SC-200T00 Microsoft Security Operations Analyst

Summary

Length: 32 hours Level: Experienced

Learn how to investigate, respond to, and hunt for threats using Microsoft Sentinel, Microsoft Defender for Cloud, and Microsoft 365 Defender. In this course you will learn how to mitigate cyberthreats using these technologies. Specifically, you will configure and use Microsoft Sentinel as well as utilize Kusto Query Language (KQL) to perform detection, analysis, and reporting. The course was designed for people who work in a Security Operations job role and helps learners prepare for the exam SC-200: Microsoft Security Operations Analyst. This course may earn a Credly Badge.

Learning Objectives

Explain how Microsoft Defender for Endpoint can remediate risks in your environment Create a Microsoft Defender for Endpoint environment Configure Attack Surface Reduction rules on Windows 10 devices Perform actions on a device using Microsoft Defender for Endpoint Investigate domains and IP addresses in Microsoft Defender for Endpoint Investigate user accounts in Microsoft Defender for Endpoint Configure alert settings in Microsoft Defender for Endpoint Explain how the threat landscape is evolving Conduct advanced hunting in Microsoft 365 Defender Manage incidents in Microsoft 365 Defender Explain how Microsoft Defender for Identity can remediate risks in your environment. Investigate DLP alerts in Microsoft Cloud App Security Explain the types of actions you can take on an insider risk management case. Configure auto-provisioning in Azure Defender Remediate alerts in Azure Defender Construct KQL statements Filter searches based on event time, severity, domain, and other relevant data using KQL Extract data from unstructured string fields using KQL Manage an Azure Sentinel workspace Use KQL to access the watchlist in Azure Sentinel Manage threat indicators in Azure Sentinel Explain the Common Event Format and Syslog connector differences in Azure Sentinel Connect Azure Windows Virtual Machines to Azure Sentinel Configure Log Analytics agent to collect Sysmon events Create new analytics rules and queries using the analytics rule wizard Create a playbook to automate an incident response Use queries to hunt for threats Observe threats over time with livestream

Course Outline

1. Mitigate threats using Microsoft Defender for Endpoint

   Protect against threats with Microsoft Defender for Endpoint
   Deploy the Microsoft Defender for Endpoint environment
   Implement Windows 10 security enhancements with Microsoft Defender for Endpoint
   Manage alerts and incidents in Microsoft Defender for Endpoint
   Perform device investigations in Microsoft Defender for Endpoint
   Perform actions on a device using Microsoft Defender for Endpoint
   Perform evidence and entities investigations using Microsoft Defender for Endpoint
   Configure and manage automation using Microsoft Defender for Endpoint
   Configure for alerts and detections in Microsoft Defender for Endpoint
   Utilize Threat and Vulnerability Management in Microsoft Defender for Endpoint
   Lab - Mitigate threats using Microsoft Defender for Endpoint
   Deploy Microsoft Defender for Endpoint
   Mitigate Attacks using Defender for Endpoint
   After completing this module, students will be able to-
   Define the capabilities of Microsoft Defender for Endpoint
   Configure Microsoft Defender for Endpoint environment settings
   Configure Attack Surface Reduction rules on Windows 10 devices
   Investigate alerts in Microsoft Defender for Endpoint
   Describe device forensics information collected by Microsoft Defender for Endpoint
   Conduct forensics data collection using Microsoft Defender for Endpoint
   Investigate user accounts in Microsoft Defender for Endpoint
   Manage automation settings in Microsoft Defender for Endpoint
   Manage indicators in Microsoft Defender for Endpoint
   Describe Threat and Vulnerability Management in Microsoft Defender for Endpoint

2. Mitigate threats using Microsoft 365 Defender

Introduction to threat protection with Microsoft 365
Mitigate incidents using Microsoft 365 Defender
Protect your identities with Azure AD Identity Protection
Remediate risks with Microsoft Defender for Office 365
Safeguard your environment with Microsoft Defender for Identity
Secure your cloud apps and services with Microsoft Cloud App Security
Respond to data loss prevention alerts using Microsoft 365
Manage insider risk in Microsoft 365
Lab - Mitigate threats using Microsoft 365 Defender
Mitigate Attacks with Microsoft 365 Defender
After completing this module, students will be able to-

