Lab Manual- Setup and Manage Azure Sentinel with Preloaded data

Prepared for:

Date: 18th Nov 2021

Prepared by:

Document Name: Lab Manual

Document Number AZLabn990

Contributor:

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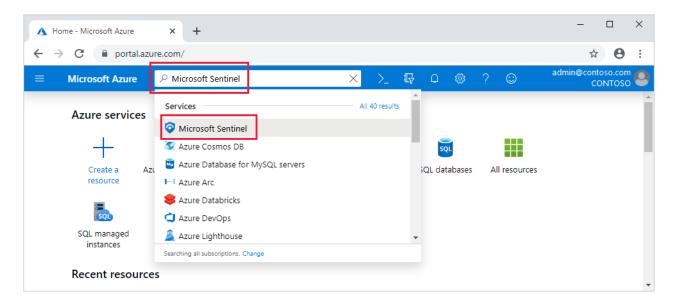
1. Introduction

Microsoft Sentinel comes with a number of connectors for Microsoft solutions, available out of the box and providing real-time integration, including Microsoft 365 Defender (formerly Microsoft Threat Protection) solutions, Microsoft 365 sources (including Office 365), Azure AD, Microsoft Defender for Identity (formerly Azure ATP), Microsoft Defender for Cloud Apps, security alerts from Microsoft Defender for Cloud, and more. In addition, there are built-in connectors to the broader security ecosystem for non-Microsoft solutions. You can also use Common Event Format (CEF), Syslog or REST-API to connect your data sources with Microsoft Sentinel In this Lab , we will understand how to create an Azure sentinel workspace and connect with Data source

2. Lab: Setup Azure Sentinel workspace

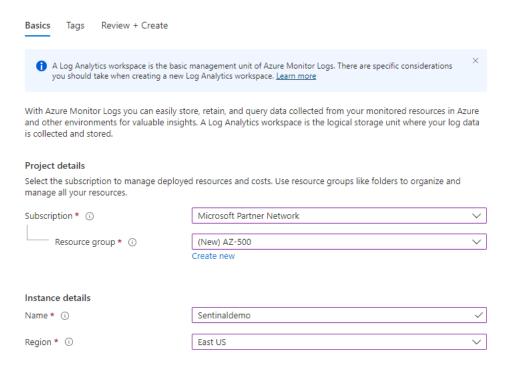
2.1 Enable Microsoft Sentinel

- 1. Sign in to the Azure portal. Make sure that the subscription in which Microsoft Sentinel is created is selected.
- 2. Search for and select Microsoft Sentinel.

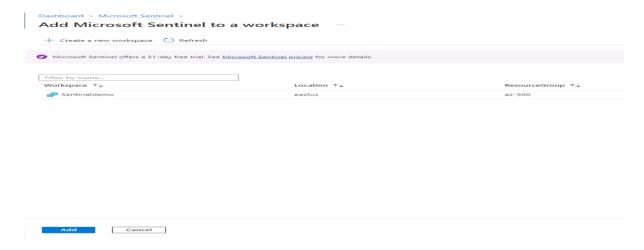


- 3. Select Add.
- 4. create a new one.

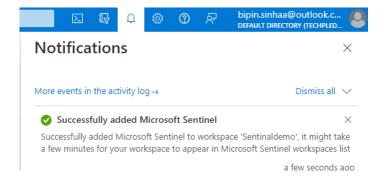
Create Log Analytics workspace



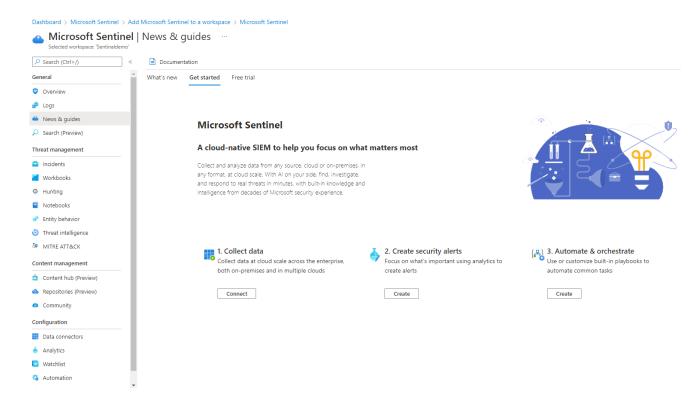
- 5. Click Review and Create
- 6. Once Created click add to On the Add Microsoft Sentinel to a workspace blade,



