



CPO550 - Lab 03:

Implement monitoring by using Azure Virtual Desktop Insights

Student Lab Manual

Fall 2026

Lab scenario

You have an existing Azure Virtual Desktop environment. You want to monitor the status and activities of the environment.

Objectives

- Implement monitoring of an Azure Virtual Desktop environment.

Lab dependencies

- The lab 01: *Deploy host pools and session hosts by using the Azure portal* completed.
- The lab 02: *Manage host pools and session hosts by using the Azure portal* completed.

Submission Requirements

Take a screenshot whenever you see the camera icon () alongside task instructions. For better visibility, don't take screenshots in the dark mode.

Compile all screenshots into a single Word (.docx) or PDF file in the order of each task and provide a brief explanation of the significance of each screenshot. Underline or highlight all important information as shown in the provided sample screenshots at the end of this lab manual. Ensure your Odl_user account is clearly visible and underlined in every screenshot. Do not include the lab instructions in your submission.

Important: Use the provided template in the Blackboard to submit your lab reports.

Instructions

Exercise 1: Implement monitoring of an Azure Virtual Desktop environment

The main tasks for this exercise are as follows:

1. Register the Azure subscription with the Microsoft.Insights resource provider
2. Create an Azure Log Analytics workspace
3. Set up the Virtual Desktop Insights configuration workbook
4. Task 4: Disable AVD Diagnostic Settings

Task 1: Register the Azure subscription with the Microsoft.Insights resource provider

Note: Azure Virtual Desktop Insights rely on the Microsoft.Insights resource provider, so you need to first register it within the Azure subscription you are using for this lab. In lab 01, you performed this task by using Azure PowerShell. In this lab, you will accomplish it by using the Azure portal (either method is supported and available).

1. If needed, from your local computer, start a web browser, navigate to the Azure portal and sign in by providing your **odl_user** credentials.
2. In the web browser displaying the Azure portal, search for and select **Subscriptions**, on the **Subscriptions** page, select your Azure subscription, in the **Settings** section, select **Resource providers**.
3. On the **Resource providers** tab, in the search text box, enter **Microsoft.Insights**, in the list of results, select **Microsoft.Insights** entry, and then select **Register** or **Re-register**.

Note: Wait for the registration process to complete. This typically takes about 1 minute. Use the **Refresh** toolbar button to display the up-to-date value of the registration status.

Task 2: Create an Azure Log Analytics workspace

Note: Azure Virtual Desktop Insights is a dashboard built on Azure Monitor Workbooks that facilitates monitoring of Azure Virtual Desktop environments.

Note: You can only monitor Autoscale operations with Insights with pooled host pools.

1. From your local computer, in the web browser displaying the Azure portal, search for and select **Log Analytics workspaces**, select **+ Create**.
2. On the **Basics** tab of the **Create Log Analytics workspace** page, specify the following settings and select **Review + create**:

Setting	Value
Subscription	The name of the Azure subscription you are using in this lab

Setting	Value
Resource group	The name of a new resource group <sName>-cpoF67-411e-RG
Name	cpoF67-LAworkspace
Region	The name of the Azure region where you deployed the Azure Virtual Desktop environment

3. On the **Review + Create** page, select **Create**.



Note: Wait for the provisioning process to complete. This typically takes about 1 minute.

Note: Next, you need to enable data collection in the newly provisioned Log Analytics workspace of diagnostics from the Azure Virtual Desktop environment, performance counters from the session hosts, and Windows Event Logs from the Azure Virtual Desktop session hosts.

Task 3: Set up the Virtual Desktop Insights configuration workbook

Note: When opening Azure Virtual Desktop Insights for the first time, you need to set up Azure Virtual Desktop Insights to target your Azure Virtual Desktop environment.

