

Microsoft Security

# SC-200 Microsoft Security Operations Analyst

Ben McGee  
11/20/2022



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Microsoft Security

## Module 6: Connect logs to Microsoft Sentinel



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### Module agenda

- Connect data to Microsoft Sentinel using data connectors
- Connect Microsoft services to Microsoft Sentinel
- Connect Microsoft 365 Defender to Microsoft Sentinel
- Connect Windows hosts to Microsoft Sentinel
- Connect Common Event Format logs to Microsoft Sentinel
- Connect syslog data sources to Microsoft Sentinel
- Connect threat indicators to Microsoft Sentinel

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Lesson 1: Connect data to Microsoft Sentinel using data connectors



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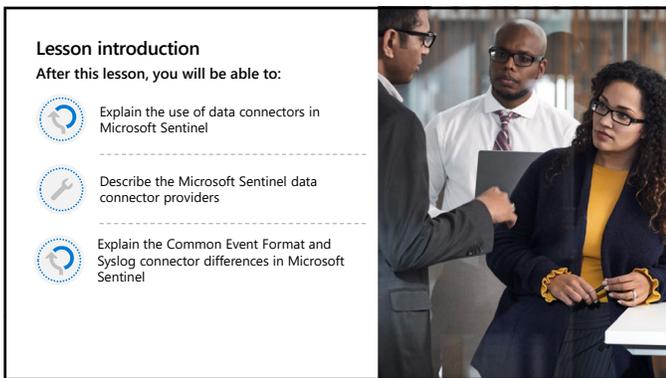
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**Lesson introduction**  
After this lesson, you will be able to:

- Explain the use of data connectors in Microsoft Sentinel
- Describe the Microsoft Sentinel data connector providers
- Explain the Common Event Format and Syslog connector differences in Microsoft Sentinel



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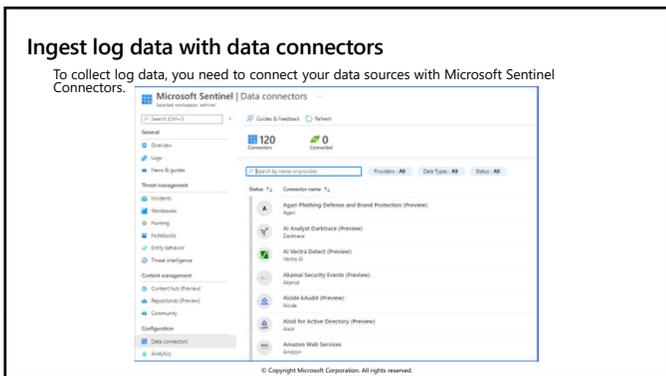
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**Ingest log data with data connectors**  
To collect log data, you need to connect your data sources with Microsoft Sentinel Connectors.



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### Describe data connector providers

-  Microsoft 365 Defender and related Defender services
-  Microsoft 365 and Azure Services
-  Vendor connectors
-  Custom connectors using the Log Analytics API
-  Logstash plugin
-  Common Event Format (CEF) and Syslog connector

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### View connected hosts

- The Data Connector page shows the connectors that are connected. The number of Windows and Linux hosts connected with the Log Analytics agent is available in the Log Analytics workspace.
- You can view the connected hosts in the Log Analytics Workspace Agents Management page.

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Lesson 2: Connect Microsoft services to Microsoft Sentinel 

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**Lesson introduction**  
After this lesson, you will be able to:

- Connect Microsoft service connectors
- Explain how connectors auto-create incidents in Microsoft Sentinel




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**Plan for Microsoft services connectors**



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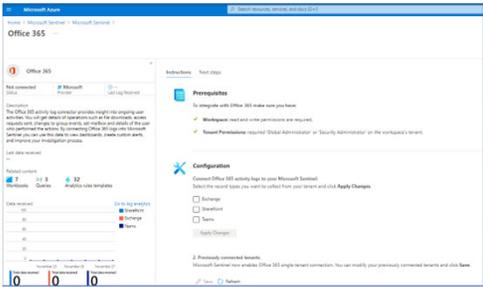
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**Connect the Microsoft Office 365 connector**

The Office 365 activity log connector provides insight into ongoing user activities. You will get details of operations such as file downloads, access requests sent, changes to group events, set-mailbox, and details of the user who performed the actions.



