LAB13: Connect SQL Servers to Azure Arc using offline MSI installer

> [!alert] **This lab shows an alternative method to that of the previous lab for onboarding SQL Servers. You can treat it as an optional lab if you want to move to other labs that explore the capabilities that Azure Arc facilitate for managing SQL Servers**.

In the previous Lab you looked at onboarding a SQL Server to Azure Arc automatically by onboarding the machine that hosts the SQL Server to Azure Arc. In this lab you will look at an alternative method of onboarding the SQL Server using an MSI installer. This method is useful when you want to onboard a number of SQL Servers at scale or if the automatic method of onboarding was not successful. The exercises will be carried out using one server only (due to resource limitations on the lab infrastructure) but the method is applicable to multiple server deployment. Also note that you will be starting from the point where the Windows Server VM itself is connected to Arc and you will only be onboarding the SQL Server that is running on the Windows VM.

The onboarding involves installing an extension on the Arc-enabled Windows machine, namely the *WindowsAgent.SqlServer* extension. This extension, once installed, will detect any running SQL Servers and onboard them automatically to Arc.

Student Lab Manual

Table of Contents

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Exercise 1 - Disconnect the Arc-enabled SQL Server instances from Azure Arc using Azure portal

Objective

In this exercise you will disconnect the SQL Servers from Arc so that you can practice with other methods of onboarding them at scale. You will keep the Windows Server machine that has the SQL Server installed on it connected to Arc, and you will only remove the SQL Server Arc registration.

Estimated Time to Complete This Exercise

15 minutes

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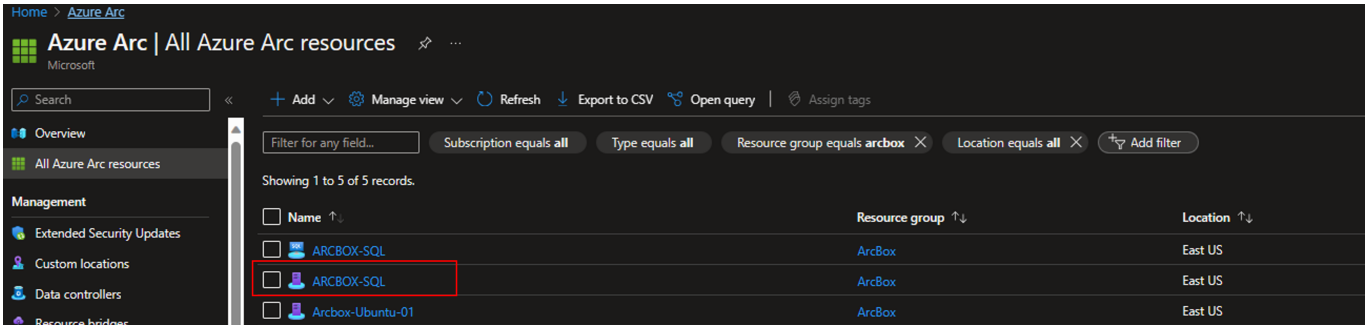
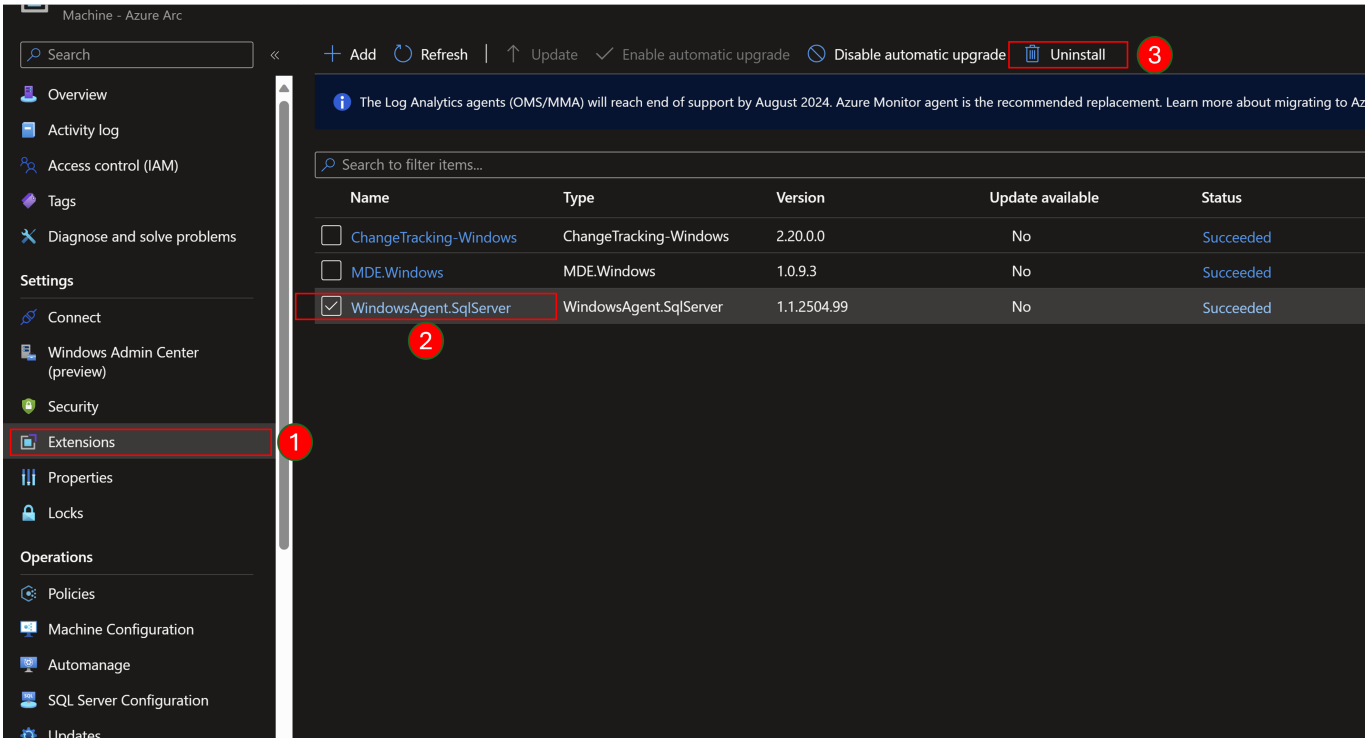
Task 1: Uninstall Azure extension for SQL Server

