

Analytics rules in Microsoft Sentinel

3.1 Analytics rules in Microsoft Sentinel are the **detection engine**. They continuously query ingested logs (using KQL) to identify suspicious activity, anomalies, or policy violations. When a rule's condition is met, Sentinel generates an **alert** and can group alerts into **incidents** for SOC investigation.

The screenshot shows the Microsoft Sentinel Analytics interface. On the left is a navigation pane with categories like General, Threat management, Content management, and Configuration. The main area displays a table of active rules. At the top, there's a 'Rules by severity' bar showing counts for High (1), Medium (3), Low (0), and Informational (0). Below this, a table lists rules with columns for Severity, Name, Rule type, Data sources, Tactics, Techniques, Sub techniques, and Source name. The table shows 14 rules, including ones like 'High count of connections', 'GitHub Signin Burst from Multi...', 'Cross-tenant Access Settings...', 'TI map IP entity to AWS...', 'TI map IP entity to Workday...', 'Authentication Methods Chan...', 'TI map URL entity to Cloud Ap...', 'Conditional Access - A Condi...', 'TI Map URL Entity to PaloAlto...', 'Conditional Access - Dynamic...', 'Attempts to sign in to disabled...', 'Suspicious application consent...', 'Cross-tenant Access Settings...', and 'TI Map IP Entity to SigninLogs'.

Severity	Name	Rule type	Data sources	Tactics	Techniques	Sub techniques	Source name
Medium	High count of connections	Scheduled		Initial Access	T1190		Standalone
Medium	GitHub Signin Burst from Multi...	Scheduled	Microsoft Entra ID	Credential Access	T1110		Microsoft Entra ID
Medium	Cross-tenant Access Settings...	Scheduled	Microsoft Entra ID	Initial Access +2	T1078 +2	T1078.004 +2	Microsoft Entra ID
Medium	TI map IP entity to AWS...	Scheduled	Threat Intelli...	Command And Cor	T1071		Threat Intelligence (N...
Medium	TI map IP entity to Workday(A...	Scheduled	Threat Intelli...	Command And Cor	T1071		Threat Intelligence (N...
High	Authentication Methods Chan...	Scheduled	Microsoft Ent...	Persistence	T1098		Microsoft Entra ID
Medium	TI map URL entity to Cloud Ap...	Scheduled	Microsoft De...	Command And Cor	T1071		Threat Intelligence (N...
Low	Conditional Access - A Condi...	Scheduled	Microsoft Entra ID	Defense Evasion	T1562	T1562.007	Microsoft Entra ID
Medium	TI Map URL Entity to PaloAlto ...	Scheduled	+3	Command And Cor	T1071		Threat Intelligence (N...
High	Conditional Access - Dynamic ...	Scheduled	Microsoft Entra ID	Privilege Escalation	T1484		Microsoft Entra ID
Medium	Attempts to sign in to disabled...	Scheduled	Microsoft Entra ID	Initial Access	T1078		Microsoft Entra ID
Low	Suspicious application consent...	Scheduled	Microsoft Entra ID	Credential Access	T1528		Microsoft Entra ID
Medium	Cross-tenant Access Settings ...	Scheduled	Microsoft Entra ID	Initial Access +2	T1078 +2	T1078.004 +2	Microsoft Entra ID
Medium	TI Map IP Entity to SigninLogs	Scheduled	Threat Intelli...	Command And Cor	T1071		Threat Intelligence (N...

3.1.1 We will create own query and test it

Scenario: Detect multiple failed sign-ins from the same IP within 10 minutes in Microsoft Entra ID

The screenshot shows the 'Analytics rule wizard - Create a new Scheduled rule' interface. It has tabs for General, Set rule logic, Incident settings, Automated response, and Review + create. The 'General' tab is active. It contains fields for Name (multiple failed sign-ins), Description (Detect multiple failed sign-ins from the same IP within 10 minutes:), Severity (Medium), MITRE ATT&CK (Initial Access), and Status (Enabled).

General Set rule logic Incident settings Automated response Review + create

Create an analytics rule that will run on your data to detect threats.

Analytics rule details

Name *
multiple failed sign-ins

Description
Detect multiple failed sign-ins from the same IP within 10 minutes:

Severity
Medium

MITRE ATT&CK
Initial Access

Status
Enabled

3.1.2 Enter Query (Use KQL Language) and Set Scheduling according to environment

Microsoft Azure

Upgrade

Search resources, services, and docs (G+/)

Home > Microsoft Sentinel | Analytics >

Analytics rule wizard - Create a new Scheduled rule

GeneralSet rule logicIncident settingsAutomated responseReview + create

Define the logic for your new analytics rule.

Rule query
Any time details set here will be within the scope defined below in the Query scheduling fields.

```
SigninLogs
| where ResultType == "50126" // failed login
| summarize FailedAttempts = count() by IPAddress, bin(TimeGenerated, 10m)
| where FailedAttempts > 5
```

[View query results >](#)

Alert enhancement
[Entity mapping](#)
[Custom details](#)
[Alert details](#)

Query scheduling
Run query every *
10 Minutes
Lookup data from the last *
24 Hours
Start running ⓘ

[< Previous](#) [Next : Incident settings >](#)

3.1.3 Save the Rule

Microsoft Sentinel | Analytics >

Analytics rule wizard - Create a new Scheduled rule

Validation passed.

