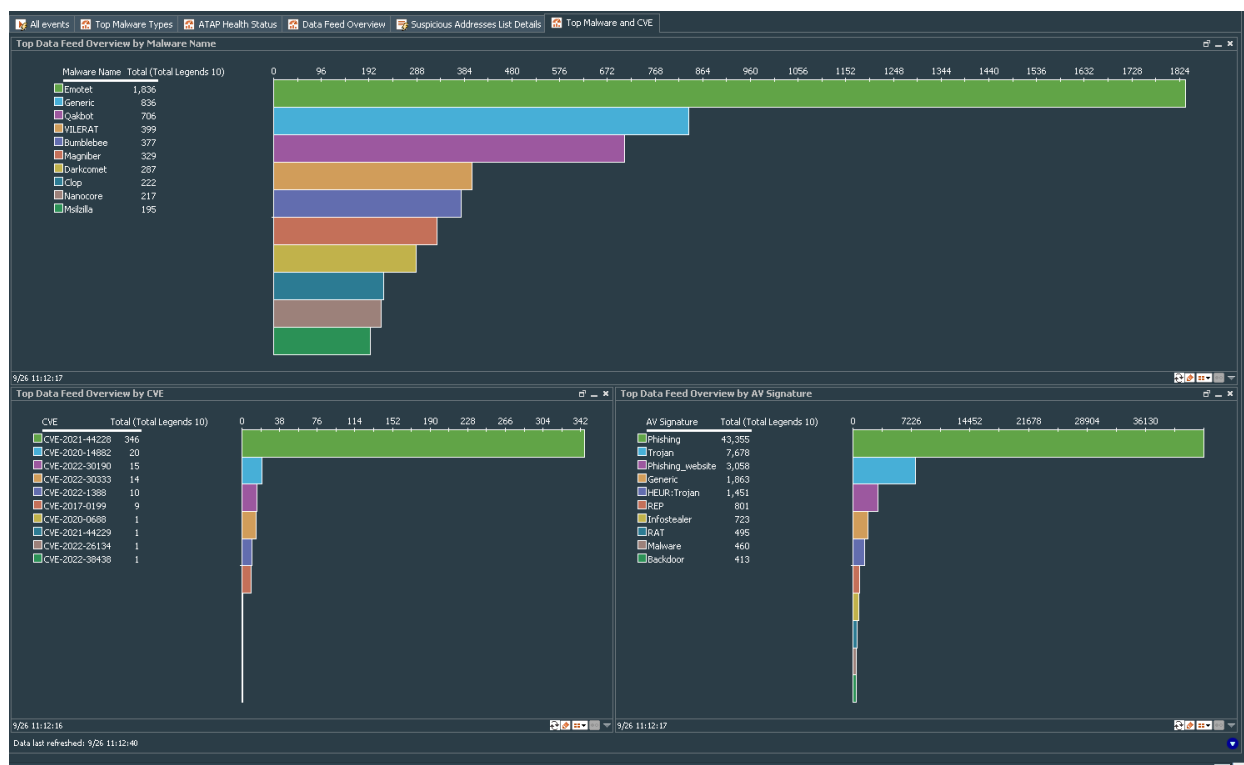
Data Feed Overview by Medium Confidence: This chart shows total count with medium confidence in each TI data feed, which are stored in five active lists (address, domain, hash, email, and URL).

Data Feed Overview by Low Confidence: This chart shows total count with low confidence in each TI data feed, which are stored in five active lists (address, domain, hash, email, and URL).