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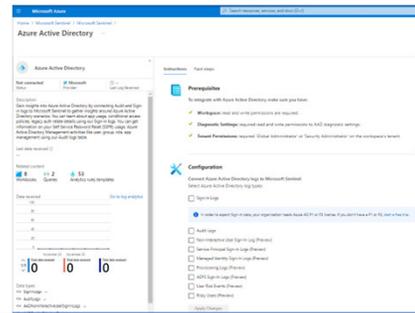
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### Connect the Azure Active Directory connector

Gain insights into Azure Active Directory by connecting Audit and Sign in logs to Microsoft Sentinel to gather insights around Azure Active Directory scenarios.



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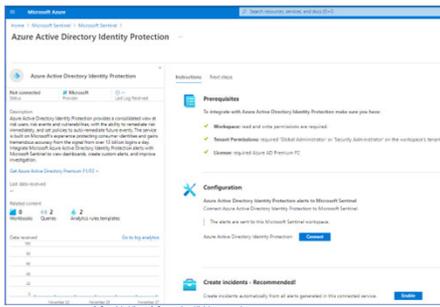
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### Connect the Azure Active Directory Identity Protection connector

Azure Active Directory Identity Protection provides a consolidated view of at-risk users, risk events, and vulnerabilities, with the ability to remediate risk immediately and set policies to auto remediate future events.



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### Lesson 3: Connect Microsoft 365 Defender to Microsoft Sentinel



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**Lesson introduction**

After this lesson, you will be able to:

- Activate the Microsoft 365 Defender connector in Microsoft Sentinel
- Activate the Microsoft Defender for Endpoint connector in Microsoft Sentinel
- Activate the Microsoft Defender for Office 365 connector in Microsoft Sentinel



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**Plan for Microsoft 365 Defender connectors**

- Microsoft Defender for Office 365
- Microsoft Defender for Endpoint
- Microsoft 365 Defender
- Microsoft Defender for Identity
- Microsoft Defender for Cloud Apps
- Microsoft 365 Insider Risk Management (IRM) (Preview)

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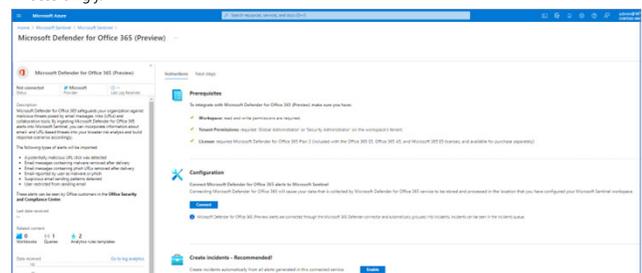
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**Connect alerts from Microsoft Defender for Office 365**

With Microsoft Defender for Office 365 alerts, you can incorporate information about email-based and URL-based threats into your broader risk analysis and build response scenarios accordingly.



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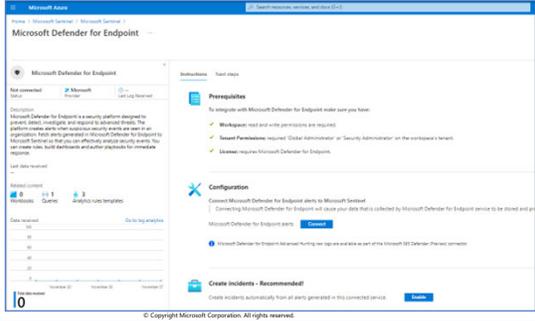
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### Connect alerts from Microsoft Defender for Endpoint

Fetch alerts generated in Microsoft Defender for Endpoint so that you can effectively analyze security events.