GeneralSet rule logicIncident settingsAutomated responseReview + create

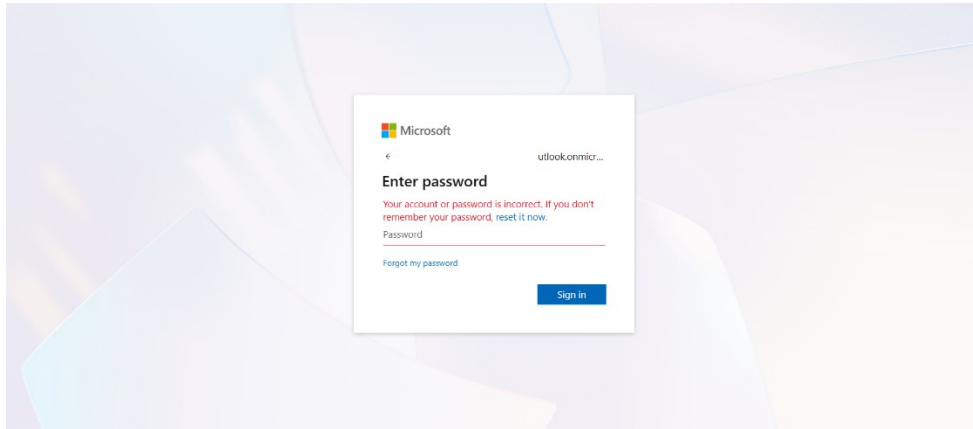
Analytics rule details
Name: multiple failed sign-ins
Description: Detect multiple failed sign-ins from the same IP within 10 minutes:
MITRE ATT&CK: Initial Access
Severity: Medium
Status: Enabled

Analytics rule settings
Rule query: SigninLogs | where ResultType == "50126" // failed login | summarize FailedAttempts = count() by IPAddress, bin(TimeGenerated, 10m) | where FailedAttempts > 5
Rule frequency: Run query every 10 minutes
Rule period: Last 24 hours data
Rule start time: Automatic
Rule threshold: Trigger alert if query returns different than 0 results
Event grouping: Group all events into a single alert
Suppression: Not configured
Entity mapping
Entity 1: Host
Identifier: HostName, Value: FailedAttempts

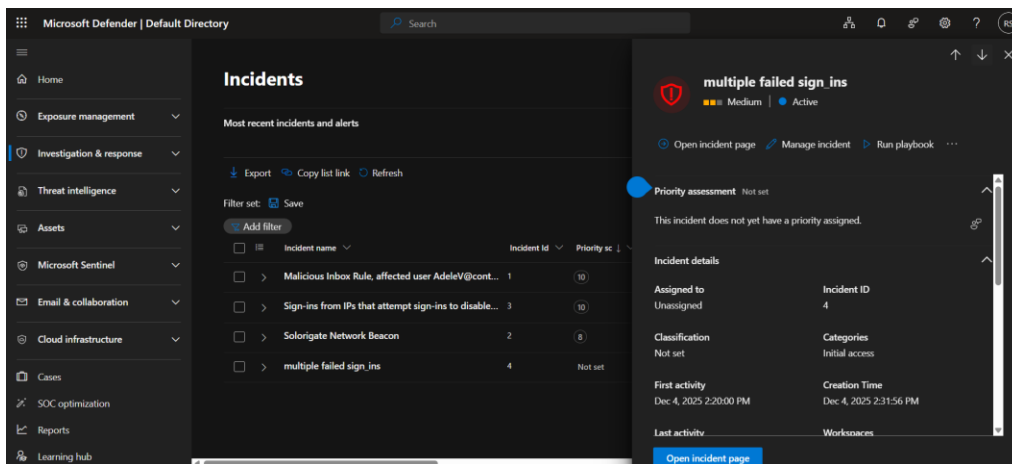
Custom details
Not configured

[< Previous](#) [Save](#)

3.1.4 I attempted Failed Login to Check my Custom Analytics rule.



3.1.5 Incident has generated under incident tab



3.1.6 Let's Resolve the Incident

Microsoft Defender | Default Directory

Incidents > multiple failed sign_ins

multiple failed sign_ins

Medium | Active | Unassigned

Go Hunt queries launched from the entity menu now default to a time range starting from the incident's start day.

Attack story Alerts (1) Assets (1) Investigations (0) Evidence and Response

Alerts

Play attack story Unpin all Show all

Dec 4, 2025 2:20 PM New multiple failed sign_ins 7

Incident graph Layout

Report incident inaccuracy

Manage incident

Medium

Incident tags

Type to find or create tags

Assign to

rhythmsharm@outlook.com

Status

Resolved

This incident was generated intentionally as part of a training exercise. No malicious activity detected.

Classification

False positive - Not malicious

Save Cancel

Microsoft Defender | Default Directory

This page has a new home > Intel management

Filters

Indicators (84,989) Attack patterns (0) Identities (1) Threat actors (0)

+ New Add tags Delete Columns

Values	Name	Types	Source
An unknown error occurred			

New TI object

Object type

Indicator

Pattern

Pattern builder Free text

IPv4 address

IPv4 address value *

17.81.146.1

[17.81.146.1] is not a valid IPv4 address

+ New observable

[ipv4-addrvalue = '17.81.146.1']

Name

An existing indicator with the same source and pattern already exists.

Add Cancel Add and duplicate