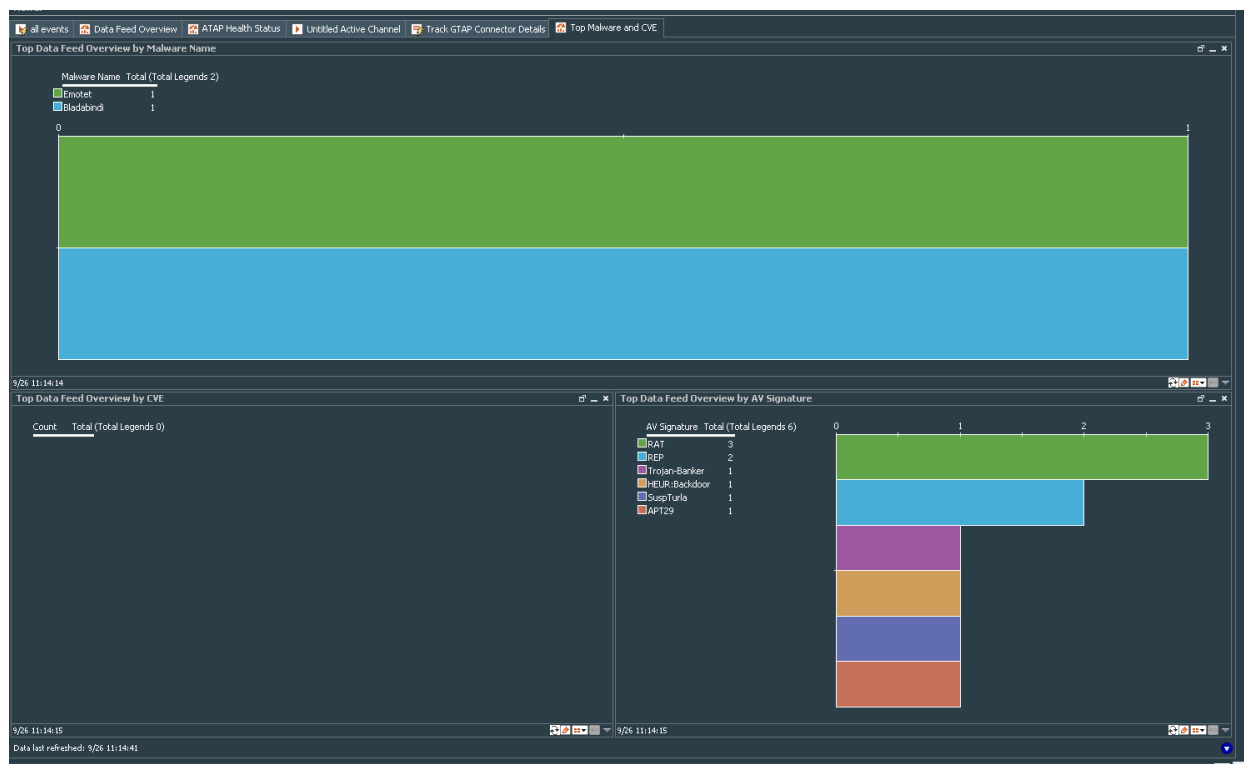
Top Malware and CVE

To access the Top Malware and CVE dashboard, go to **All Dashboards > ArcSight Foundation > Threat Intelligence Platform > Top Malware and CVE**.

Top Malware and CVE dashboard for ThreatHub Feed Plus:



Top Malware and CVE dashboard for ThreatHub Feed Basic:



This dashboard has the following charts:

Top Data Feed Overview by Malware Name: The indicators evaluate particular malware names as very active. What it means is that if you are missing these malwares in your AV protection layer, that is a high risk for your environment. Malware names with a high degree of activity are more likely to hit you and must be taken care of specifically.

Combining that information with AV update information gives you a risk indicator of "Exposedness" which can trigger priorities in particular host activity monitoring or AV mitigation activity.

Top Data Feed Overview by AV Signature: AV signature can be used as an indicator of how critical a particular missing AV updates are or findings of a particular type can be. Combine that information with AV status information to drive "Risk Conditions" and TLP status on your SOC screen.

Top Data Feed Overview by CVE: Activity in these feeds by using particular CVE gives you prioritization for your vulnerability management teams. The findings of any particular very highly active CVEs are more likely to hit you than CVEs with lower number of origins (according to the threat feed).

Top Malware Types

To access the Top Malware Types dashboard, go to **All Dashboards > ArcSight Foundation > Threat Intelligence Platform > Top Malware Types**.