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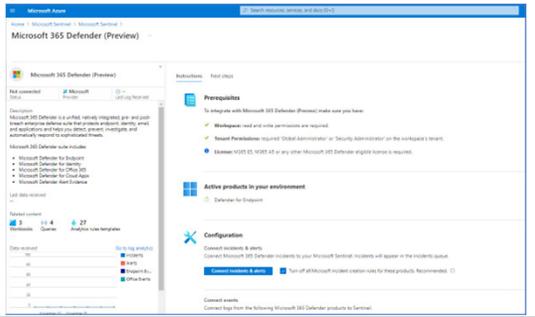
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### Connect the Microsoft 365 Defender connector (Preview)

The Microsoft 365 Defender connector lets you stream advanced hunting logs - a type of raw event data - from Microsoft 365 Defender.



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### Lesson 4: Connect Windows hosts to Microsoft Sentinel



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**Lesson introduction**

After this lesson, you will be able to:

- Connect Azure Windows Virtual Machines to Microsoft Sentinel
- Connect non-Azure Windows hosts to Microsoft Sentinel
- Configure Log Analytics agent to collect Sysmon events



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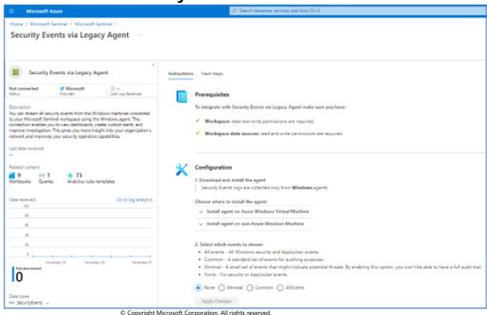
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**Plan for Windows hosts security events connector**

The Security Events connector lets you stream all security events from your Windows systems (servers and workstations, physical and virtual) to your Microsoft Sentinel workspace.



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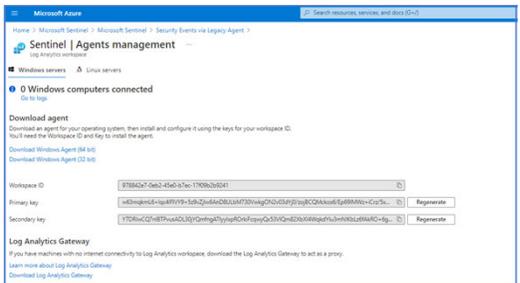
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**Connect non-Azure Windows Machines**

When connecting non-Azure Windows hosts, you need to manually install the client agent.



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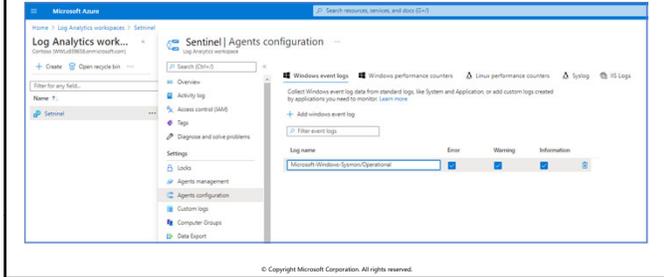
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### Collect Sysmon event logs

The Microsoft-Windows-Sysmon/Operational entry is required in the Windows Event Logs.




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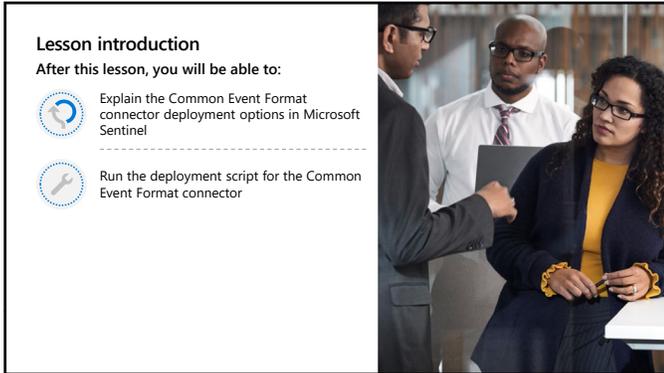
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### Plan for Common Event Format (CEF) connector

