ThreatConnect® Release Notes

Software Version 6.7

October 12, 2022

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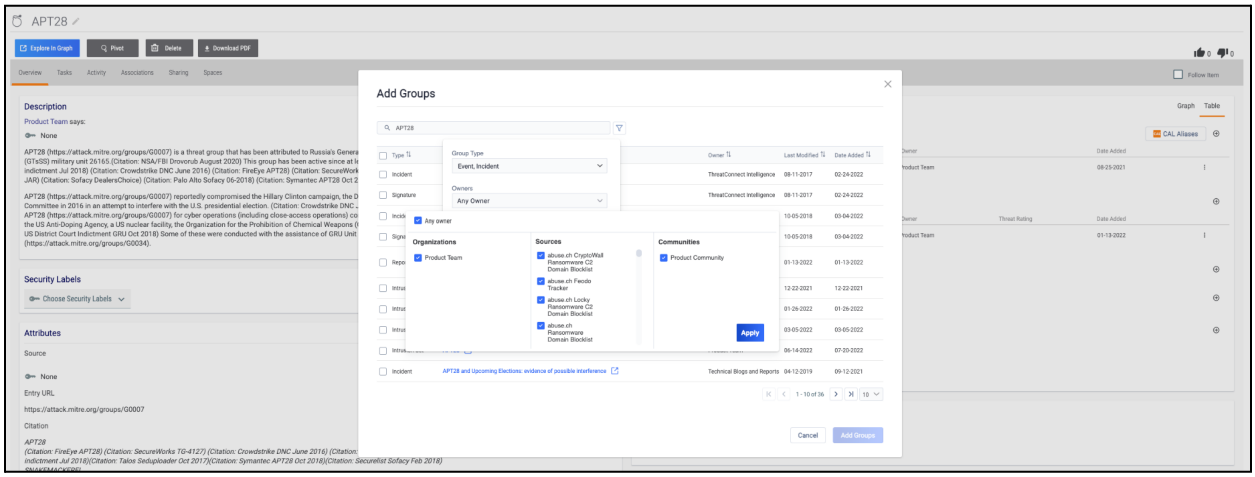
Table of Contents

New Features and Functionality

Cross-Owner Associations

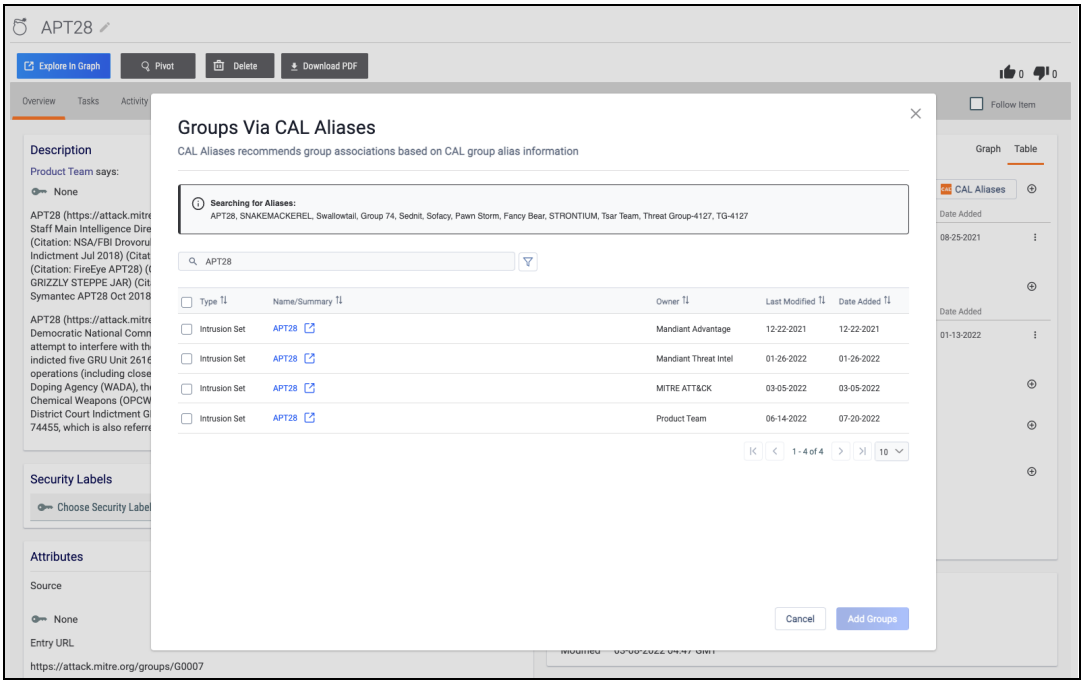
In ThreatConnect® version 6.7, we address one of the most commonly raised challenges faced by our users: the inability to associate items across owners.[1] With this feature, you will be able to associate objects from Sources, Communities, and Organizations to one another without needing to use the "Copy to my Org" functionality. We also introduce a new search and filtering capability within the "Add Associations" functionality on the **Details** screen that enables you to more easily locate objects that you want to associate.