1. From your local computer, in the web browser displaying the Azure portal, search for and select **Azure Virtual Desktop** and, on the **Azure Virtual Desktop** page, in the vertical navigation menu, in the **Monitoring** section, select **Workbooks**.
2. In the list of **Windows Virtual Desktop** workbooks, in the **Windows Virtual Desktop** section, select the **Insights** workbook.
3. On the **Azure Virtual Desktop | Workbooks | Insights** page, review the warning messages indicating that the workspace and session hosts are not sending data to the workspace and then select the **Configuration workbook** link to repair the issue.
4. On the **CheckAMAConfiguration** page, on the **Resource diagnostics settings** tab, in the **Log Analytics workspace** drop-down list, select **cpoF67-LAworkspace**.
5. On the **CheckAMAConfiguration** page, on the **Resource diagnostics settings** tab, in the **Host pool <sName>-cpoF67-hp1** section, review the warning message indicating that no existing diagnostic configuration was found for the selected host pool and then select **Configure host pool**.
6. In the **Deploy Template** pane, select **Deploy**.

Note: This effectively enables the following diagnostics tables in the target Log Analytics workspace:

- o Management Activities
- o Feed
- o Connections
- o Errors
- o Checkpoints
- o HostRegistration

- o AgentHealthStatus

Note: Wait for the deployment to complete. This typically takes less than 1 minute.

7. On the **CheckAMAConfiguration** page, on the **Resource diagnostics settings** tab, select the **Refresh** icon (a circular arrow) in the toolbar.
8. Review the **Host pool <sName>-cpoF67-hp1** section and verify that the diagnostic settings are enabled for **allLogs**.
9. While on the **Resource diagnostics settings** tab, scroll down to the **Workspace, <sName>-cpoF67-21-ws1** section and then select **Configure workspace**.
10. In the **Deploy Template** pane, select **Deploy**.

Note: This effectively configures the workspace for **allLogs**.

Note: Wait for the deployment to complete. This typically takes less than 1 minute.

11. On the **CheckAMAConfiguration** page, on the **Resource diagnostics settings** tab, select the **Refresh** icon (a circular arrow) in the toolbar.
12. Review the **Workspace <sName>-cpoF67-21-ws1** section and verify that the diagnostic settings are enabled for **allLogs** and that there are no remaining warning messages.
13. Navigate to the top of the **CheckAMAConfiguration** page and switch to the **Session host data settings** tab.
14. On the **Session host data settings** tab, in the **Create DCR** section, in the **Workspace destination** drop-down list, select **cpoF67-LAworkspace** and then select **Create data collection rule**.
15. In the **Deploy Template** pane, select **Deploy**.

Note: Wait for the deployment to complete. This typically takes less than 1 minute.

16. On the **CheckAMAConfiguration** page, on the **Session host data settings** tab, select the **Refresh** icon (a circular arrow) in the toolbar.

Note: Before you proceed, make sure that the newly created DCR is listed in the **Available DCRs** subsection of the **Create DCR** section. If that is not the case, wait for another minute and refresh the page again.

17. On the **Session host data settings** tab, in the **Selected DCR** drop-down list, select the entry starting with **microsoft-avdi-** prefix.
18. If needed, on the **Session host data settings** tab, in the **DCR associations** section, select **Deploy Association** and, in the **Deploy Template** pane, select **Deploy**.

Note: This effectively associates the newly created DCR with the session hosts in the **<sName>-cpoF67-hp1** host pool.

Note: Wait for the deployment to complete. This typically takes less than 1 minute.

19. On the **CheckAMAConfiguration** page, on the **Session host data settings** tab, select the **Refresh** icon (a circular arrow) in the toolbar.
20. On the **Session host data settings** tab, in the **Session hosts missing Azure Monitor extension** section, select **Add extension**.
21. In the **Deploy Template** pane, select **Deploy**.

Note: This effectively installs the Azure Monitor extension on the session hosts in the <sName>-cpoF67-hp1 host pool.

Note: Wait for the deployment to complete. This might take about 1 minute.

22. On the **CheckAMAConfiguration** page, on the **Session host data settings** tab, select the **Refresh** icon (a circular arrow) in the toolbar.
23. Verify that there are no error or warning messages displayed.
24. Navigate to the top of the **CheckAMAConfiguration** page, select the **Data generated** tab, and then select the **Refresh** icon (a circular arrow) in the toolbar.
25. Review the sections displaying graphs representing collected data, including **Billed data over last 24hrs**, **Performance Counters**, and **Events**.



Note: Use the **Billed data over last 24hrs** section to monitor data ingestion. You are responsible for Log Analytics charges for data storage and ingestion.