7. Once Created click add to On the Add Microsoft Sentinel to a workspace blade



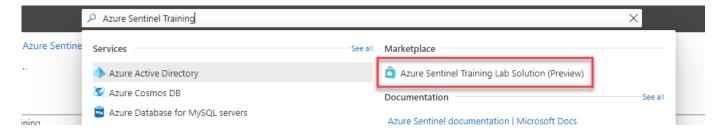
8. Once Created click add to On the Add Microsoft Sentinel to a workspace blade



3. Exercise 2: Deploy the Microsoft Sentinel Training Lab Solution

In this exercise you will deploy the Training Lab solution into your existing workspace. This will ingest pre-recorded data (~20 MBs) and create several other artifacts that will be used during the exercises.

1. In the Azure Portal, go to the top search bar and type *Microsoft Sentinel Training*. Select the **Microsoft Sentinel Training Lab Solution (Preview)** marketplace item on the right.



2. Read the solution description and click **Create** at the top.

Azure Sentinel Training Lab Solution (Preview) 🕏 😁

Azure Sentinel, Microsoft Corporation



Azure Sentinel Training Lab Solution (Preview) Add to Favorites

Azure Sentinel, Microsoft Corporation



Overview

Plans

Usage Information + Support

Reviews

Offered under Microsoft Standard Contract.

Important: This Azure Sentinel Solution is currently in public preview. This feature is provided without a service level agreement, and it's not recommended for production workloads. Certain features might not be supported or might have constrained capabilities. For more information, see Supplemental Terms of Use for Microsoft Azure Previews.

Note: There may be known issues pertaining to this Solution, please refer to them before installing.

Azure Sentinel Training Lab helps you get ramped up with Azure Sentinel providing hands-on practical experience for product features, capabilities, and scenarios. To get started, visit the training guide with step-by-step instructions.

This solution ingests pre-recorded data into your Azure Sentinel workspace and enables several artifacts to simulate scenarios that showcase various Azure Sentinel features. The size of the ingested data is around ~20 MBs, so you will see no cost related to ingestion. Pre-recorded data will land in the following custom log tables: SecurityEvent_CL, SigninLogs_CL, OfficeActivity_CL, AzureActivity_CL, Cisco_Umbrella_dns_CL.

Azure Sentinel Solutions provide a consolidated way to acquire Azure Sentinel content like data connectors, workbooks, analytics, and automations in your workspace with a single deployment step.

Parsers: 2, Workbooks: 1, Analytic Rules: 3, Hunting Queries: 2, Playbooks: 1

Learn more about Azure Sentinel | Learn more about Solutions

Media

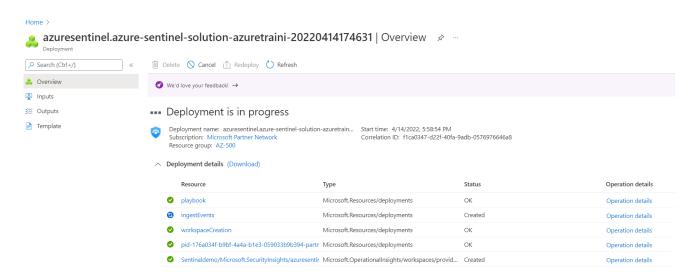


3. In the Basics tab, select the Subscription, Resource Group and Workspace that you created in Exercise 1, or the details for your existing workspace. Optionally, review the different tabs (Workbooks, Analytics, Hunting Queries, Watchlists, Playbooks) in the solution. When ready, click on **Review + create**.

