

# Welcome to the Nashua CLOUD .NET User Group



Akumina, Nashua, NH (Online)

Tuesday, April 20<sup>th</sup>, 2021

# About me!

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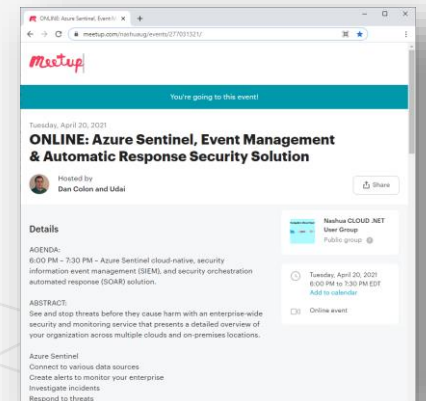
Daniel Colón

<https://www.linkedin.com/in/danielecolon/>

A+, Security+, Azure Solutions Architect Expert

New Hampshire Cloud User Group

<https://www.meetup.com/nashuaug>





# Azure Sentinel

**Security Information Event Management (SIEM) and  
Security Orchestration Automated Response (SOAR) solution**

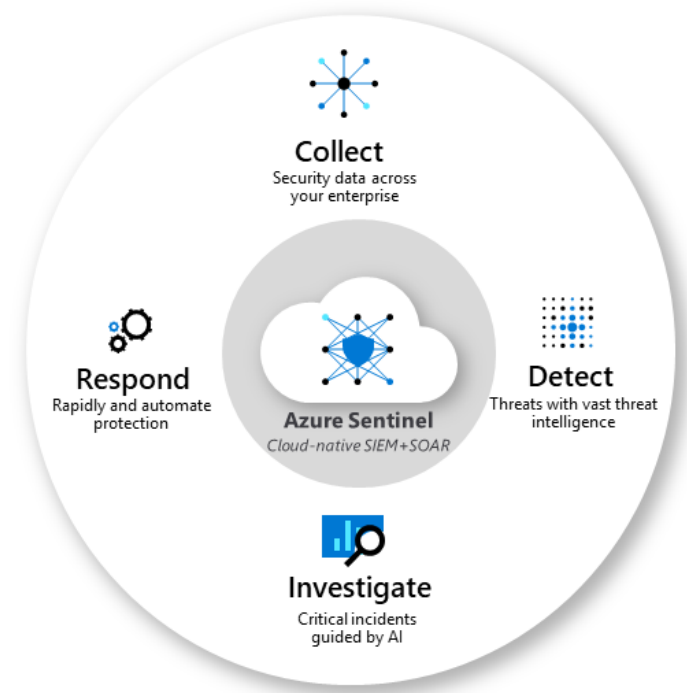
# Agenda

- Azure Sentinel
- Onboarding of Azure Sentinel
- Configuration
- Threat Management

# Azure Sentinel

Intelligent security analytics and threat intelligence in a single solution for alert detection, threat visibility, proactive hunting, and threat response.

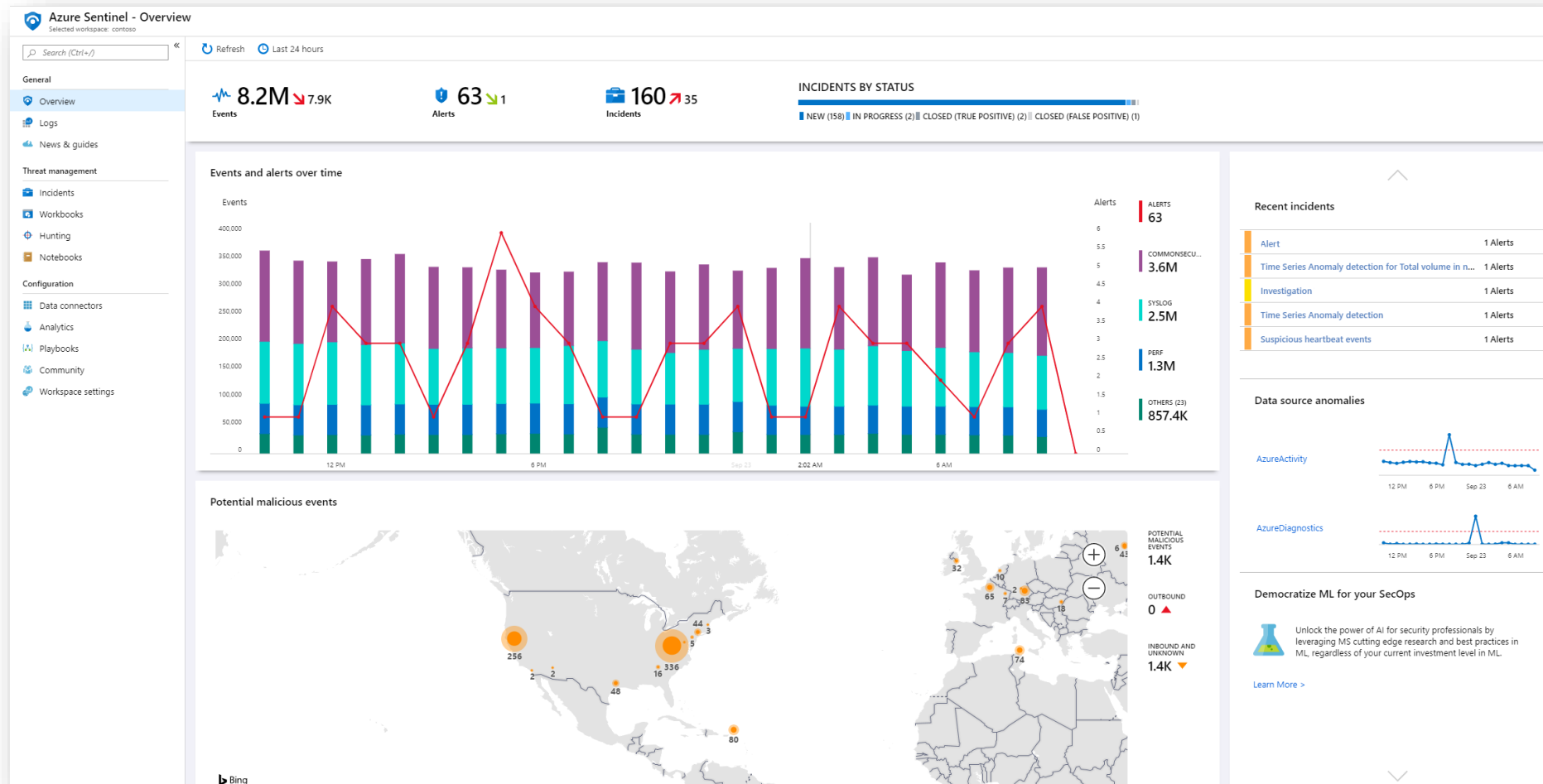
- Collect Data
- Detect
- Investigate
- Respond