26. In the web browser displaying the Azure portal, navigate back to the **Azure Virtual Desktop** page and, in the **Monitoring** section of the vertical navigation menu, select **Insights**.
27. On the **Azure Virtual Desktop | Insights** page, review the content of the **Overview** tab, including the **Capacity** section, **Connection diagnostics: % of users able to connect**, **Connection performance: Time to connect (new sessions)**, and **Utilization** telemetry.
28. Next, review all the remaining tabs on the **Azure Virtual Desktop | Insights** page, including **Connection Reliability**, **Connection Diagnostics**, **Connection Performance**, **Users**, **Utilization**, **Clients**, and **Alerts**.



Task 4: Disable AVD Diagnostic Settings

Note: Now we need to stop collecting monitoring data to stop charges on our account. Go through the following steps to stop data collection while keeping the workspace intact for future use.

29. On the **AVD | host pools** page select <sName>-cpoF67-hp1. From the **monitoring** section select **Diagnostic settings**, select **edit settings**, select **delete** and click **Yes**.
30. From the **AVD | Workspaces**, select <sName>-cpoF67-21e-ws1, then from **Monitoring** select **Diagnostic settings**. On the **Diagnostic settings**, select **edit settings**, select **delete** and click **Yes**.



Note: We have stop collecting new data but kept the Log Analytics workspace and its current data for future use.



Task 5: Summary Questions

Please answer the following questions in *your own words*, and submit with your lab report:

Question 1: Explain the role of the Log Analytics workspace in the Azure Virtual Desktop monitoring architecture. What types of data does it collect and store, and why is it important to select the same Azure region as your AVD environment when creating the workspace?

Question 2: The lab instructs you to install the Azure Monitor extension on session hosts. What is the function of this extension, and what would be the consequence of not installing it on some or all of your session hosts?

Question 3: The lab concludes by disabling diagnostic settings while keeping the Log Analytics workspace intact. Explain the cost implications of this decision. What are the two main sources of Azure Monitor costs, and why might an organization choose to disable data collection temporarily rather than deleting the entire workspace?

Lab Reflection

Question 4: What have you learned from completing this lab? Describe any challenges you encountered during the setup of Azure Virtual Desktop Insights and how you solved them.

Important Lab Cleanup Instructions

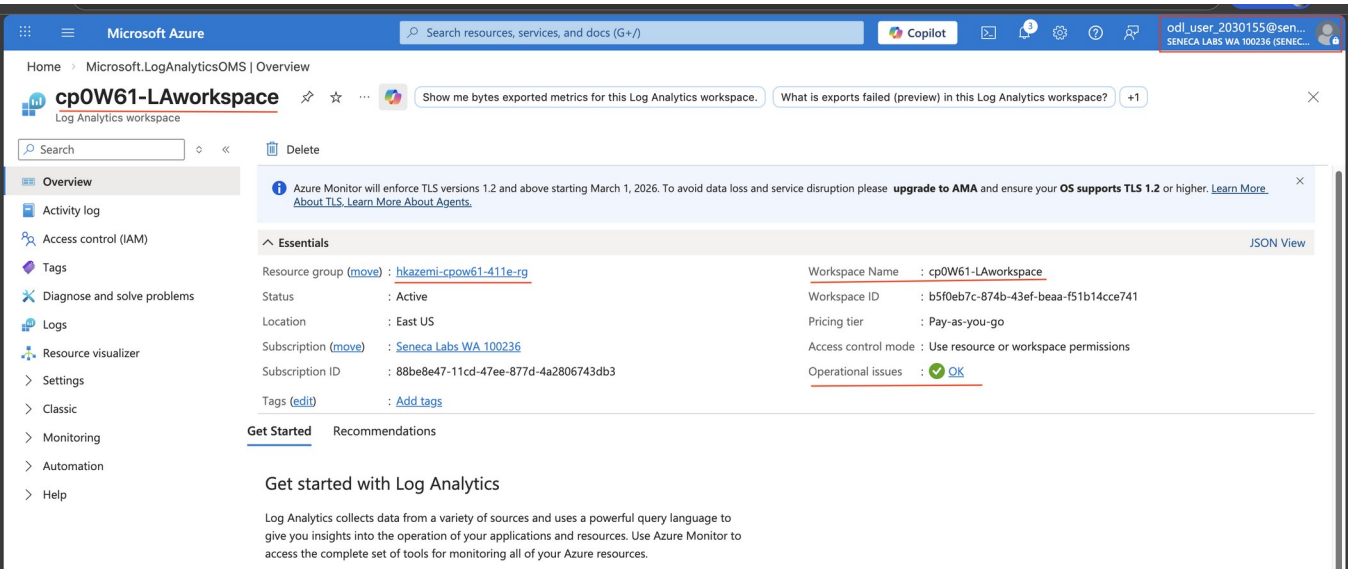
Do **NOT** delete any resources created in this lab. They are required for subsequent labs.