Create Microsoft Sentinel Training Lab Solution (Preview)

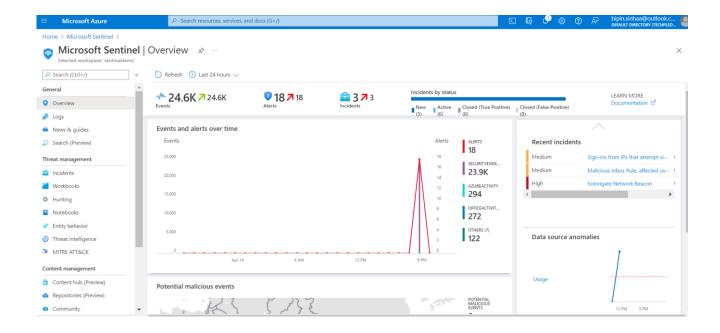
Basics	Workbooks	Analytics I	Playbooks	Review + create				
Important: This Microsoft Sentinel Solution is currently in public preview. This feature is provided without a service level agreement, and it's not recommended for production workloads. Certain features might not be supported or might have constrained capabilities. For more information, see Supplemental Terms of Use for Microsoft Azure Previews.								
Note: There may be known issues pertaining to this Solution, please refer to them before installing.								
Microsoft Sentinel Solutions provide a consolidated way to acquire Microsoft Sentinel content like data connectors, workbooks, analytics, and automations in your workspace with a single deployment step.								
Workbooks: 1, Analytic Rules: 3, Saved Searches: 2, Playbooks: 1								
Learn more about Microsoft Sentinel Learn more about Solutions								
Project details								
Select the subscription to manage deployed resources and costs. Use resource groups like folders to organize and manage all your resources.								
Subscription * (i)			Microsoft F	Partner Network				
Resource group * ①		AZ-500	~					
	Create new							
Instance details								
Workspace * (i)			Sentinalde	mo V				
Review +	- create	< Previous	Next :	Workbooks >				

4. Once validation is ok, click on **Create**. The deployment process takes **about 15 minutes**, this is because we want to make sure that all the ingested data is ready for you to use once finished.



5. Once the deployment finishes, you can go back to Microsoft Sentinel and select your workspace. In the home page you should see some ingested data and several recent incidents.

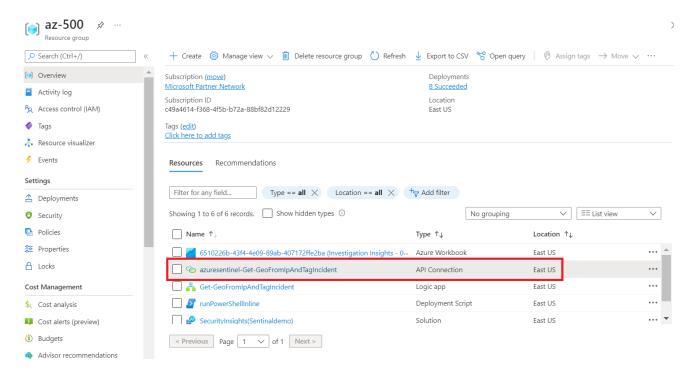
Don't worry if you don't see 3 incidents like in the screenshot below, they might take a few minutes to be raised.



4. Exercise 3: Configure Microsoft Sentinel Playbook

In this exercise, we will configure a Playbook that will be later used in the lab. This will allow the playbook to access Sentinel.

- 1. Navigate to the resource group where the lab has been deployed.
- 2. In the resource group you should see an API Connection resource called **azuresentinel-Get-GeoFromlpAndTagIncident**, click on it.



3. Click on Edi API connection under General.

Home > Microsoft Sentinel > az-500 > <u>azuresentinel-Get-GeoFromIpAndTagIncident</u> azuresentinel-Get-GeoFromlpAndTagIncident | Edit API connection API Connection Search (Ctrl+/) Edit API connection Overview Edit API connection lets you update the display name and refresh the authorization for this SaaS provider. Activity log Access control (IAM) Microsoft Sentinel Tags Display Name Diagnose and solve problems azuresentinel-Get-GeoFromlpAndTagIncident Settings Locks General

4. Click on **Authorize** and a new window will open to chose an account. Pick the user that you want to authenticate with. This should normally be the same user that you're logged in with.