# Azure Sentinel - Use Cases

- Manage incidents across cloud and on-prem
- Automatically respond to potential threats
- Detect previously undetected threats

# Azure Sentinel - Overview



<https://docs.microsoft.com/en-us/azure/sentinel/quickstart-get-visibility>

# Onboarding

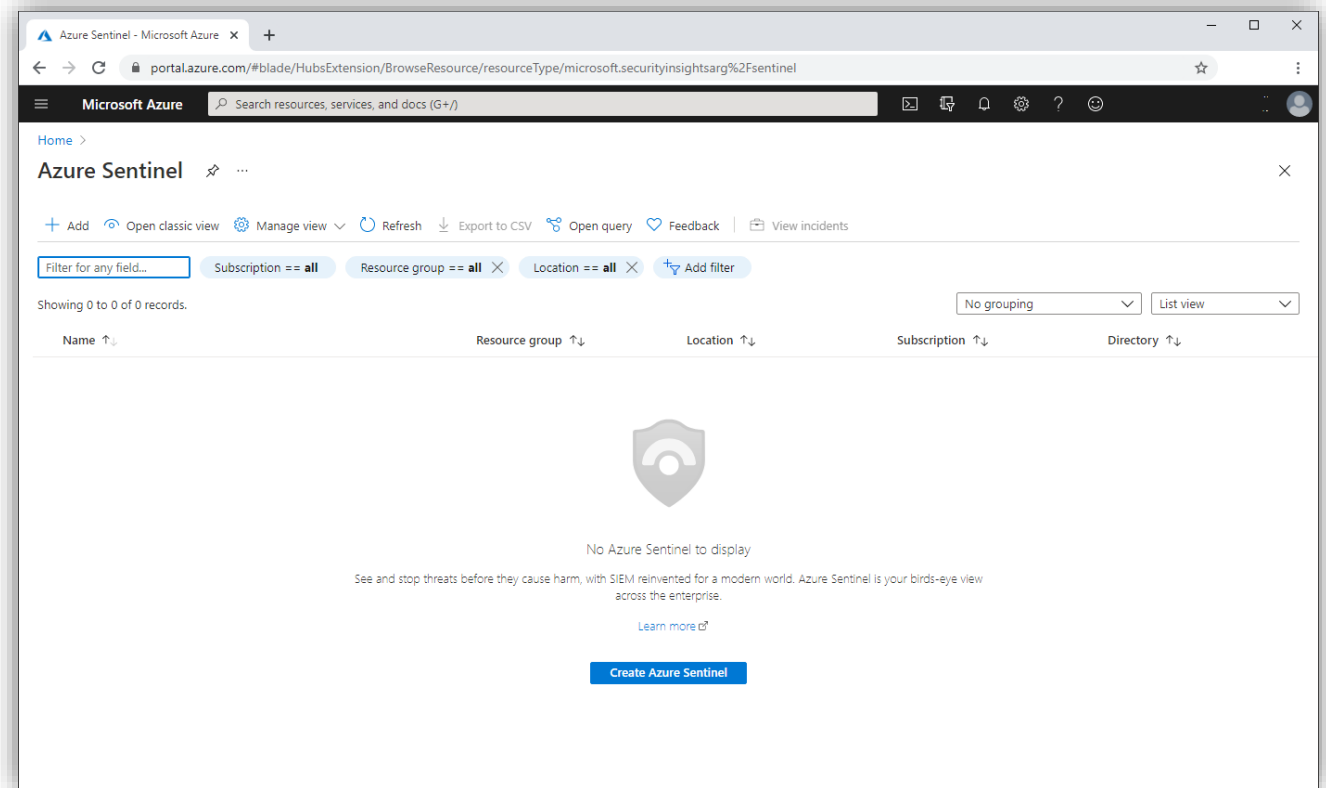
- Enable Azure Sentinel
- Create Azure Analytics Workspace
- Amount of data collected affects pricing