*New search and filtering functionality available when adding associations on the **Details** screen*

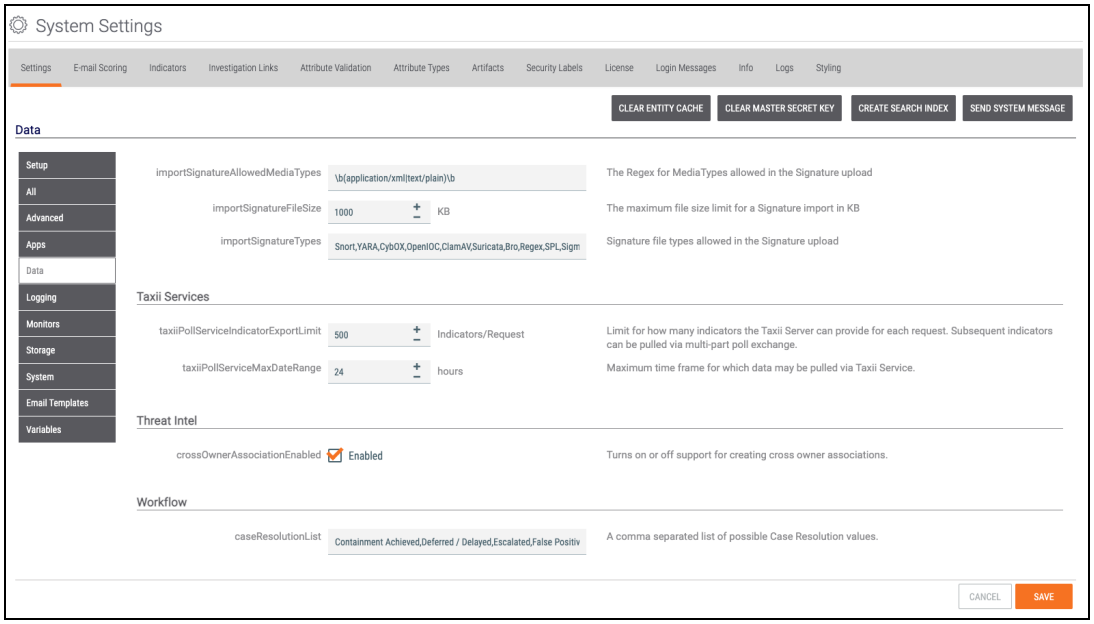
In addition to the ability to associate items across owners, we have added a new **CAL Aliases** button that can be leveraged by our users who have the Collective Analytics Layer (CAL™) turned on.[2] When clicked, this button queries your ThreatConnect instance for any Groups with a summary (name) matching one or more of the known aliases for the Group being viewed. This functionality is intended to help you identify related information faster so you can spend your time on things other than keeping track of threat actor aliases.

[1] ThreatConnect® is a registered trademark of ThreatConnect, Inc.
[2] CAL™ is a trademark of ThreatConnect, Inc.



*Use the **CAL Aliases** button to quickly identify other Groups that are likely to be related to the one being viewed*

It is important to note that the cross-owner associations functionality is turned off by default in ThreatConnect 6.7. This is because we want to make sure that the teams who decide to leverage this functionality are aware of when it is turned on and off. Some users may not want to make associations between items in different sources for one reason or another, and we want to make sure they are able to keep the separation of owners in place if they want. Those teams that choose to leverage the feature can rest assured that there are permissions checks before information is presented to a given user to make sure that users have access only to information they have permission to view.



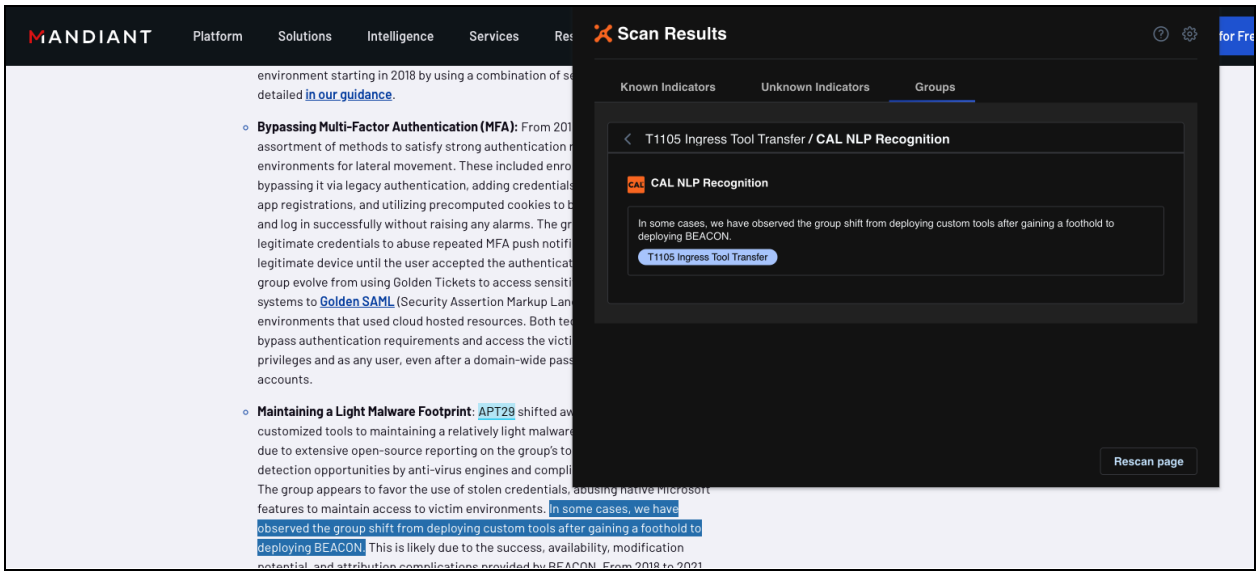
*Cross-owner associations can be enabled in the **Data** section of **System Settings** in ThreatConnect 6.7*