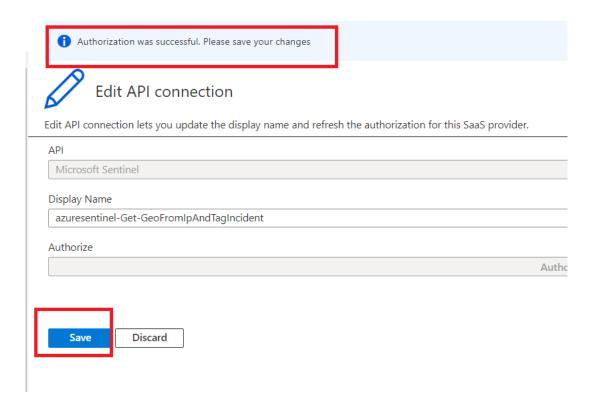
Save

Discard

5. Click Save.

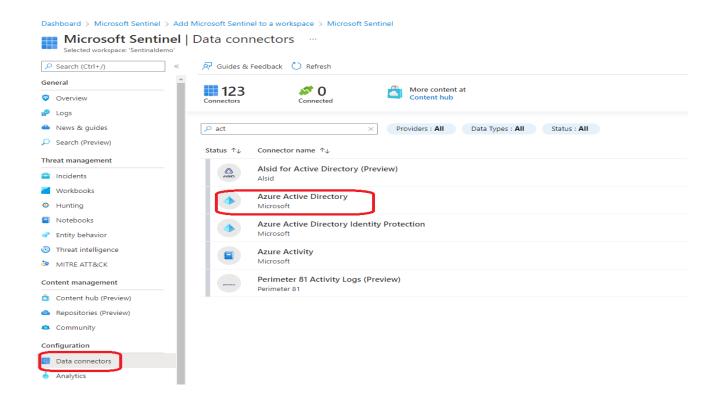
Properties

Edit API connection

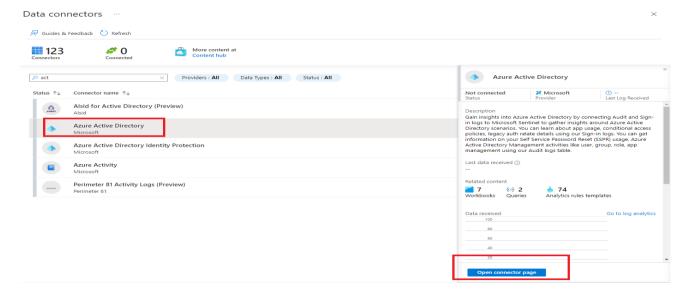


5. Connect to Active Directory

- 1. In Microsoft Sentinel, select **Data connectors** from the navigation menu.
- 2. From the data connectors gallery, select Azure Active Directory

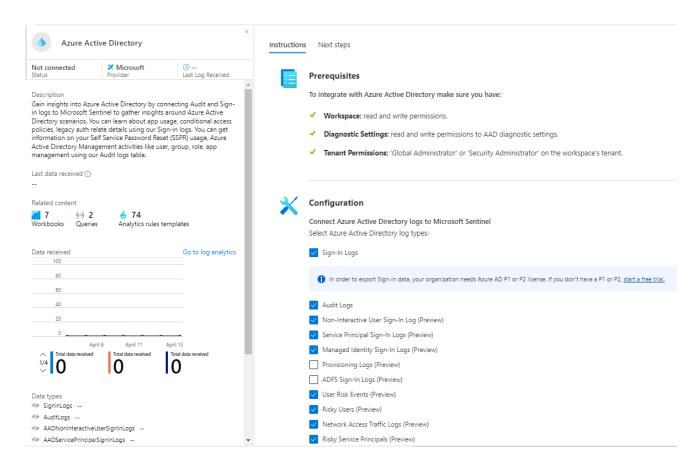


3. Then select **Open connector page**.



4. Mark the check boxes next to the log types you want to stream into Microsoft Sentinel (see below), and select **Connect**.

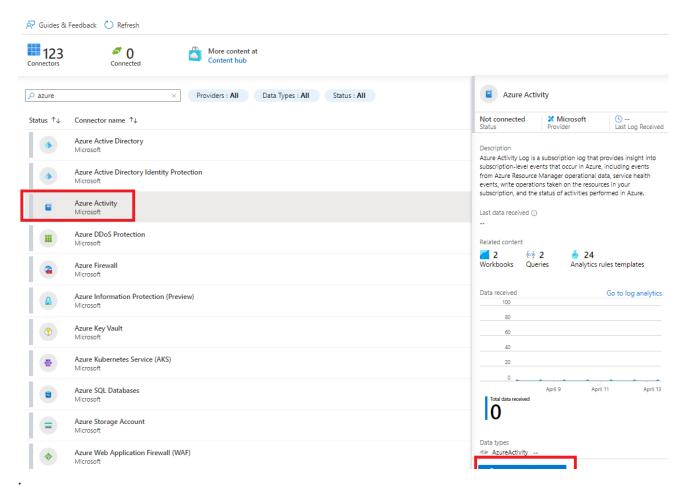
Azure Active Directory



5. Mark the check boxes next to the log types you want to stream into Microsoft Sentinel (see below), and select **Apply Changes**