To minimize costs, stop all virtual machines (VMs) immediately. Restart them only when beginning the next lab.

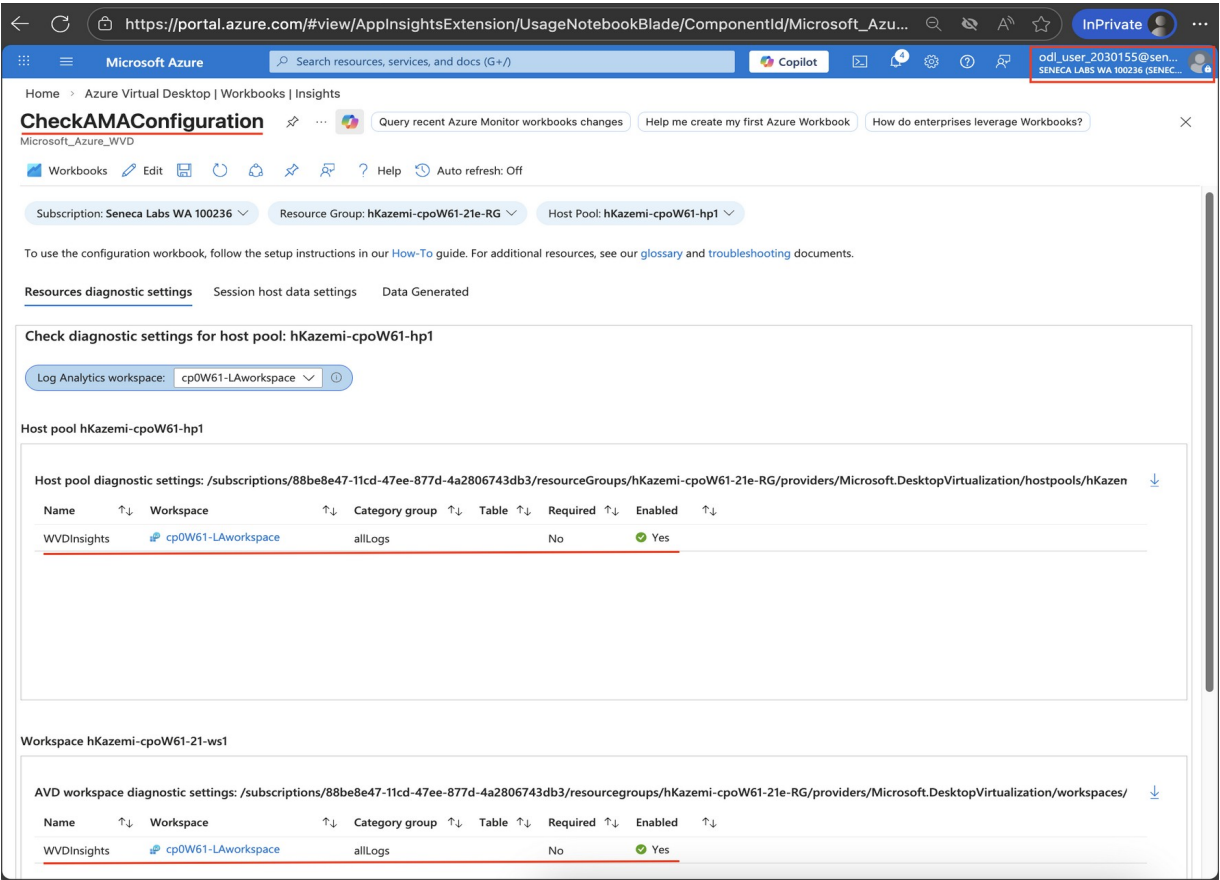
Sample Screenshots

Please ensure that all marked information in the samples is included, clearly visible, and underlined in your screenshots.