This is version 1 of ThreatConnect's cross-owner association functionality. Stay tuned for upcoming releases in which we iterate on this feature to make it even easier for you to see information across owners.

Browser Extension v3 - Natural-Language Processing

The newest version of the ThreatConnect Browser Extension adds some exciting new functionality around natural-language processing (NLP). With Browser Extension v3, you can scan a web page and query the CAL NLP engine for matches on MITRE ATT&CK® techniques.[3] This feature doesn't look for exact wording matches. Instead, it scans the contents of a sentence and determines whether the text is indicative of a specific ATT&CK technique, and then it serves that information to you in an updated Browser Extension UI.

[3] MITRE ATT&CK® and ATT&CK® are registered trademarks of The MITRE Corporation.

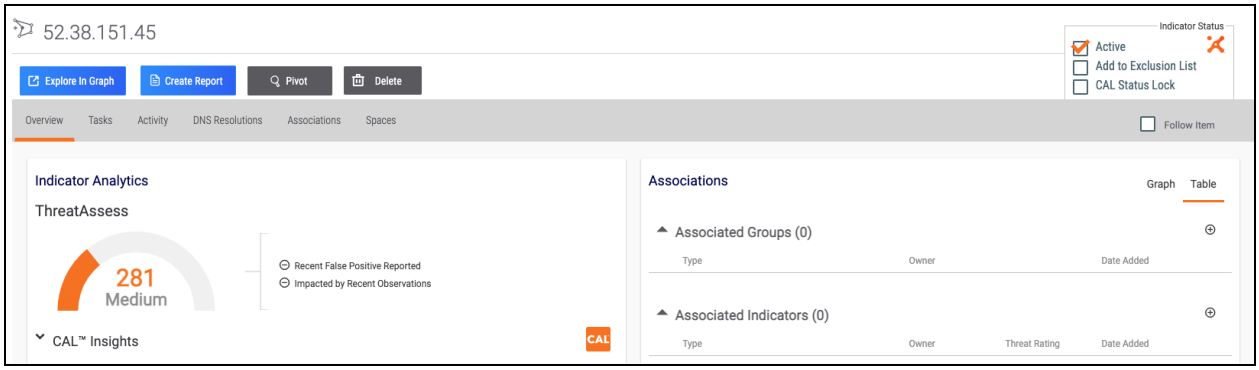


Leverage CAL's NLP to identify ATT&CK techniques not explicitly mentioned in the text of a web page

Unlike previous versions of the Browser Extension, this version does not require you to install and enable an App Service. However, it does require you to be on ThreatConnect version 6.7 or newer.

Add to the Exclusion List from the Details Screen

Also in version 6.7, System Administrators and Organization Administrators will have the option to add an Indicator to their Organization's Exclusion List directly from the Indicator's **Details** screen. This functionality has been requested by multiple customers and will make it easier for administrators to add Indicators to the Exclusion List without interrupting their flow of work.



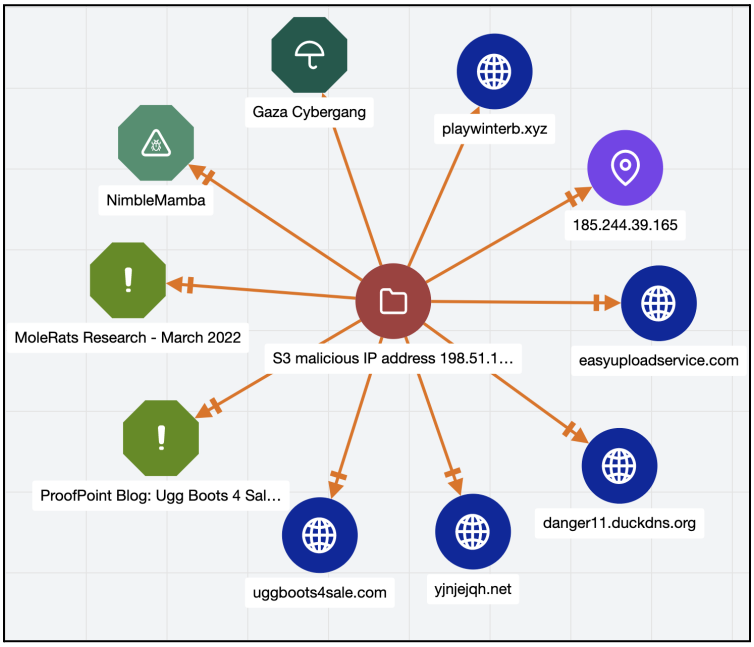
*Organization and System Administrators can add Indicators to the Organization Exclusion List from the the **Details** screen*

It is important to note that once an Indicator is added to the Exclusion List, the administrator will need to remove the item from the Exclusion List via the **Indicator Exclusions** tab of the **Organization Config** screen. The **Add to Exclusion List** checkbox cannot be cleared manually.