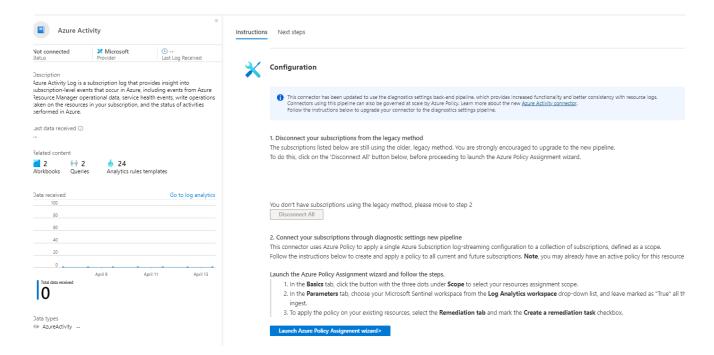
6. Connect to Azure Activity

 On the Microsoft Sentinel | Data connectors blade, review the list of available connectors, type Azure into the search bar and select the entry representing the Azure Activity connector Data connectors ··· ×

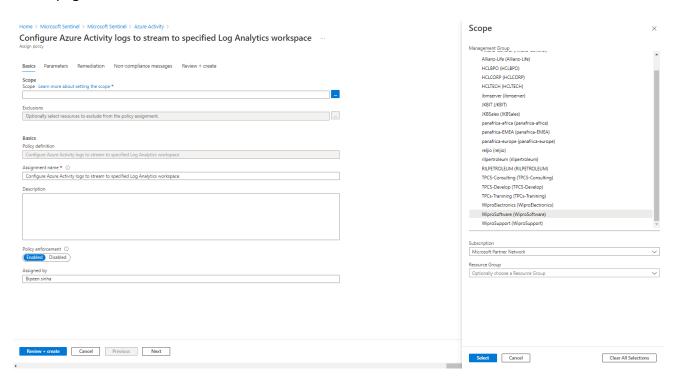


- 2. Then select **Open connector page**.
- 3. On the **Azure Activity** blade the **Instructions** tab should be selected, note the **Prerequisites** and scroll down to the **Configuration**. Take note of the information describing the connector update. Your Azure Pass subscription never used the legacy connection method so you can skip step 1 (the **Disconnect All** button will be grayed out) and proceed to step 2.
- 4. In step 2 Connect your subscriptions through diagnostic settings new pipeline, review the "Launch the Azure Policy Assignment wizard and follow the steps" instructions then click Launch the Azure Policy Assignment wizard>.

Azure Activity ...

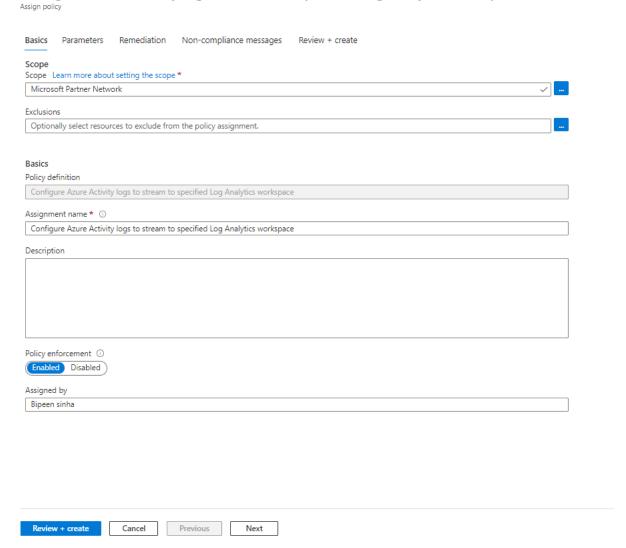


5. On the **Configure Azure Activity logs to stream to specified Log Analytics workspace** (Assign Policy page) **Basics** tab, click the **Scope elipsis (...)** button. In the **Scope** page choose your Azure Pass subscription from the drop-down subscription list and click the **Select** button at the bottom of the page.