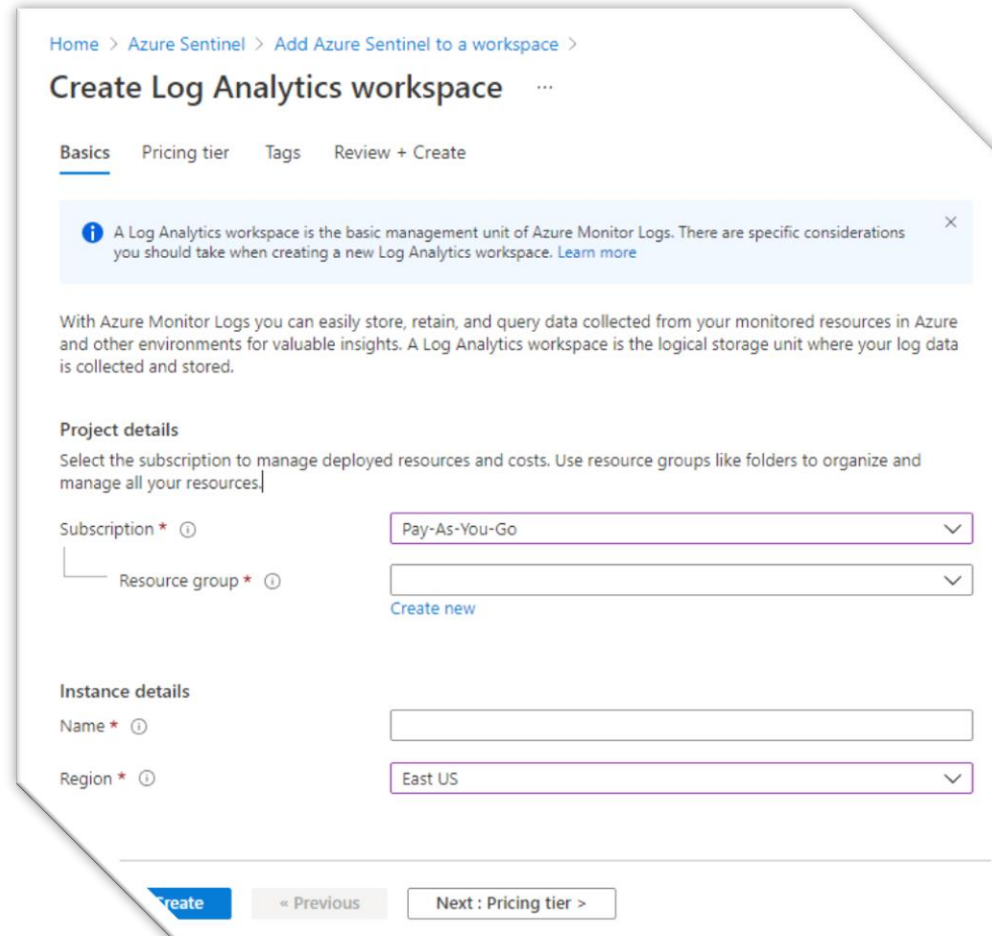
# Onboarding – Enabling Azure Sentinel

Nothing special here

Azure Sentinel needs at least one workspace to work with



# Onboarding - Azure Analytics Workspace



The screenshot shows the 'Create Log Analytics workspace' wizard in the Azure portal. The breadcrumb trail at the top is 'Home > Azure Sentinel > Add Azure Sentinel to a workspace >'. The main heading is 'Create Log Analytics workspace' with a three-dot menu icon. Below the heading are four tabs: 'Basics' (selected), 'Pricing tier', 'Tags', and 'Review + Create'. An information box states: 'A Log Analytics workspace is the basic management unit of Azure Monitor Logs. There are specific considerations you should take when creating a new Log Analytics workspace. [Learn more](#)'. A descriptive paragraph follows: 'With Azure Monitor Logs you can easily store, retain, and query data collected from your monitored resources in Azure and other environments for valuable insights. A Log Analytics workspace is the logical storage unit where your log data is collected and stored.' The 'Project details' section instructs the user to 'Select the subscription to manage deployed resources and costs. Use resource groups like folders to organize and manage all your resources.' It contains two dropdown menus: 'Subscription \*' (set to 'Pay-As-You-Go') and 'Resource group \*' (empty). A 'Create new' link is below the resource group dropdown. The 'Instance details' section has two fields: 'Name \*' (empty) and 'Region \*' (set to 'East US'). At the bottom are three buttons: 'Create' (blue), '< Previous' (disabled), and 'Next: Pricing tier >' (disabled).