Visualize Cases in Threat Graph

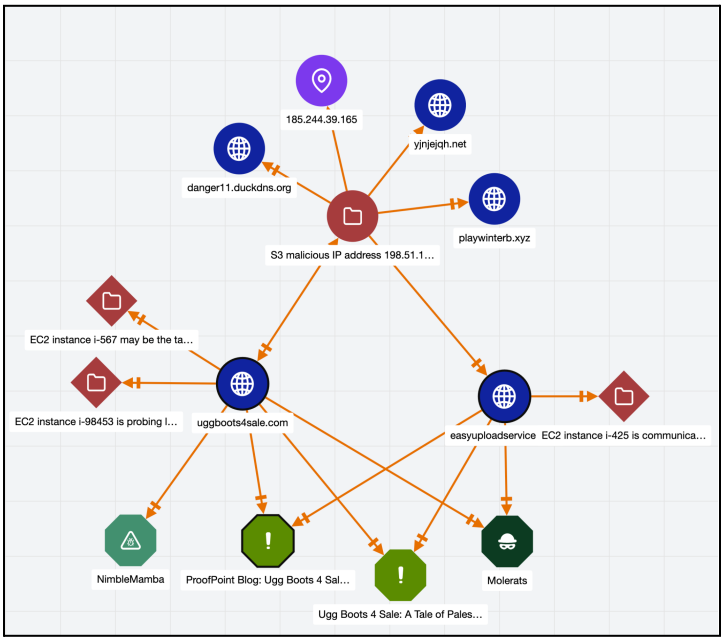
One of the most critical challenges analysts face today is the lack of a bird's-eye view of the threat landscape, forcing them to work in silos. With the 6.7 release, we bring Cases into the Threat Graph (formerly known as Graph View), providing you with a holistic view of your threats and their relationships with the Cases in your Organization.

You can now launch the Threat Graph from Workflow Cases. When you click the **Explore in Graph** button at the upper-right corner of a Case, you will be able to pivot on associated Indicators or Groups for the Case. This functionality helps you understand complex attacks and gain more contextual relationships between the IoCs, threat actors, Adversaries, Campaigns, etc., involved in the Case.



Threat Graph for a Case and its associated Indicators and Groups

Investigations can be built by pivoting on these Indicators and Groups to identify similar Cases that share them. This process helps to speed up investigations, as the action taken for one Case could be easily leveraged for other Cases.



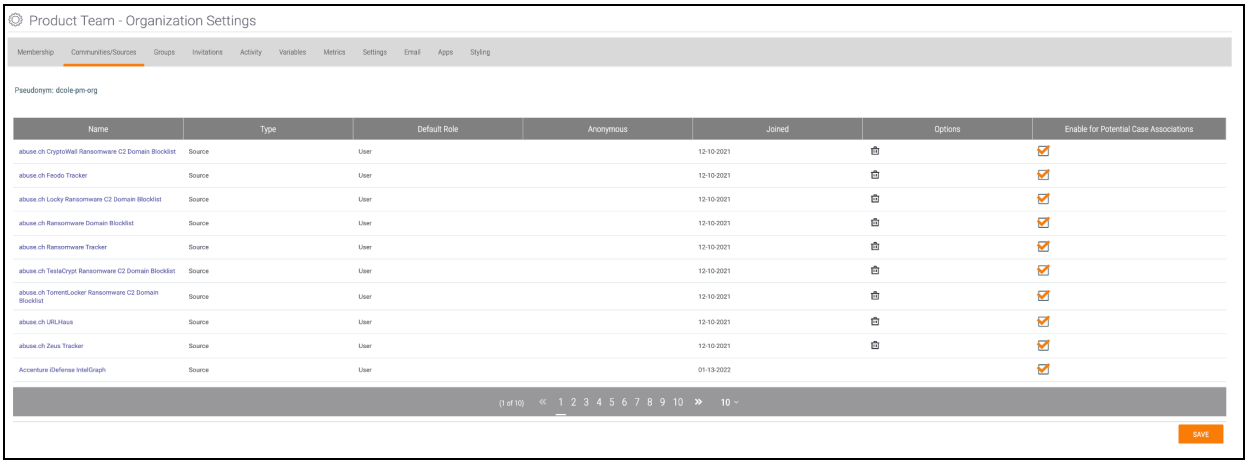
Holistic view of Cases and shared Indicators and Groups

Intel-Powered Case Associations

Due to the sensitive nature of breaches, it is crucial for analyst teams to rely heavily on external threat intelligence sources and to learn about the techniques commonly used by attackers. This information helps them respond to threats confidently and with precision. With version 6.7 of ThreatConnect, we bring in relevant potential associations from external sources to add more context to Workflow Cases.