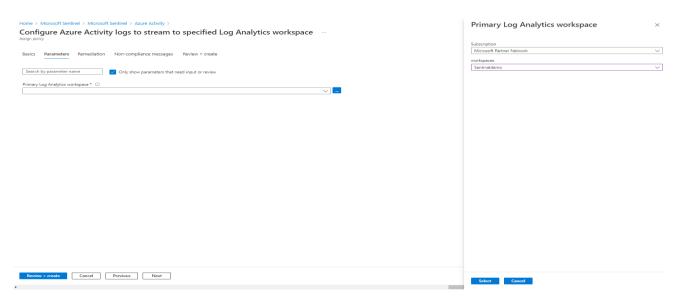


6. Click Next

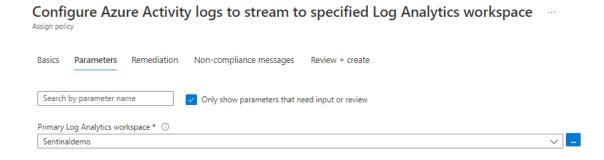
Configure Azure Activity logs to stream to specified Log Analytics workspace



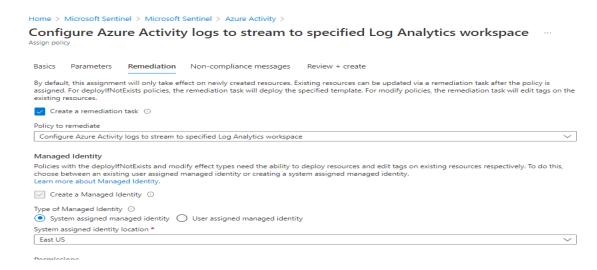
- 7. Click Next
- 8. Click the **Next** button at the bottom of the **Basics** tab to proceed to the **Parameters** tab. On the **Parameters** tab click the **Primary Log Analytics workspace elipsis (...)** button. In the **Primary Log Analytics workspace** page, make sure your Azure pass subscription is selected and use the **workspaces** drop-down to select the Log Analytics workspace you are using for Sentinel.



9. When done click the Select button at the bottom of the page and click Next



10. Click the Next button at the bottom of the Parameters tab to proceed to the Remediation tab. On the Remediation tab select the Create a remediation task checkbox. This will enable the "Configure Azure Activity logs to stream to specified Log Analytics workspace" in the Policy to remediate drop-down. In the System assigned identity location drop-down, select the region (East US for example) you selected earlier for your Log Analytics workspace.



11. Click the **Next** button at the bottom of the **Remediation** tab to proceed to the **Non-compliance message** tab. Enter a Non-compliance message if you wish (this is optional) and click the **Review** + **Create** button at the bottom of the **Non-compliance message** tab.

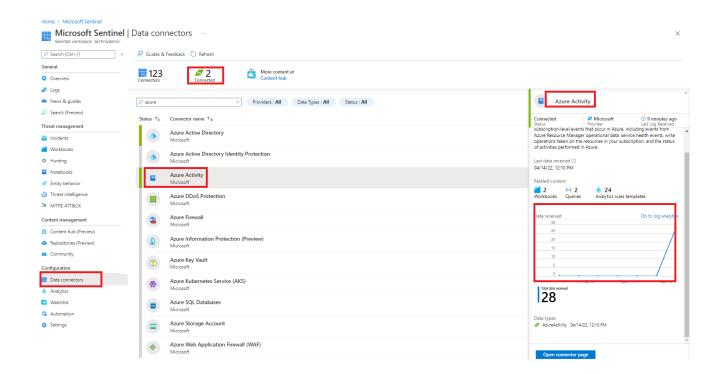
С

Home > Microsoft Sentinel > Microsoft Sentinel > Azure Activity >										
Configure Azure Activity logs to stream to specified Log Analytics workspace										
Basics Parameters Remediation	Non-compliance messages	Review + create								
Non-compliance messages help users understand why a resource is not compliant with the policy. The message will be displayed when a resource is denied and in the evaluation details of any non-compliant resource.										
Non-compliance message										
Contact Security Head		✓								

12. Click the **Create** button. You should observe three succeeded status messages: **Creating policy** assignment succeeded, Role Assignments creation succeeded, and Remediation task creation succeeded.