Home > Azure Sentinel > Add Azure Sentinel to a workspace >

## Create Log Analytics workspace ...

**Basics** Pricing tier Tags Review + Create

**i** A Log Analytics workspace is the basic management unit of Azure Monitor Logs. There are specific considerations you should take when creating a new Log Analytics workspace. [Learn more](#)

With Azure Monitor Logs you can easily store, retain, and query data collected from your monitored resources in Azure and other environments for valuable insights. A Log Analytics workspace is the logical storage unit where your log data is collected and stored.

**Project details**

Select the subscription to manage deployed resources and costs. Use resource groups like folders to organize and manage all your resources.

Subscription \* ⓘ Pay-As-You-Go

Resource group \* ⓘ [Create new](#)

**Instance details**

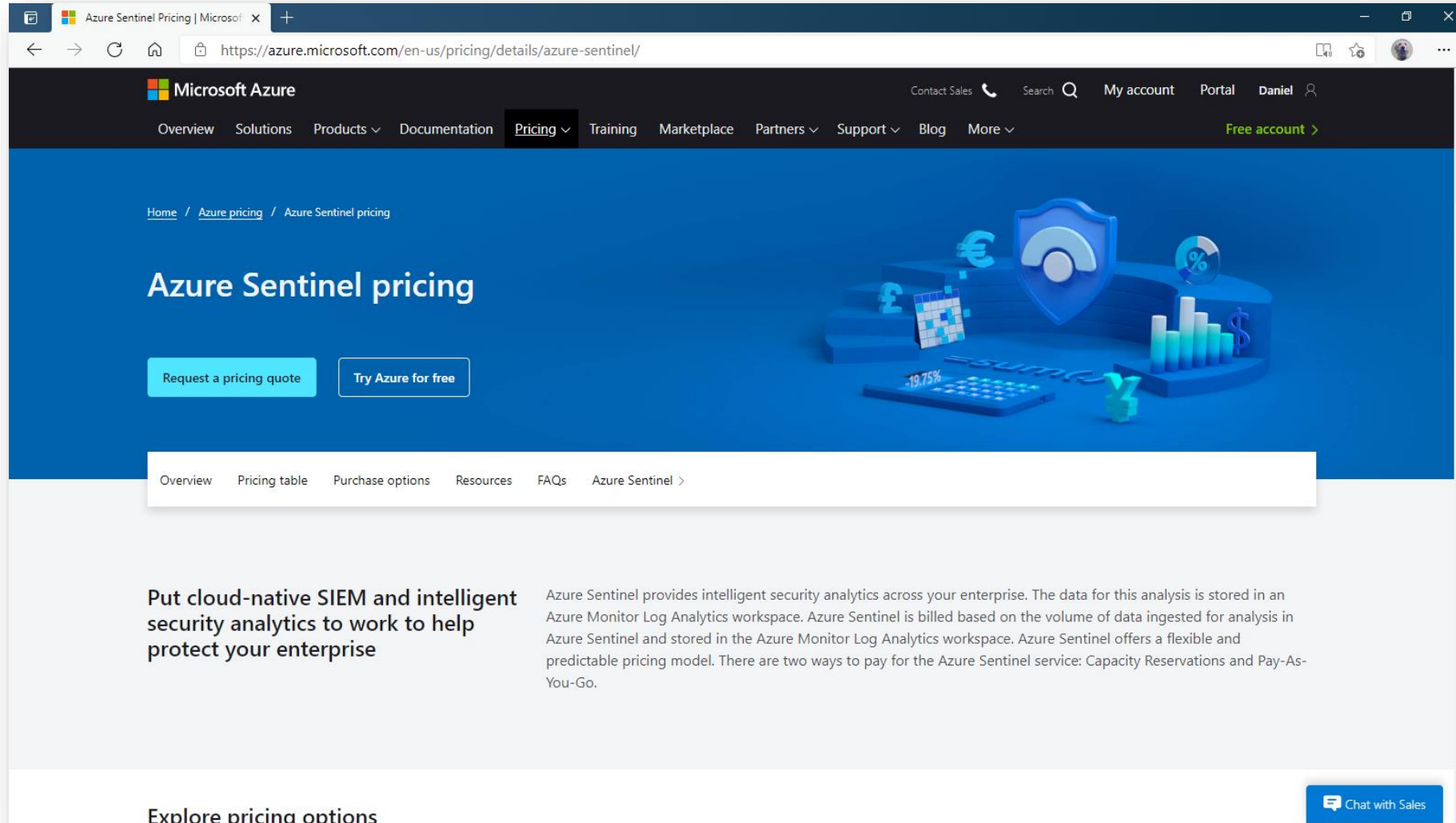
Name \* ⓘ

Region \* ⓘ East US

[Create](#) < Previous Next: Pricing tier >

<https://docs.microsoft.com/en-us/azure/azure-monitor/logs/quick-create-workspace>