- Deploys a Syslog Forwarder server to support the communication between the appliance and Microsoft Sentinel.
- The server consists of a dedicated Linux machine with the Log Analytics agent for Linux installed.
- Many of the Microsoft Sentinel Data Connectors that are vendor-specific utilize the CEF Connector.
- Deployment options include Azure and on-premises based.
- CEF is recommended over the Syslog Connector because CEF provides parsed message data

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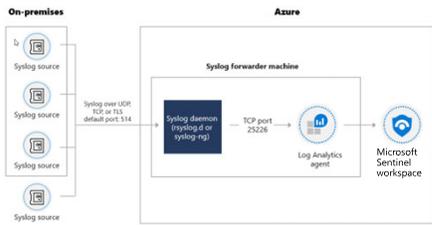
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### CEF Azure VM Architecture

The following diagram displays the setup in the case of a Linux VM in Azure.



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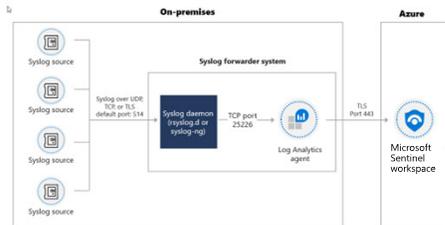
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### CEF on-premise Architecture

The following diagram displays the setup if you use a VM in another cloud or an on-premises machine.



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### Plan for the syslog connector

#### Overview

Stream events from Linux-based, Syslog-supporting machines or appliances into Microsoft Sentinel using the Log Analytics agent for Linux.

The host's native Syslog daemon will collect local events of the specified types and forward them locally to the agent, which will stream them to your Log Analytics workspace.

#### How it works

Syslog is an event logging protocol that is common to Linux. When the Log Analytics agent for Linux is installed on your VM or appliance, the installation routine configures the local Syslog daemon to forward messages to the agent on TCP port 25224.

The agent then sends the message to your Log Analytics workspace over HTTPS, where it is parsed into an event log entry in the Syslog table in *Microsoft Sentinel > Logs*.

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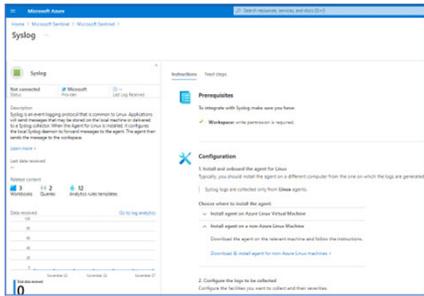
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### Collect data from Linux-based sources using syslog

The Syslog connector has two deployment options: Azure Linux Virtual Machine and agent on a non-Azure Linux Machine. Azure Linux VM is a simple connect button.



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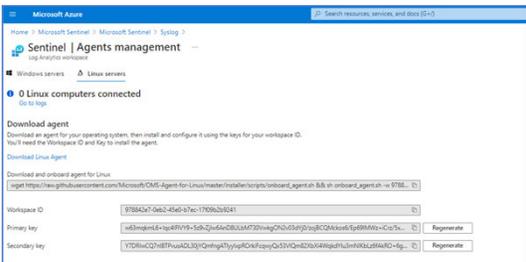
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### Connect non-Azure Linux Hosts

When connecting non-Azure Linux hosts, you need to manually install the client agent.



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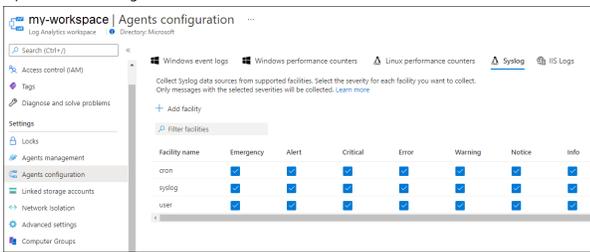
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### Configure the log analytics agent

The Log Analytics agent for Linux will only collect events with the facilities and severities that are specified in its configuration.