13. Verify that the **Azure Activity** pane displays the **Data received** graph (you might have to refresh the browser page).

Note: It may take over 15 minutes before the Status shows "Connected" and the graph displays Data received.

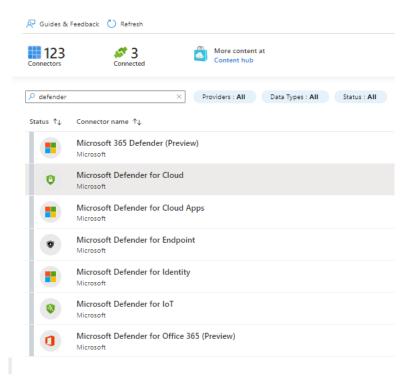


7. Enable Microsoft Defender for Cloud data connector

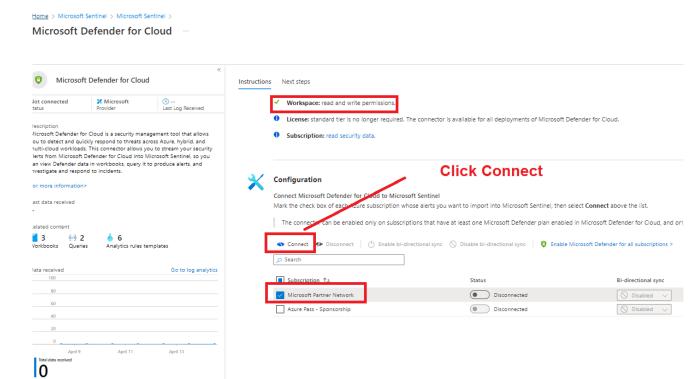
This exercise shows you how to enable the Microsoft Defender for Cloud data connector. This connector allows you to stream your security alerts from Microsoft Defender for Cloud into Microsoft Sentinel, so you can view Defender data in workbooks, query it to produce alerts, and investigate and respond to incidents.

NOTE: To do this exercise, your user must have the Security Reader role in the subscription of the logs you stream. If not done already, you will need to enable any of the Defender plans in Microsoft Defender for Cloud.

- Go to you Microsoft Sentinel workspace and select **Data** Connectors under Configuration section.
- 2. In the data connectors screen, type *defender* in the search bar, select the *Microsoft**Defender for Cloud* connector and click on Open connector page.



- 3. In the Microsoft Defender for Cloud connector page, check that your permissions are enough at the top. If you don't have the required permissions, you can continue to the next exercise.
- 4. From the list of subscriptions at the bottom of the page, select the desired **subscription** and click on **Connect**. Wait for the operation to complete.



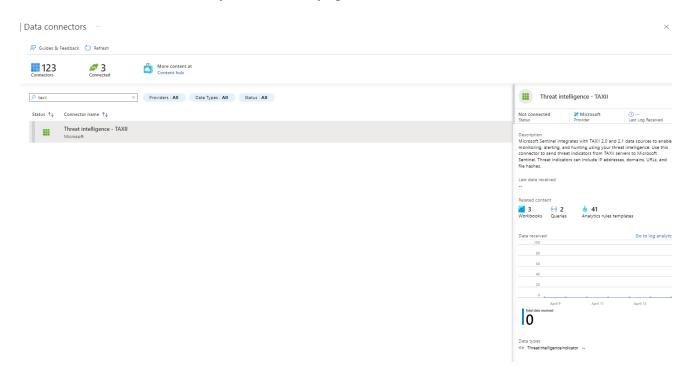
5. Click on *Next Steps* at the top of the page and explore what content is available for this connector.

8. Enable Threat Intelligence TAXII data connector

This exercise shows you how to enable the Threat Intelligence - TAXII data connector. This connector allows you to send threat indicators from TAXII servers to Microsoft Sentinel. Threat indicators can include IP addresses, domains, URLs, and file hashes.

NOTE: To do this exercise, your user must have the Security Reader role in the subscription of the logs you stream. If not done already, you will need to enable Azure Defender within Azure Security Center.

- 1. Go to you Microsoft Sentinel workspace and select *Data Connectors* under *Configuration* section.
- 2. In the data connectors screen, type *taxii* in the search bar, select the *Threat intelligence TAXII* connector and click on *Open connector page*.