# Onboarding – Cost Considerations



The screenshot shows the Microsoft Azure website's pricing page for Azure Sentinel. The browser address bar displays the URL: <https://azure.microsoft.com/en-us/pricing/details/azure-sentinel/>. The page features a dark blue header with the Microsoft Azure logo and navigation links: Overview, Solutions, Products, Documentation, Pricing (selected), Training, Marketplace, Partners, Support, Blog, and More. User account options include Contact Sales, Search, My account, Portal, and Daniel. A 'Free account' link is also present. The main content area has a blue background with the title 'Azure Sentinel pricing' and two buttons: 'Request a pricing quote' and 'Try Azure for free'. A 3D illustration of financial and security icons is on the right. A white navigation bar below the main content lists: Overview, Pricing table, Purchase options, Resources, FAQs, and Azure Sentinel. The text 'Put cloud-native SIEM and intelligent security analytics to work to help protect your enterprise' is followed by a paragraph explaining the pricing model: 'Azure Sentinel provides intelligent security analytics across your enterprise. The data for this analysis is stored in an Azure Monitor Log Analytics workspace. Azure Sentinel is billed based on the volume of data ingested for analysis in Azure Sentinel and stored in the Azure Monitor Log Analytics workspace. Azure Sentinel offers a flexible and predictable pricing model. There are two ways to pay for the Azure Sentinel service: Capacity Reservations and Pay-As-You-Go.' At the bottom, there is a link to 'Explore pricing options' and a 'Chat with Sales' button.

Microsoft Azure

Overview Solutions Products Documentation **Pricing** Training Marketplace Partners Support Blog More

Free account >

Home / Azure pricing / Azure Sentinel pricing

## Azure Sentinel pricing

Request a pricing quote Try Azure for free

Overview Pricing table Purchase options Resources FAQs Azure Sentinel >

**Put cloud-native SIEM and intelligent security analytics to work to help protect your enterprise**

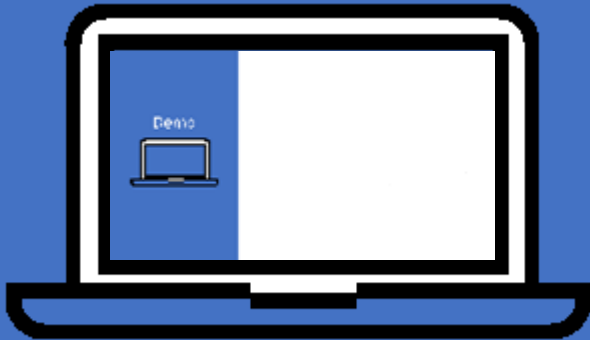
Azure Sentinel provides intelligent security analytics across your enterprise. The data for this analysis is stored in an Azure Monitor Log Analytics workspace. Azure Sentinel is billed based on the volume of data ingested for analysis in Azure Sentinel and stored in the Azure Monitor Log Analytics workspace. Azure Sentinel offers a flexible and predictable pricing model. There are two ways to pay for the Azure Sentinel service: Capacity Reservations and Pay-As-You-Go.