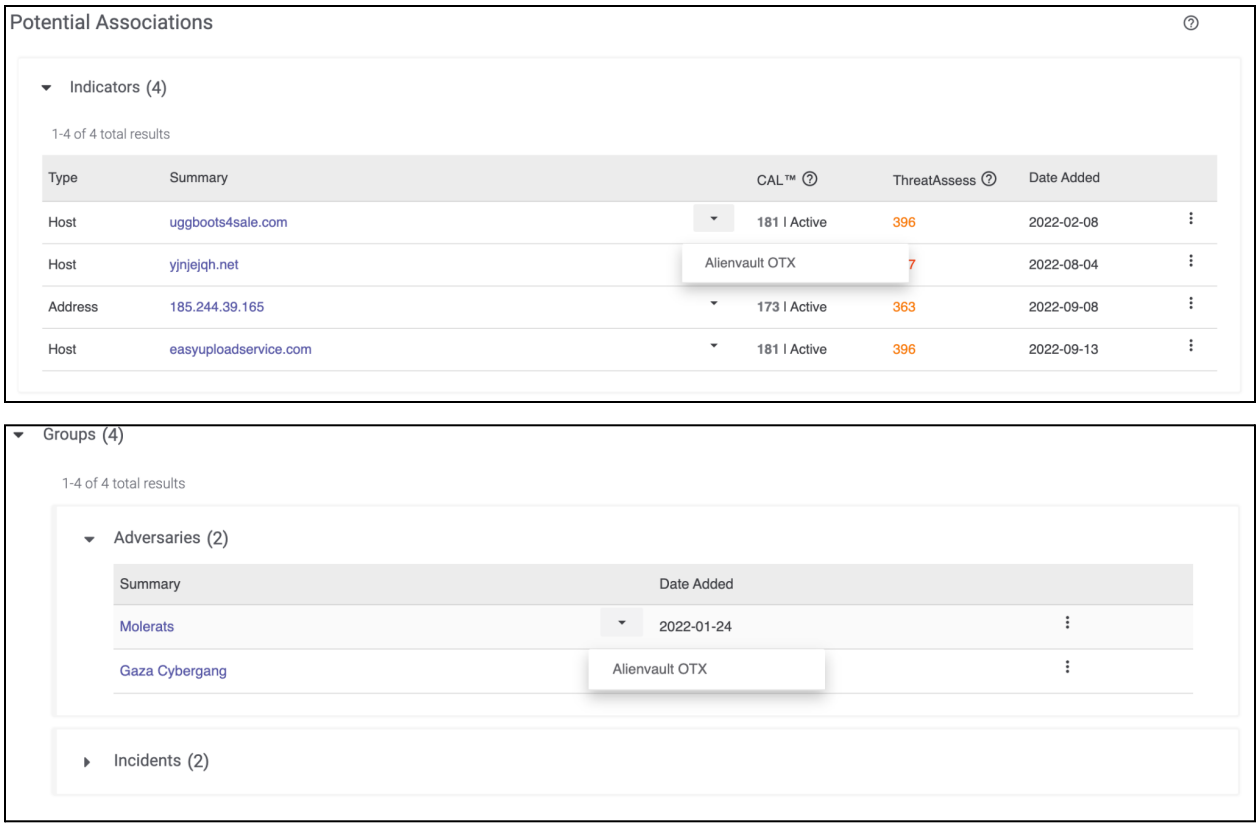
In a Workflow Case, analysts collect Indicators on the **Artifacts** card as part of their investigation. Prior to this release, only matching Indicators in your Organization and their associated Groups were suggested as potential associations. With version 6.7, users can now view matching Indicators and their related Groups from selected external feeds (Communities and Sources) on a Case's **Potential Associations** card.

Organization Administrators can enable external feeds for potential associations in Workflow on the **Communities/Sources** tab in **Organization Settings**. There is a new column—**Enable for Potential Case Associations**—from which administrators can select Communities and Sources.



Organization Administrators can select Communities and Sources for potential Case associations

When Indicators are collected as Artifacts in a Workflow Case investigation, each Indicator is automatically looked up in these selected feeds. If any of the feeds contains the Indicator, then the Indicator and its associated Groups will be added to the Case's **Potential Associations** card. However, Indicators marked as inactive or a false positive will not be included. This new functionality will help you speed up your investigations by enabling you to discover malicious Indicators involved in the Case more quickly.



Potential Case associations with Indicators and Groups seen in external sources

User Management API v1

Historically, user management has been available only through the ThreatConnect GUI, which becomes problematic when working with large numbers of users. Administrators have had to use the GUI to manually create and configure users individually, which is a very time-consuming process. To solve this problem, we have made enhancements to the existing **`v3/security/users`** endpoint to support tasks related to user account management. Using this endpoint, API users with an Organization role of Organization Administrator can retrieve all users of an Organization, retrieve a single user by user ID, create a user, update a user, and delete a user. A user must be authenticated with the instance using HMAC or Token Authentication to use this API endpoint.