Task 2:



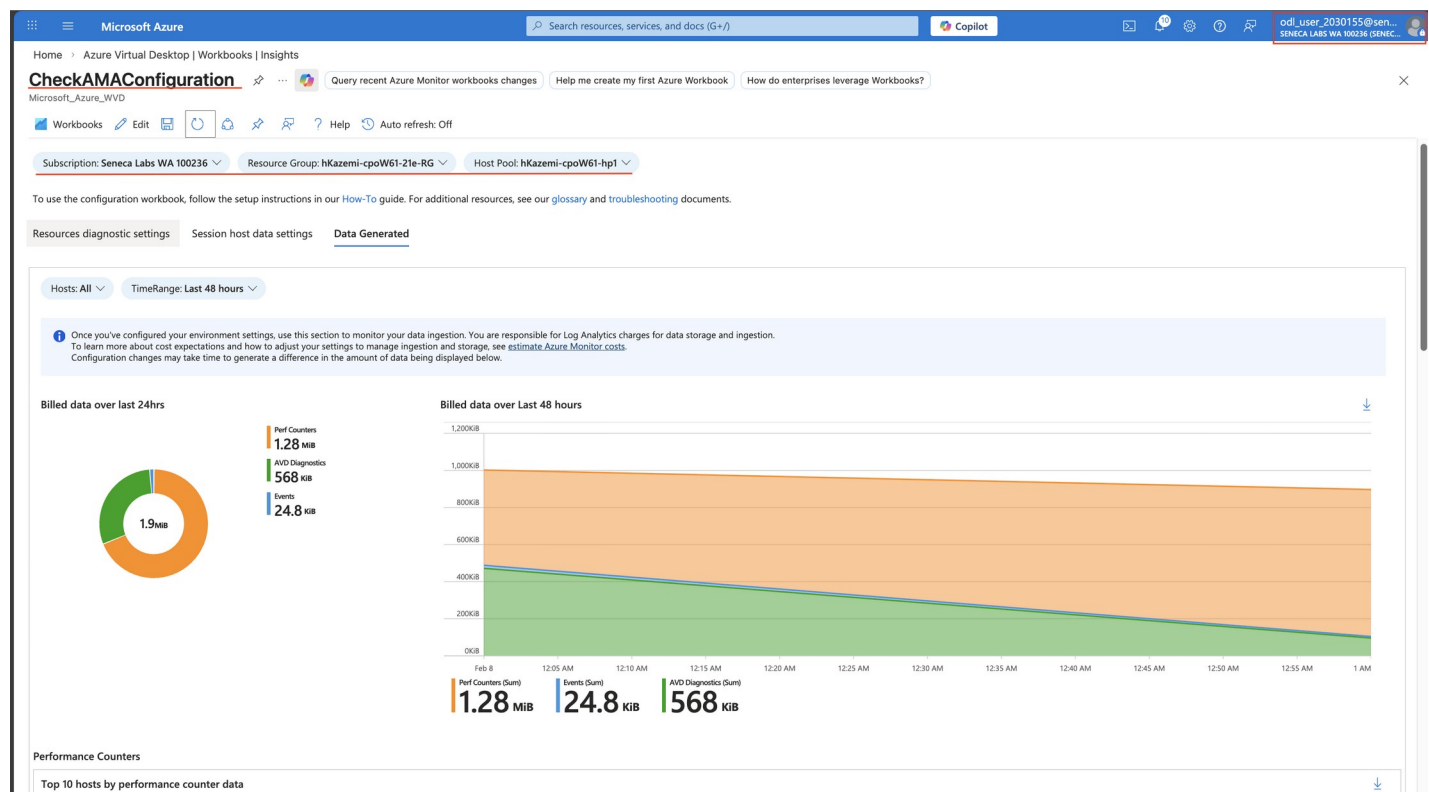
Task 3(a):



Task 3(b):