Explore pricing options

Chat with Sales

<https://azure.microsoft.com/en-us/pricing/details/azure-sentinel/#pricing>

Demo



Onboarding

# Configuration

Data connectors

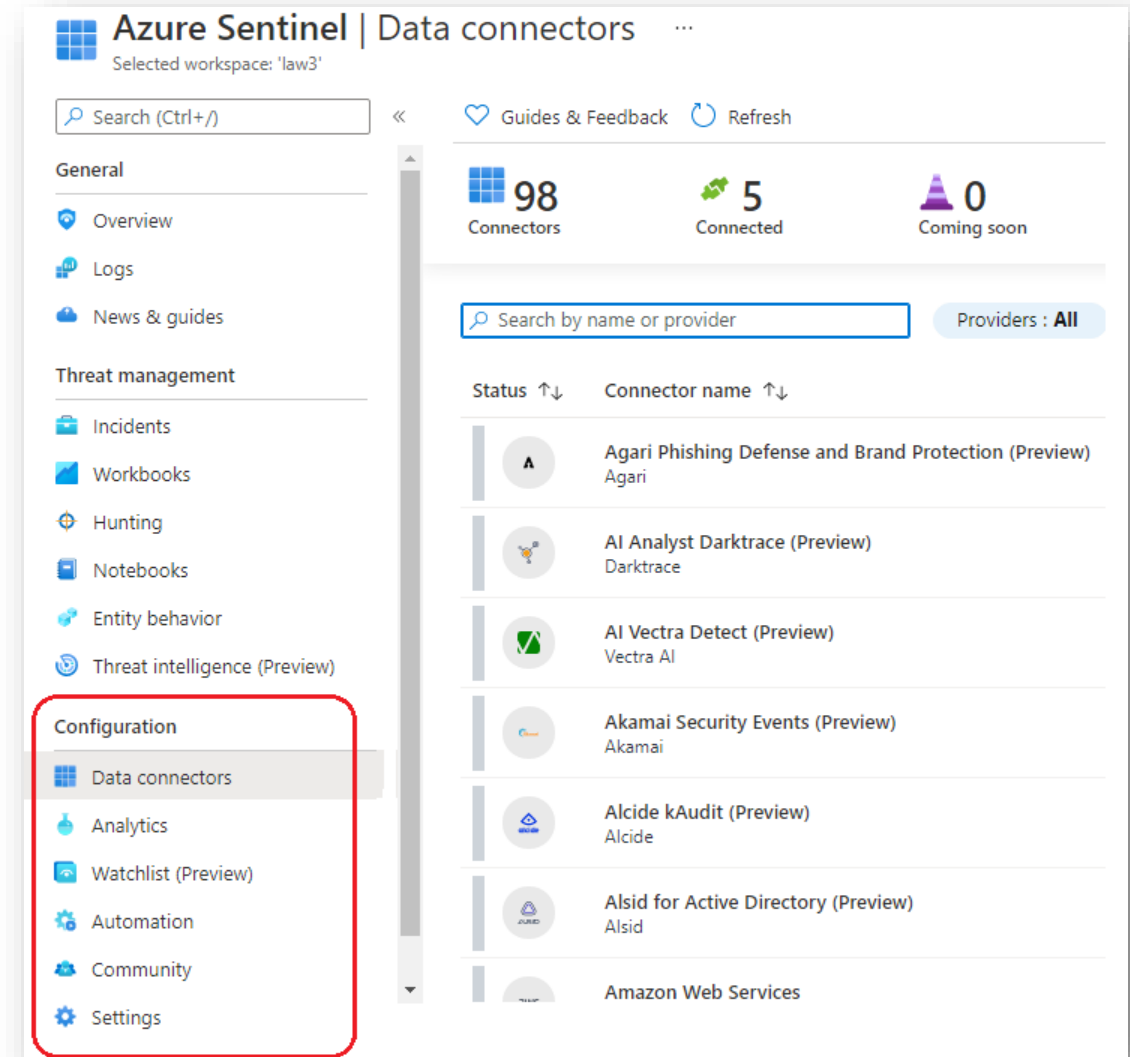
Analytics

Watchlist

Automation

Community

Settings



**Azure Sentinel | Data connectors**  
Selected workspace: 'law3'

Search (Ctrl+/)

General

- Overview
- Logs
- News & guides

Threat management

- Incidents
- Workbooks
- Hunting
- Notebooks
- Entity behavior
- Threat intelligence (Preview)

**Configuration**

- Data connectors**
- Analytics
- Watchlist (Preview)
- Automation
- Community
- Settings

Guides & Feedback Refresh

98 Connectors 5 Connected 0 Coming soon

Search by name or provider Providers : All

Status ↑↓	Connector name ↑↓
⚠	Agari Phishing Defense and Brand Protection (Preview) Agari
🔍	AI Analyst Darktrace (Preview) Darktrace
🛡	AI Vectra Detect (Preview) Vectra AI
🌐	Akamai Security Events (Preview) Akamai
🔍	Alcide kAudit (Preview) Alcide
🔍	Alsid for Active Directory (Preview) Alsid
🌐	Amazon Web Services

# Configuration – Data Connectors

The screenshot displays the Azure Sentinel 'Data connectors' page. The left sidebar shows the navigation menu with 'Data connectors' selected. The main content area shows a summary of connectors: 98 Connectors, 5 Connected, and 0 Coming soon. Below this is a table of connectors with columns for Status, Connector name, and Provider. The connectors listed are Azure Active Directory, Azure Active Directory Identity Protection, Azure Activity, Office 365, and Security Events. A detailed view of the Azure Active Directory connector is shown on the right, including its description, last data received timestamp (04/20/21, 02:02 PM), and a line graph of data received over time. The graph shows data received from April 11 to April 18, with a peak around April 11. The total data received is 1.08 K.

Status	Connector name	Provider
Connected	Azure Active Directory	Microsoft
Connected	Azure Active Directory Identity Protection	Microsoft
Connected	Azure Activity	Microsoft
Connected	Office 365	Microsoft
Connected	Security Events	Microsoft

**Azure Active Directory**

Connected Status | Microsoft Provider | 15 minutes ago Last Log Received

Description: Gain insights into Azure Active Directory by connecting Audit and Sign-in logs to Azure Sentinel to gather insights around Azure Active Directory scenarios. You can learn about app usage, conditional access policies, legacy auth relate details using our Sign-in logs. You can get information on your Self Service Password Reset (SSPR) usage, Azure Active Directory Management activities like user, group, role, app management using our Audit logs table.