- 3. In the Threat Intelligence TAXII connector page, add the following information under *Configuration* menu:
 - o Friendly name (for server): RansomwareIPs
 - o API root URL: https://limo.anomali.com/api/v1/taxii2/feeds/
 - o Collection ID: 135
 - o Username: guest
 - o Password: guest
 - o Import Indicators: All available (review all available options)
 - Polling frequency: Once an minute (review all available options)

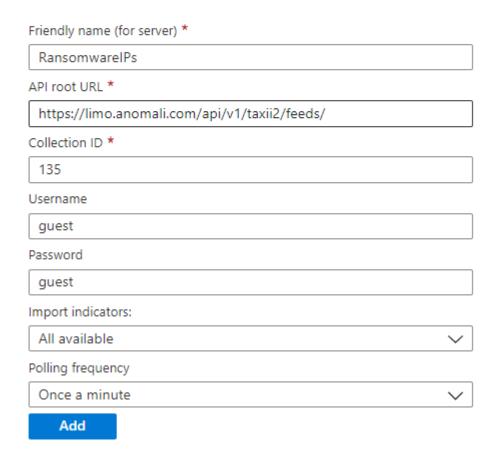


Configuration

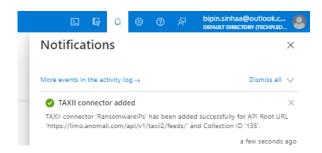
Configure TAXII servers to stream STIX 2.0 or 2.1 threat indicators to Azure Sentinel

You can connect your TAXII servers to Azure Sentinel using the built-in TAXII connector. For
the full documentation.

Enter the following information and select Add to configure your TAXII server.



4. Click Add and wait until the operation completes.



Click on Next Steps at the top of the page and explore what content is available for this
connector. In a few seconds, the ThreatIntelligenceIndicator will be populated with IOCs
from Anomali's feed



Recommended workbooks (3)



Threat Intelligence
Microsoft



Investigation Insights



Summarize by threat type

ThreatIntelligenceIndicator | where SourceSystem Iin ("SecurityGraph", "Azure Sentinel", "Microsoft Sentinel")
and ExpirationDateTime > now() | join (SigninLogs) on Sleft.NetworkIP == Sright.IPAddress | summarize count() by ThreatType

Summarize by 1 hour bins

ThreatIntelligenceIndicator | where SourceSystem Iin ("SecurityGraph", "Azure Sentinel", "Microsoft Sentinel") and TimeGenerated >= ago(1d) | summarize count()

Run



Relevant analytics templates (41)

Severity ↑↓	Name ↑↓	Rule type ↑↓	Data sources	Tactics
Medium	TI map IP entity to Azure Key Vault logs		Threat Intelligence Platforms +2 ①	impact
Medium	TI map IP entity to AppServiceHTTPLogs	Scheduled	Threat Intelligence Platforms +1 ①	mpact
Medium	TI map Domain entity to SecurityAlert	Scheduled	Threat Intelligence Platforms +3 (i)	mpact
Medium	TI map IP entity to SigninLogs	Scheduled	Threat Intelligence Platforms +3 ①	mpact
Medium	TI map IP entity to AWSCloudTrail	Scheduled	Threat Intelligence Platforms +2 ①	mpact
Medium	TI map File Hash to CommonSecurityLog Event	Scheduled	Palo Alto Networks (Firewall) +2 ①	mpact
Medium	TI map IP entity to Azure SQL Security Audit Events	Scheduled	Threat Intelligence Platforms +1 ①	impact
Medium	TI map Email entity to OfficeActivity	Scheduled	Office 365 +2 ①	mpact
Medium	TI map Domain entity to CommonSecurityLog	Scheduled	Threat Intelligence Platforms +1 ①	mpact
Medium	TI map URL entity to SecurityAlert data	Scheduled	Microsoft Defender for Cloud +3 ①	mpact
Medium	TI map URL entity to OfficeActivity data	Scheduled	Office 365 +1 ①	mpact
Medium	TI map Email entity to CommonSecurityLog	Scheduled	Palo Alto Networks (Firewall) +2 ①	mpact
Medium	ProofpointPOD - Email sender in TI list	Scheduled Scheduled	Threat Intelligence Platforms +2 ①	医血