Explain how the threat landscape is evolving.
Manage incidents in Microsoft 365 Defender
Conduct advanced hunting in Microsoft 365 Defender
Describe the investigation and remediation features of Azure Active Directory Identity Protection.
Define the capabilities of Microsoft Defender for Endpoint.
Explain how Microsoft Defender for Endpoint can remediate risks in your environment.
Define the Cloud App Security framework
Explain how Cloud Discovery helps you see what's going on in your organization

3. Mitigate threats using Azure Defender

Plan for cloud workload protections using Azure Defender
Explain cloud workload protections in Azure Defender
Connect Azure assets to Azure Defender
Connect non-Azure resources to Azure Defender
Remediate security alerts using Azure Defender
Lab - Mitigate threats using Azure Defender
Deploy Azure Defender
Mitigate Attacks with Azure Defender
After completing this module, students will be able to-

Describe Azure Defender features
Explain Azure Security Center features
Explain which workloads are protected by Azure Defender
Explain how Azure Defender protections function
Configure auto-provisioning in Azure Defender
Describe manual provisioning in Azure Defender
Connect non-Azure machines to Azure Defender
Describe alerts in Azure Defender
Remediate alerts in Azure Defender
Automate responses in Azure Defender

4. Create queries for Azure Sentinel using Kusto Query Language (KQL)

Construct KQL statements for Azure Sentinel
Analyze query results using KQL
Build multi-table statements using KQL
Work with data in Azure Sentinel using Kusto Query Language
Lab - Create queries for Azure Sentinel using Kusto Query Language (KQL)
Construct Basic KQL Statements
Analyze query results using KQL
Build multi-table statements using KQL
Work with string data using KQL statements
After completing this module, students will be able to-
Construct KQL statements
Search log files for security events using KQL
Filter searches based on event time, severity, domain, and other relevant data using KQL

Summarize data using KQL statements
Render visualizations using KQL statements
Extract data from unstructured string fields using KQL
Extract data from structured string data using KQL
Create Functions using KQL

5. Configure your Azure Sentinel environment

Introduction to Azure Sentinel
Create and manage Azure Sentinel workspaces
Query logs in Azure Sentinel
Use watchlists in Azure Sentinel
Utilize threat intelligence in Azure Sentinel
Lab - Configure your Azure Sentinel environment
Create an Azure Sentinel Workspace
Create a Watchlist
Create a Threat Indicator
After completing this module, students will be able to-
Identify the various components and functionality of Azure Sentinel.
Identify use cases where Azure Sentinel would be a good solution.
Describe Azure Sentinel workspace architecture
Install Azure Sentinel workspace
Manage an Azure Sentinel workspace
Create a watchlist in Azure Sentinel
Use KQL to access the watchlist in Azure Sentinel
Manage threat indicators in Azure Sentinel
Use KQL to access threat indicators in Azure Sentinel

6. Connect logs to Azure Sentinel

Connect data to Azure Sentinel using data connectors
Connect Microsoft services to Azure Sentinel
Connect Microsoft 365 Defender to Azure Sentinel
Connect Windows hosts to Azure Sentinel
Connect Common Event Format logs to Azure Sentinel
Connect syslog data sources to Azure Sentinel
Connect threat indicators to Azure Sentinel
Lab - Connect logs to Azure Sentinel
Connect Microsoft services to Azure Sentinel
Connect Windows hosts to Azure Sentinel
Connect Linux hosts to Azure Sentinel
Connect Threat intelligence to Azure Sentinel
After completing this module, students will be able to-
Explain the use of data connectors in Azure Sentinel
Explain the Common Event Format and Sysl

Audience

The Microsoft Security Operations Analyst collaborates with organizational stakeholders to secure information technology systems for the organization. Their goal is to reduce organizational risk by rapidly remediating active attacks in the environment, advising on improvements to threat protection practices, and referring violations of organizational policies to appropriate stakeholders. Responsibilities include threat management, monitoring, and response by using a variety of security solutions across their environment. The role primarily investigates, responds to, and hunts for threats using Microsoft Azure Sentinel, Azure Defender, Microsoft 365 Defender, and third-party security products. Since the Security Operations Analyst consumes the operational output of these tools, they are also a critical stakeholder in the configuration and deployment of these technologies.

Prerequisites

Basic understanding of Microsoft 365 Fundamental understanding of Microsoft security, compliance, and identity products Intermediate understanding of Windows 10 Familiarity with Azure services, specifically Azure SQL Database and Azure Storage Familiarity with Azure

virtual machines and virtual networking Basic understanding of scripting concepts.