Last data received: 04/20/21, 02:02 PM

Related content: 7 Workbooks, 2 Queries, 38 Analytic rules templates

Data received: 1.08 K

Go to log analytics

Open connector page

<https://docs.microsoft.com/en-us/azure/azure-monitor/logs/quick-create-workspace>

# Configuration - Analytics

New Query 1\* x +

CH-LA Select scope

Run Time range : Last 24 hours Save Copy link New alert rule Export Pin to dashboard Format query

Tables Queries Filter

Search

Group by: Solution Filters: not selected

Favorites

You can add favorites by clicking on the ☆ icon

Active Directory Health Check

Azure Monitor for VMs

Azure Sentinel

Change Tracking

ContainerInsights

LogManagement

Network Performance Monitor

Security and Audit

SecurityCenterFree

Service Map

Update Management

Custom Logs

Functions

```
106 // Network security events
107 // Find Network security events reporting blocked incoming traffic.
108 AzureDiagnostics
109 | where ResourceProvider == "MICROSOFT.NETWORK"
110 | where Category == "NetworkSecurityGroupEvent"
111 | where direction_s == "In" and type_s == "block"
```

Results Chart Columns Display time (UTC+00:00) Group columns

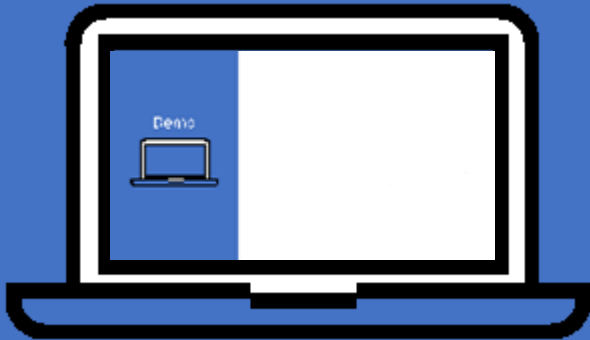
Completed. Showing partial results from the last 24 hours. 00:00:09.638 10,000+ records

Showing the first 10,000 results. [Learn more](#) on how to narrow down the result set.

TimeGenerated [UTC]	ResourceId	Category	ResourceGroup
> 8/13/2020, 3:10:29.576 PM	/SUBSCRIPTIONS/5733BCB3-7FDE-4CAF-8629-41DC15E3B352/RESO...	NetworkSecurityGroupEvent	MC_CH-CONTOSOSH360CLUSTERRG_CH-CO
> 8/13/2020, 3:10:29.576 PM	/SUBSCRIPTIONS/5733BCB3-7FDE-4CAF-8629-41DC15E3B352/RESO...	NetworkSecurityGroupEvent	MC_CH-CONTOSOSH360CLUSTERRG_CH-CO
> 8/13/2020, 3:14:46.513 PM	/SUBSCRIPTIONS/5733BCB3-7FDE-4CAF-8629-41DC15E3B352/RESO...	NetworkSecurityGroupEvent	CH-OPSRG-PRI
> 8/13/2020, 3:14:46.513 PM	/SUBSCRIPTIONS/5733BCB3-7FDE-4CAF-8629-41DC15E3B352/RESO...	NetworkSecurityGroupEvent	CH-OPSRG-PRI
> 8/13/2020, 3:12:48.904 PM	/SUBSCRIPTIONS/5733BCB3-7FDE-4CAF-8629-41DC15E3B352/RESO...	NetworkSecurityGroupEvent	CH-OPSRG-SEC
> 8/13/2020, 3:12:48.904 PM	/SUBSCRIPTIONS/5733BCB3-7FDE-4CAF-8629-41DC15E3B352/RESO...	NetworkSecurityGroupEvent	CH-OPSRG-SEC
> 8/13/2020, 3:11:17.758 PM	/SUBSCRIPTIONS/5733BCB3-7FDE-4CAF-8629-41DC15E3B352/RESO...	NetworkSecurityGroupEvent	MC_CH-CONTOSOSH360CLUSTERRG_CH-CO
> 8/13/2020, 3:11:17.758 PM	/SUBSCRIPTIONS/5733BCB3-7FDE-4CAF-8629-41DC15E3B352/RESO...	NetworkSecurityGroupEvent	MC_CH-CONTOSOSH360CLUSTERRG_CH-CO
> 8/13/2020, 3:11:43.689 PM	/SUBSCRIPTIONS/5733BCB3-7FDE-4CAF-8629-41DC15E3B352/RESO...	NetworkSecurityGroupEvent	CH-OPSRG-PRI
> 8/13/2020, 3:11:43.689 PM	/SUBSCRIPTIONS/5733BCB3-7FDE-4CAF-8629-41DC15E3B352/RESO...	NetworkSecurityGroupEvent	CH-OPSRG-PRI