This dashboard contains the following charts:

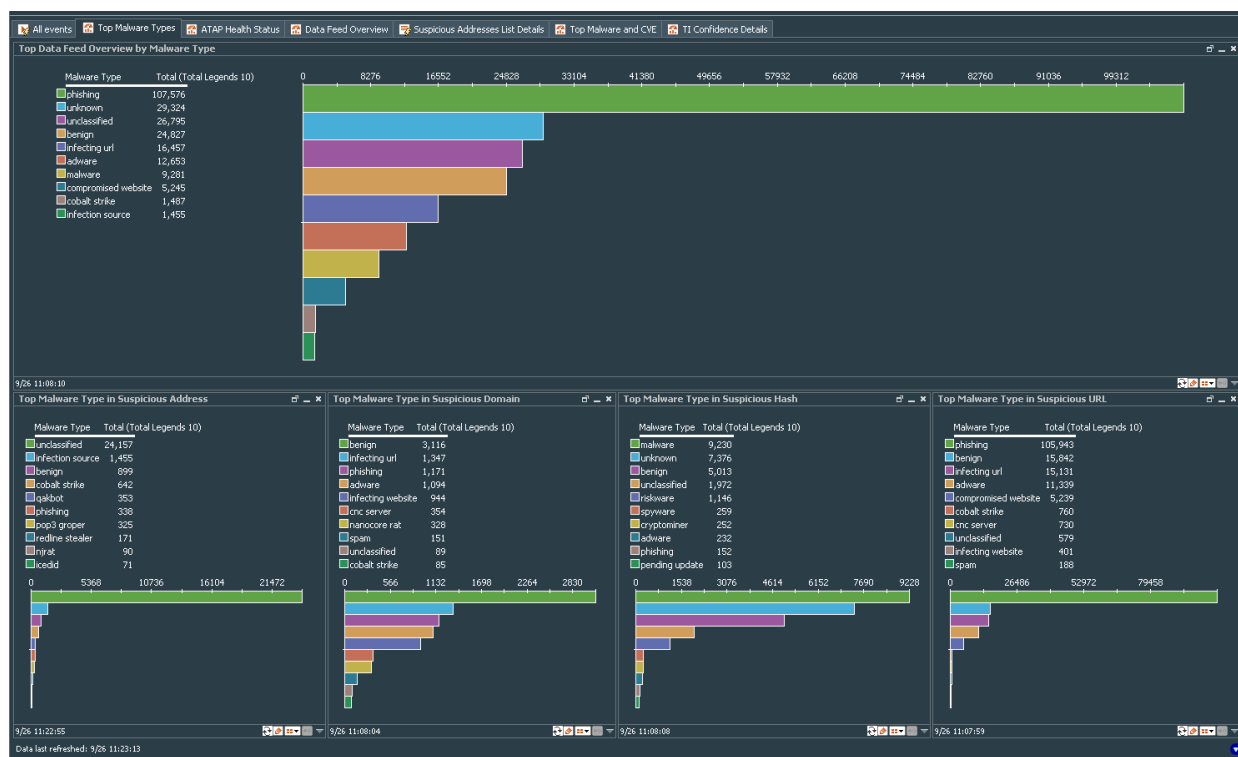
Top Malware Type in Suspicious Address: Provides the top 10 malware types in the Suspicious Address Active List.

Top Malware Type in Suspicious Domain: Provides the top 10 malware types in the Suspicious Domain Active List.