Improvements

In addition to the brand new features listed above, we've made a number of improvements to the features users already know and love.

Dashboards

- When querying by Case Tasks in a datatable on a Query card, you now have options to view the Case ID, the date the Task was assigned, the Task's due date (including a timestamp), the Task's status, and the Task's assignee.

Explore In Graph

- You can now pivot on Indicators and Groups in CAL and view CAL alias information for Groups without having to install the **CAL Association Graph Service** App and configure a corresponding Service on your instance of ThreatConnect.

Playbooks

- There is a new Case Trigger that initiates Playbook execution on the following actions: Case created, Case deleted, Tag applied to Case, Tag removed from Case, Case opened, Case closed, specific resolution set, specific severity set.
- You can now hold down the **Ctrl** (Windows®) or **Command** (Mac®) key and rotate the mousewheel (or swipe down and up on a Magic Mouse®, Magic Trackpad®, or built-in Mac trackpad with one or two fingers, depending on the device's configuration) to zoom in and out in the **Playbook Designer**.[4]
- The maximum number of Playbook Workers has been increased to 146.
- The memory footprint for Delay/Resume/MEO Playbook events has been reduced to prevent out-of-memory errors when too many of these types of events are queued up.
- Organization Administrators can now create, view, and administrate Playbook Services in their own Organization.

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[4] Windows® is a registered trademark of Microsoft Corporation.
Mac®, Magic Mouse®, and Magic Trackpad® are registered trademarks of Apple, Inc.

Workflow

Task Due Dates

- When creating or editing a Workflow, you can now specify **Task** due dates in days, hours, or minutes.
- When filtering on due dates on the **Tasks** screen, you can now specify the range by date and timestamp in your time zone.
- Users and members of user groups assigned to a Task that is not completed by its due date will now receive a notification that the Task is overdue. The method of delivery of the notification (e.g., email, push notification) will depend on each user's settings in the **Notifications Center**.
- Two new filters have been added to the Tasks screen: **All Past Due Date Tasks** and My **Past Due Date Tasks**. These filters' functionality is not available in ThreatConnect 6.7.0, but will be available in an upcoming patch release.

System Settings

- The following new system settings were added:
    - **crossOwnerAssociationEnabled**: This setting enables the ability to create associations between Cases, Groups, and Indicators in a user's Organization and Groups and Indicators that exist in Communities or Sources to which they have access. It also enables Super Users to create these associations between objects in the Organizations on their instance and between those in the Communities and Sources to which they have access.
    - **excludeFromDetailsEnabled**: For Dedicated Cloud instances, this setting determines whether to allow Organization and System Administrators to add an Indicator to an Organization-level Exclusion List from the Indicator's **Details** screen. When this setting is enabled, the **Add to Exclusion List** checkbox will be displayed in the **Indicator Status** section of the **Details** screen for all Indicators.
    - **indicatorStatusLock**: This setting determines whether to prevent automated system processes, except for scheduled Threat Deprecation, from modifying the Indicator Status for all Indicators on the ThreatConnect instance. When this setting is enabled, the default Indicator Status for new Indicators will be **Active**, and the Indicator Status of Indicators in each owner will remain

constant regardless of activity affecting the Indicator Status of the same Indicators in other owners or CAL.

- The commit hash for the ThreatConnect version is now displayed under **System Settings > Settings > Information**.
- The import rule for URL Indicators has been updated to allow for TCP and file path URIs to be added as URL Indicators in ThreatConnect.

User Settings

- When on an On-Premises or Dedicated Cloud license, two new logout interval options are available on the **My Profile** screen: 8 hours and 12 hours.

Browser Extension

- The CIDR IPV6 regex was updated to identify all IPV6 CIDR blocks, including ones with compressed notation, when scanning web pages with the ThreatConnect Browser Extension.

API & Under the Hood

- On instances where cross-owner associations are enabled, v3 API users can create associations between Cases, Groups, and Indicators in their Organization and Groups and Indicators in the Communities and Sources to which they have access.

Bug Fixes

Threat Intelligence

- An issue causing a unique constraint violation to occur when copying data to a Community on some customer instances running on HANA databases has been resolved.
- An issue preventing passive-DNS functionality from being available for Hosts and Addresses in Communities and Sources has been fixed.
- An issue causing the Structured Indicator Import feature to attempt to import duplicate Indicators if the **Back** button is pressed on the **Confirm** step has been corrected.
- An issue causing the **DELETE** button not to display on the **Browse** screen for Standard Users viewing only objects in their Organization has been resolved.
- An issue causing the **DNS** and **Whois** checkboxes not to display on the **Optional Data** tab of the Unstructured Indicator Import feature on instances running ThreatConnect 6.5.*x* and 6.6.*x* has been fixed.