Page 1 of 200 50 items per page 1 - 50 of 10000 items

# Demo



# Configuration



# Threat Management

Incidents

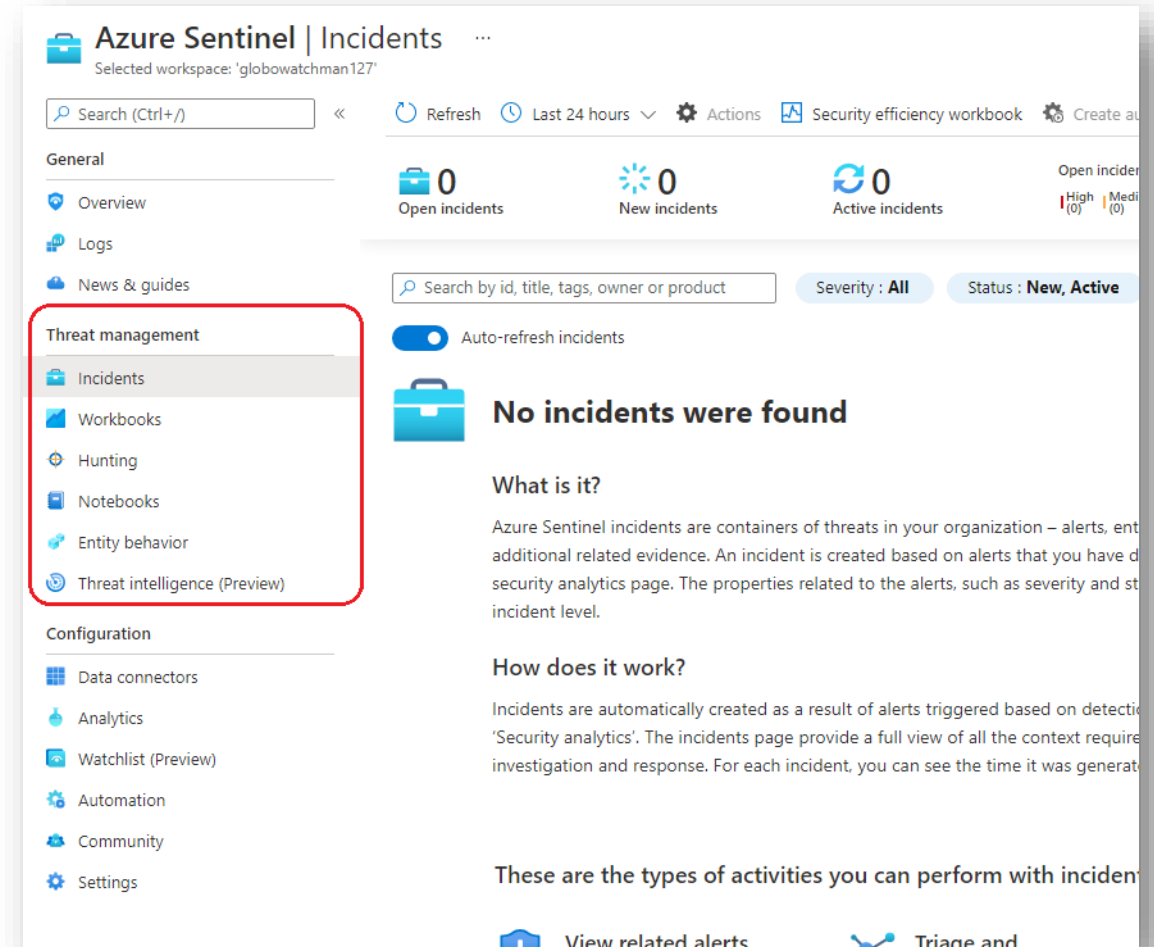
Workbooks

Hunting

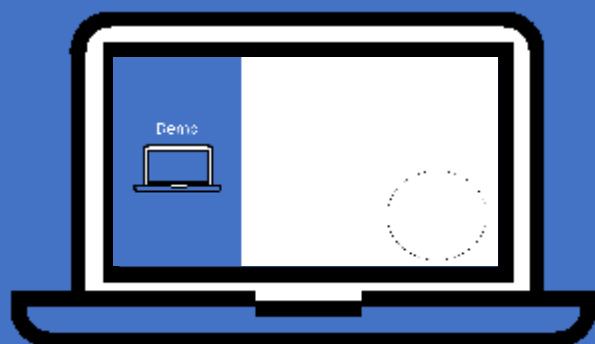
Notebooks

Entity behavior

Threat Intelligence



# Demo



# Summary

- Easy to get started
- Helps reduce the noise
- Lowers the cost through automation

# Resources

- Azure Sentinel uses Azure Logic Apps to implement automation  
<https://docs.microsoft.com/en-us/azure/sentinel/tutorial-respond-threats-playbook>
- Azure Sentinel uses Azure Monitor Log Analytics's KQL to build queries  
<https://docs.microsoft.com/en-us/azure/data-explorer/kusto/concepts/>
- Azure Sentinel GitHub Community  
<https://github.com/Azure/Azure-Sentinel>