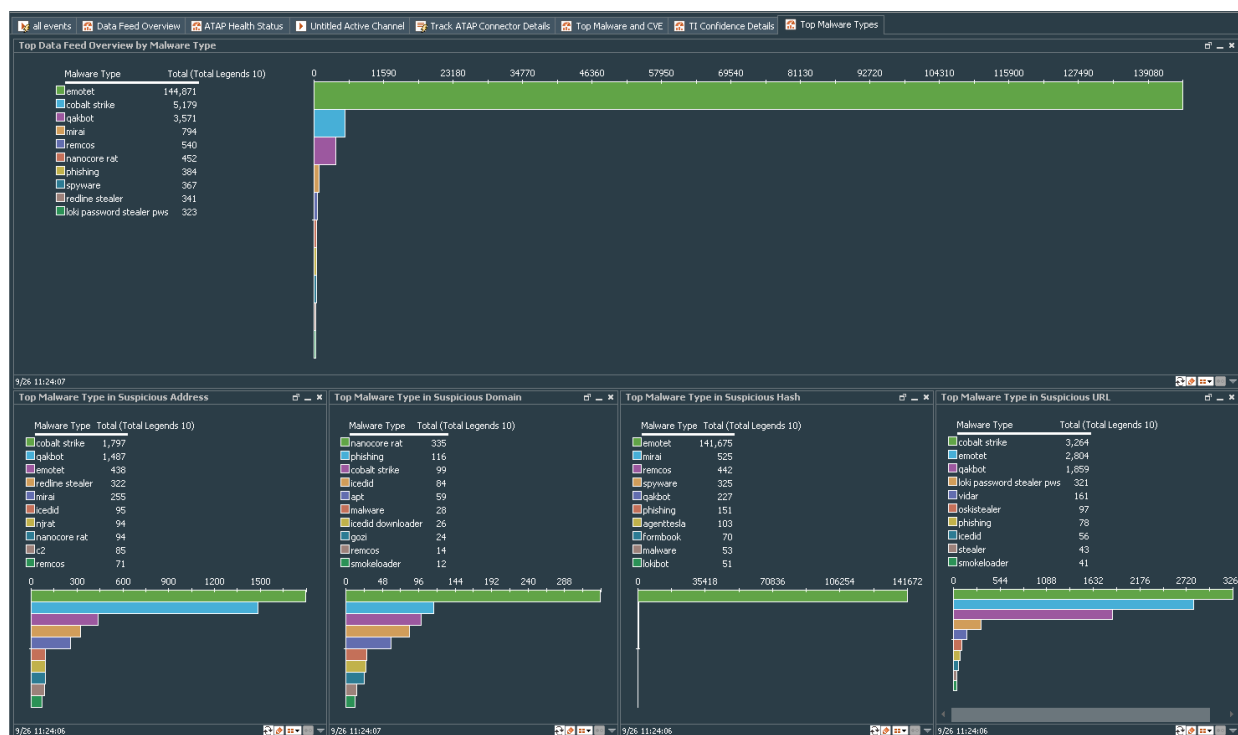
Top Malware Type in Suspicious Hash: Provides the top 10 malware types in the Suspicious Hash Active List.

Top Malware Type in Suspicious URL: Provides the top 10 malware types in the Suspicious URL Active List.

Top Malware Types Dashboard for ThreatHub Feed Plus:



Top Malware Types Dashboard for ThreatHub Feed Basic:



Upgrading ThreatHub Feed Connector

If you have an older version of ThreatHub Feed Connector installed, complete the following procedure to upgrade the connector:

1. Stop the connector.
2. Run the ThreatHub Feed Connector installer.
3. Select the location of the connector that you want to upgrade.
4. The installation wizard detects that a previous installation exists and prompts the user to upgrade.
5. Click **OK** to continue with the upgrade.
6. Click **Next**, then **Next** again to proceed with the configuration upgrade.

The upgraded connector is installed in the `$ARCSIGHT_HOME\current` folder.

During the upgrade, the original installation folder is backed up and saved as a .zip file, while the upgraded connector installation files are saved in the current folder.

7. Specify your ESM account credentials, when prompted.

The connector upgrade completes successfully.

Troubleshooting

This section has the following troubleshooting topics:

Common Causes of Error

Following are some of the typical issues that might be present:

- **Communication requirements between the connector and the service address are not met**

Check for network connectivity and verify if the ThreatHub Feed Connector can reach the ThreatHub Feed server or if the ThreatHub Feed Connector can connect to the ESM server.

- **Model import user is not properly set on ESM**

For more information, see [Setting the Model Import user on ESM](#).

- **Data import did not start.**

For more information, see [Starting and Stopping Data Import](#).

- **Content pack for “Threat Intelligence Platform” is not installed on ESM.**

For more information about installing the Threat Intelligence Platform content pack, see [ArcSight Marketplace](#).

- **Lower number or no records are downloaded**

This behavior is expected due to the default sync time span of one month. Wait until data import has been completed, which might take up to an hour. Check if you have set the time period through `agent.properties` file to a custom, very short time frame.