The screenshot shows the 'CheckAMAConfiguration' workbook in the Microsoft Azure portal. The interface includes a top navigation bar with the Microsoft Azure logo, a search bar, and a Copilot button. The main content area is titled 'CheckAMAConfiguration' and includes a 'Create data collection rule' button. Below this, a dropdown menu shows 'Selected DCR: microsoft-avdi-eastus (hkazemi-cpow61-21e-rg)'. The 'DCR associations' section displays a green checkmark and the message 'No session hosts with missing associations found.' The 'Session hosts missing Azure Monitor extension' section also shows a green checkmark and 'No session hosts missing AMA extension.' The 'Session hosts missing managed identity' section shows a green checkmark and 'No session hosts missing managed identity.'

Task 3(c):



Task 3(d):

Microsoft Azure

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

Copilot

odl_user_2030155@sen...
SENECA LABS WA 100236 (SENEC...

Home > Azure Virtual Desktop | Insights > hKazemi-cpoW61-hp1

hKazemi-cpoW61-hp1 | Insights

Host pool

Search

Workbooks Customize Auto refresh: Off

Overview

Activity log

Access control (IAM)

Tags

Diagnose and solve problems

Resource visualizer

Settings

Manage

Monitoring

Insights

Diagnostic settings

Logs

Insights (Legacy)

Automation

Help

Time Range: Last 48 hours

Overview Connection Diagnostics Connection Performance Host Diagnostics Host Performance Users Utilization Clients Alerts Autoscale

No new Severity 0 alerts in Last 48 hours

Host pool details

Session Hosts	Status	Status changed	New sessions	Stack version	Sessions	Available sessions	24h users	OS version
hKazemi-sh-0	Available	2/7/2026, 11:38:41.310 PM	Allowed	rdp-sxs250725770	0	8	0	10.0.22631.6491
hKazemi-sh-1	Available	2/7/2026, 11:38:49.400 PM	Allowed	rdp-sxs250725770	0	8	0	10.0.22631.6491
hKazemi-sh-2	Available	2/7/2026, 11:38:41.710 PM	Allowed	rdp-sxs250725770	0	8	0	10.0.22631.6491

Host pool type
Pooled

Load balancer type
DepthFirst

Max sessions
8

Please select a host to display current sessions here.

Task 4(a):

Microsoft Azure

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

Copilot

odl_user_2030155@sen...
SENECA LABS WA 100236 (SENEC...

Home > Seneca Labs WA 100236

Seneca Labs WA 100236 | Activity log

Subscription

Search

Activity Edit columns Refresh Export Activity Logs Download as CSV Insights Feedback Pin current filters Reset filters

Overview

Activity log

Access control (IAM)

Tags

Diagnose and solve problems

Security

Resource visualizer

Events

Resource groups

Resources

Cost Management

Cost analysis

Looking for Log Analytics? In Log Analytics you can search for performance, diagnostics, health logs, and more. Visit Log Analytics

Search Quick Insights

Management Group: None Subscription: Seneca Labs WA 100236 Event severity: All Timespan: Last 6 hours Add Filter

26 items.

Operation name	Status	Time	Time stamp	Subscription	Event initiated by
✓ Delete resource diagnostic setting	Succeeded	29 minutes ...	Sun Feb 08 ...	Seneca Labs WA 100236	odl_user_2030155@senec...
ⓘ Delete resource diagnostic setting	Started	29 minutes ...	Sun Feb 08 ...	Seneca Labs WA 100236	odl_user_2030155@senec...
✓ Delete resource diagnostic setting	Succeeded	34 minutes ...	Sun Feb 08 ...	Seneca Labs WA 100236	odl_user_2030155@senec...
ⓘ Delete resource diagnostic setting	Started	34 minutes ...	Sun Feb 08 ...	Seneca Labs WA 100236	odl_user_2030155@senec...
> Create or Update Virtual Machine Extension	Succeeded	an hour ago	Sun Feb 08 ...	Seneca Labs WA 100236	odl_user_2030155@senec...
> Validate Deployment	Succeeded	an hour ago	Sun Feb 08 ...	Seneca Labs WA 100236	odl_user_2030155@senec...

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Task 4(b):