Playbooks

- An issue causing a mismatch between the Iterator count shown in error messages under **Execution Details** and the Iterator count shown on the Iterator Operator in the **Playbook Designer** has been fixed.
- An issue causing TCEntity objects generated by a Workflow Trigger to have an empty **value** has been resolved.
- An issue preventing the **Update Global Variable** App from saving default values in its configuration has been fixed.
- An issue preventing Playbooks from being shared via Share Tokens has been fixed.
- An issue causing a mismatch between Iterator index counts and the execution details for the Iterator has been resolved.

Workflow

- An issue causing users with a certain custom owner role configuration to experience an error when attempting to open a Workflow Case has been resolved.

Organization Administration

- An issue preventing Organizations from being deleted when they contain a Run Profile for a Playbook Trigger has been fixed.
- Previously, setting an Organization's status to **Expired** on the **Organizations** tab of the **Account Settings** screen did not automatically disable all of the user accounts in the Organization. Now the user accounts will be disabled once the status change occurs.

API & Under the Hood

- An issue causing an error when using the v3 API to assign a Case to a user group has been fixed.
- An issue preventing Tags from being deleted in a Community or Source via the **`v3/tags`** branch has been fixed.
- Batch deleting via the v2 API now works as expected.

Dependencies & Library Changes

- Red Hat® Enterprise Linux® (RHEL) version 8 is now officially supported.[5]

[5] Red Hat® Enterprise Linux® (RHEL) is a registered trademark of Red Hat, Inc.

Maintenance Releases Changelog

2023-06-22 6.7.3-M0622S [Latest]

Bug Fixes

- An issue causing duplicate key values to be created, resulting in a unique constraint error, when using the batch API to update custom Indicators has been resolved.

2023-01-20 6.7.3b

Bug Fixes

- An issue causing TQL queries to return an invalid response when configured to time out between 30 and 60 seconds was causing an application error. This issue has been resolved.
- An issue causing Management API requests for App session logs to return a **500** error instead of a **404** error when they were unable to find the log directory has been fixed.

2023-01-13 6.7.3a

Bug Fixes

- An issue causing the **cases** and **tasks** v3 API endpoints to be disabled when no additional fields were requested has been resolved.

2022-12-13 6.7.3

Dependencies & Library Changes

- PostgreSQL® version 14 is now officially supported.[6]

[6] PostgreSQL® is a registered trademark of PostgreSQL Global Development Group.

Improvements

- The maximum filename length for a File occurrence was increased to 255 characters.

Bug Fixes

- An issue causing an application error to occur in Chrome™ and Microsoft Edge™ browsers when selecting an autofill suggestion for a field in a Playbook App has been fixed.[7, 8]
- An issue causing Workflows to exhibit inconsistent behavior in saving user groups as the default assignee for a Task has been resolved.
- An issue preventing users from deleting a Community that has a TAXII™ Exchange Feed with a Job referenced in it has been fixed.[9]
- An issue causing Playbooks with an active Trigger and one or more disabled Triggers to execute via a disabled Trigger has been resolved.
- All Community members except for Banned users will now be able to view the **Community Info** screen and adjust their **Notification Options**. The tabs that are displayed and the information that is displayed on each tab depend on the user's Community role.
- An issue preventing Task completion in a Workflow Case after a selection is made from a SelectOne (Yes or No) Artifact has been fixed.
- The **Event Date** field for an Event Group no longer includes a timestamp.
- log4j™ vulnerabilities were identified and remediated.[10]
- When you delete an Organization, any Communities and Sources owned by the Organization will now be assigned to your Organization instead of to the System Organization if there is no System Organization on your instance. In this case, when you perform the delete operation, a window listing the names of the Communities and Sources to be assigned to your Organization will be displayed, and you will be able to decide whether to continue with the delete operation. This fix resolves an issue causing Communities and Sources owned by deleted Organizations to be "orphaned" and uneditable in **Account Settings** on some instances.
- The information returned by the **`createdBy`** field in the v3 API was modified to omit extraneous information.

[7] Chrome™ is a trademark of Google, Inc.
[8] Microsoft Edge™ is a trademark of Microsoft Corporation.
[9] TAXII™ is a trademark of The MITRE Corporation.

[10] log4j™ is a trademark of The Apache Software Foundation.

- Sources created via the Feed Deployer are populated and displayed without you having to log out and back in.
- An issue causing the v3 API to save Address Indicators incorrectly and prevent searches on CIDRs has been fixed.
- An issue causing an error to occur on the **Resource** field in the configuration for the **Microsoft Graph Notification Service** App Trigger has been fixed.
- An issue causing an application error to occur when starting from the **Dashboard** screen and viewing the **Details** drawer for an Indicator linked in search results in the **Search** drawer (the drawer that is displayed when you click the magnifying glass on the top navigation bar) has been resolved.
- An issue causing the **Known** column not to be displayed in the table of parsed Indicators in the **Add Indicators** window when adding Indicator associations to a Group has been fixed.

2022-11-16 6.7.2

Improvements

- A new Service App type, **FeedApiService**, allows you to use the Feed Deployer to deploy feeds as Services.