- **Issues with the API key**

Ensure that you pass the API key of an API-enabled user along in the Authorization header.

Errors Specific to ThreatHub Feed Plus, Basic and Custom MISP versions

Some of the errors that might appear for ThreatHub Feed Basic, Plus, and Custom MISP instances are:

ThreatHub Feed Plus and Custom MISP

License Key Entered Is Invalid

The following error messages indicate that the license key entered is invalid:

In *\$ARCSIGHT_HOME/current/logs/agent.log*:

```
[ERROR] [verifyParameters] Unable to connect to ArcSight Threat Acceleration
Server instance. <Additional data>
```

In *\$ARCSIGHT_HOME/current/logs/agentsetup.log*:

Unable to connect to ArcSight Threat Acceleration Server instance. Please provide valid information and try again.

Workaround: Verify that the license key that you have entered is valid.

Unable to Retrieve Events

The following error messages might be displayed for both Plus and Custom MISP instances of Model Import Connector in the *agent.log* file in the *\$ARCSIGHT_HOME/current/logs* folder:

```
[ERROR] [retrieveEvents] Unable to retrieve response due to <cause>
```

```
[ERROR] [retrieveEvents] <with additional information>
```

Workaround: Check the network connectivity or look for authentication issues. If the Connector is unable to reach the ThreatHub Feed server, try restarting the server.

ThreatHub Feed Basic

Following error message might be displayed for the ThreatHub Feed Connector in the *agent.log* file in the *\$ARCSIGHT_HOME/current/logs* folder.

```
[ERROR] [processATAPEvents] <with additional information>
```

Workaround: Check the network connectivity or look for authentication issues. If the Connector is unable to reach the ThreatHub Feed server, try restarting the server.

In the ESM Console

In ESM Console, look for the connector events "Data received" and "Data processed" Count=<count>" in Message field.

For ThreatHub Feed Basic version, you must see this event every 60 minutes and for ThreatHub Feed Plus and Custom MISP, you must see this event every 15 minutes. If you do not see this event, then it indicates that the Connector is not working properly.

Workaround: Check the network connectivity or look for authentication issues. If the Connector is unable to reach the ThreatHub Feed Basic server, try restarting the server.

Connector is unable to receive any events

If you had installed MISP Model Import Connector, and installed ThreatHub Feed Connector on the same machine with the **ThreatHub Feed Plus** option, the connector is unable to receive any after the installation completes.

Workaround: Clear cache from the user/agent/agentdata folder, then restart the connector. The connector will now be able to receive events and send events to destination.

Invalid Parameters Error During ThreatHub Feed Plus Installation

You might get the error message "The parameters are invalid. Do you want to Continue, while installing the ThreatHub Feed Plus version.

Workaround: Click **No** to exit installation. Verify that the API key you have entered is correct. If you do not have a valid API key, then purchase the license and get a valid API Key before proceeding to install ThreatHub Feed Plus.

Resetting Data Import

If you are unable to see updated data in active lists or if you suspect that the data is not loading properly, you can stop the connector, delete all the existing files, and then restart the connector. The connector will then load all data from the start date set in the agent.properties file.

To reload the Connector:

1. Stop the connector, if active.
2. Remove all files:
 - **Linux:** ~/ARCSIGHT_HOME/current/user/agent/agentdata
 - **Windows:** %ARCSIGHT_HOME%\current\user\agent\agentdata
3. In the ArcSight Console, go to **All Active Lists > ArcSight Foundation > Threat Intelligence Platform**. Select each of the following Active Lists, right-click, and select **Clear Entries**:

- Suspicious Domain List
- Suspicious Addresses List
- Suspicious Email List
- Suspicious Hash List
- Suspicious URL List

4. Restart the connector.

Send Documentation Feedback

If you have comments about this document, you can [contact the documentation team](#) by email. If an email client is configured on this computer, click the link above and an email window opens with the following information in the subject line:

Feedback on Administrator's Guide for ArcSight ThreatHub (ThreatHub CE 25.1)

Just add your feedback to the email and click send.

If no email client is available, copy the information above to a new message in a web mail client, and send your feedback to MFI-Documentation-Feedback@opentext.com.

We appreciate your feedback!