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### Parse syslog data with KQL

```
// save as a function named: MyParser

Syslog
| where ProcessName contains "squid"
| extend URL = extract("([A-Z]+ [a-z]{4,5}:\\\/\\\/)[A-Z]+ )([^\n:]*)",3, SyslogMessage),
    SourceIP = extract("([0-9]+ )([0-9]{1,3})\\.([0-9]{1,3})\\.([0-9]{1,3})\\.([0-9]{1,3})\\.([0-9]{1,3})",2, SyslogMessage),
    User = extract("(CONNECT |GET )([^\n ]+ )([^\n ]+)",3, SyslogMessage),
    RemotePort = extract("(CONNECT |GET )([^\n ]+ )(:)([0-9]*)",4, SyslogMessage),
    Domain = extract("([A-Z]+ [a-z]{4,5}:\\\/\\\/)[A-Z]+ )([^\n:]*)",3, SyslogMessage)
// use the function/parser
MyParser
```

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### Lesson 7: Connect threat indicators to Microsoft Sentinel



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**Lesson introduction**  
After this lesson, you will be able to:

- Configure the TAXII connector in Microsoft Sentinel
- Configure the Threat Intelligence Platform connector in Microsoft Sentinel
- View threat indicators in Microsoft Sentinel




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**Plan for threat intelligence connectors**

**Indicator Uses**

- Generate alerts and incidents based on matches of log events from your threat indicators.
- Workbooks provide summarized information about the threat indicators
- Hunting queries allow security investigators to use threat indicators
- Notebooks can use threat indicators when you investigate anomalies and hunt for malicious behaviors.

**Threat Intelligence Connectors**

- Threat intelligence - TAXII
- Threat Intelligence Platforms

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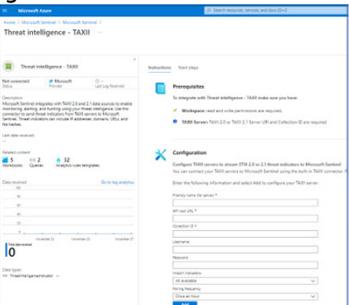
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**Connect the threat intelligence TAXII connector**

Microsoft Sentinel integrates with TAXII 2.0 and 2.1 data sources to enable monitoring, alerting, and hunting using your threat intelligence.



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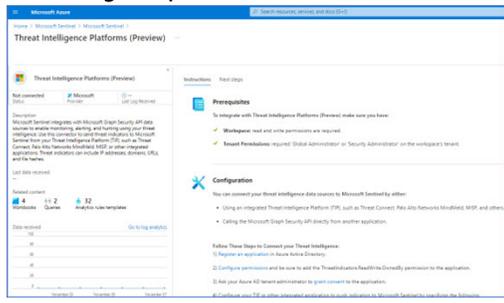
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### Connect the threat intelligence platforms connector

Microsoft Sentinel integrates with Microsoft Graph Security API data sources to enable monitoring, alerting, and hunting using your threat intelligence. Use this connector to send threat indicators to Microsoft Sentinel from your Threat Intelligence Platform (TIP).



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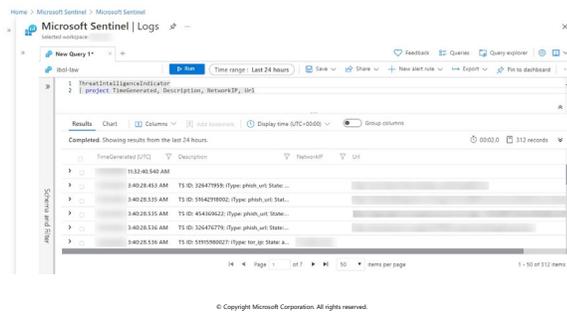
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### View your threat indicators



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### Knowledge check



Check your knowledge with the module quiz in your course viewer



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Lab 01 – Connect logs to Microsoft Sentinel 

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**Lab Exercises for module 6**

- 1 Connect data to Microsoft Sentinel using data connectors
- 2 Connect Windows devices to Microsoft Sentinel using data connectors
- 3 Connect Linux hosts to Microsoft Sentinel using data connectors
- 4 Connect Threat intelligence to Microsoft Sentinel using data connectors

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