Bug Fixes

- Case sensitivity was adjusted for Indicator retrieval using the v3 API. Specifically, API calls to retrieve Address, E-mail Address, File, and Host Indicators are case insensitive; API calls to retrieve URL Indicators are case sensitive; and API calls to retrieve custom Indicators maintain case sensitivity based on the **Case Rules** configured for that Indicator type.
- An issue causing an out-of-memory error to occur when viewing the **Details** screen for a Group with a very large number of associated Indicators was fixed.
- An issue causing the installer on PostgreSQL instances to return a false **`Database test failed!`** error has been resolved.
- An issue causing double execution of Playbooks that fire when a new Document Group is created on HANA instances has been fixed.
- Previously, searching for the same data on the **Browse** screen and via the **Search** drawer yielded different results for some search phrases. The behavior on the **Search**

drawer was incorrect and sometimes resulted in a **Search Results Warning** error. The error no longer occurs, and the **Search** drawer now returns correct results.
- An issue causing use of the **addressCidr** ThreatConnect Query Language (TQL) parameter to result in an error has been resolved.
- The **Filters** menu for adding a new association from a Victim Asset to a Group now displays the correct label of **Victim Asset Type** instead of **Group Type**, and the **Date Added** and **Last Modified** fields have been removed, as they are not relevant to Victim Assets.
- An issue causing Markdown lists to render incorrectly in Task descriptions in Workflow Cases has been fixed.
- An issue causing the **Kill** option on a Playbook execution to open the execution in a separate tab instead of displaying the **Confirm Kill** Playbook window was resolved.
- The timeout threshold on all requests to OpenSearch® was increased.[11]
- An issue causing the **App Builder** (formerly **Apps**) menu option to not be displayed under **Playbooks** on the top navigation bar for users with an Organization role of App Developer was resolved.
- If a Playbook containing an Iterator Operator is designed and executed in a way that would cause an infinite loop, the infinite loop will now be prevented from occurring.
- An issue causing the v3 API to read Workflow data when the calling Organization doesn't have Workflow permissions has been resolved.

2022-10-26 6.7.1b

Bug Fixes

- An issue causing database tests to show as failed during PostgreSQL upgrade has been fixed.

2022-10-22 6.7.1a

Bug Fixes

- An issue preventing the creation of all associations when cross-owner associations are disabled was fixed.

[11] OpenSearch® is a registered trademark of Amazon Web Services.

- An issue preventing the **Add to Exclusion List** checkbox from being displayed on an Indicator's **Details** screen when this functionality has been enabled on Dedicated Cloud instances was resolved.

2022-10-19 6.7.1

Improvements

- Cross-owner associations are now fully functional across the **Associations** and **Potential Associations** cards of Workflow Cases:
    - You can now add Indicators and Groups in Communities and Sources directly to the **Associations** card of a Workflow Case by clicking the ⊕ icon in the **Indicators** or **Groups** section and selecting objects from the **Add Related Intelligence** drawer. Note that when you select an object, all copies of the object across all owners will be added to the **Associations** card.
    - When adding an Indicator or Group on the **Potential Associations** card of a Workflow Case as an association, all copies of the object across all owners will move to the **Associations** card.
    - When dissociating an Indicator or Group on the **Associations** card, all copies of the object across all owners will be removed from the **Associations** card.
    - The **Add Related Intelligence** drawer that is displayed when adding an Indicator or Group to the **Associations** card of a Workflow Case now has an **Owner** column.
    - The **Summary** cell for each Indicator and Group on the **Associations** and **Potential Associations** card now has a dropdown that displays all owners to which the object belongs. Each object is listed only one time on the card.
- **Origin Country** was added as a System Attribute to the following object types: Address, Email Address, File, Host, URL, ASN, CIDR, Mutex, Registry Key, User Agent, Document, E-mail, Event, Incident, Intrusion Set, Report, and Signature. Previously, it existed for only the following Group types: Adversary, Campaign, Malware, Threat, Tool.
- Security Labels on the System, Organization, and Community/Source level were updated to the current Traffic Light Protocol (TLP) standards: **TLP: Red**, **TLP: Amber**, **TLP: Amber + Strict**, **TLP: Green**, and **TLP: Clear**.
- A DNS resolution setting preventing certain proxies from working with the Environment Server's SSL handshake logic was removed from an embedded library.

Bug Fixes

- You can now view Workflow associations (**Associated Artifacts**, **Associated Cases**, and **Potential Associations**) on the **Associations** card of the **Details** screen for an Indicator or Group in a Community or Source.
- When viewing the **Details** drawer for an associated or potentially associated Indicator or Group in a Workflow Case via the **Details** option of the vertical ellipsis menu, the correct owner of an object, instead of "Details," is now displayed.
- An issue causing Attributes with an ampersand (**&**) in their name to be displayed incorrectly on the **Attributes** card of a Workflow Case has been fixed.
- An issue causing the **`/v3/victims`** endpoint in the v3 API to create a Victim object in the user's Organization rather than in the owner specified in the API call when using the **`?owner=`** query parameter has been resolved.
- When retrieving deleted Indicators using the **`/v2/indicators/deleted`** endpoint in the v2 API, results will now be paginated.
- An issue preventing validation errors from being displayed in the **Validations** tab of the App Builder has been fixed.