1. [] From the Azure portal go to *Azure Arc* page and select the *All Azure Arc Resources* option. Select the *ArcBox-SQL* machine hosting a SQL server



2. [] On the Server page , under *Extensions* select the *WindowsAgent.SqlServer* extension and then click *Uninstall*. Confirm the request.



3. [] Wait for the Agent to be uninstalled and disappear from the list of extensions.

Task 1 has been completed

Click **Next** for the next exercise or **Go back to the main table of content**

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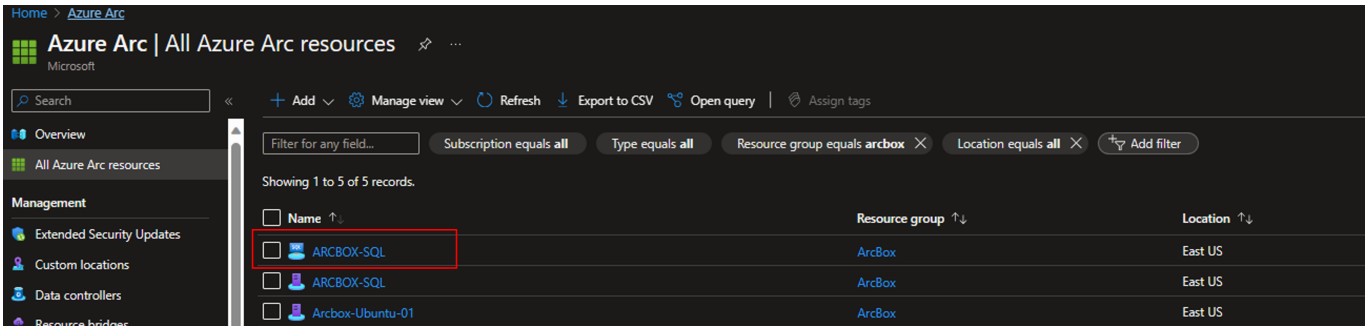
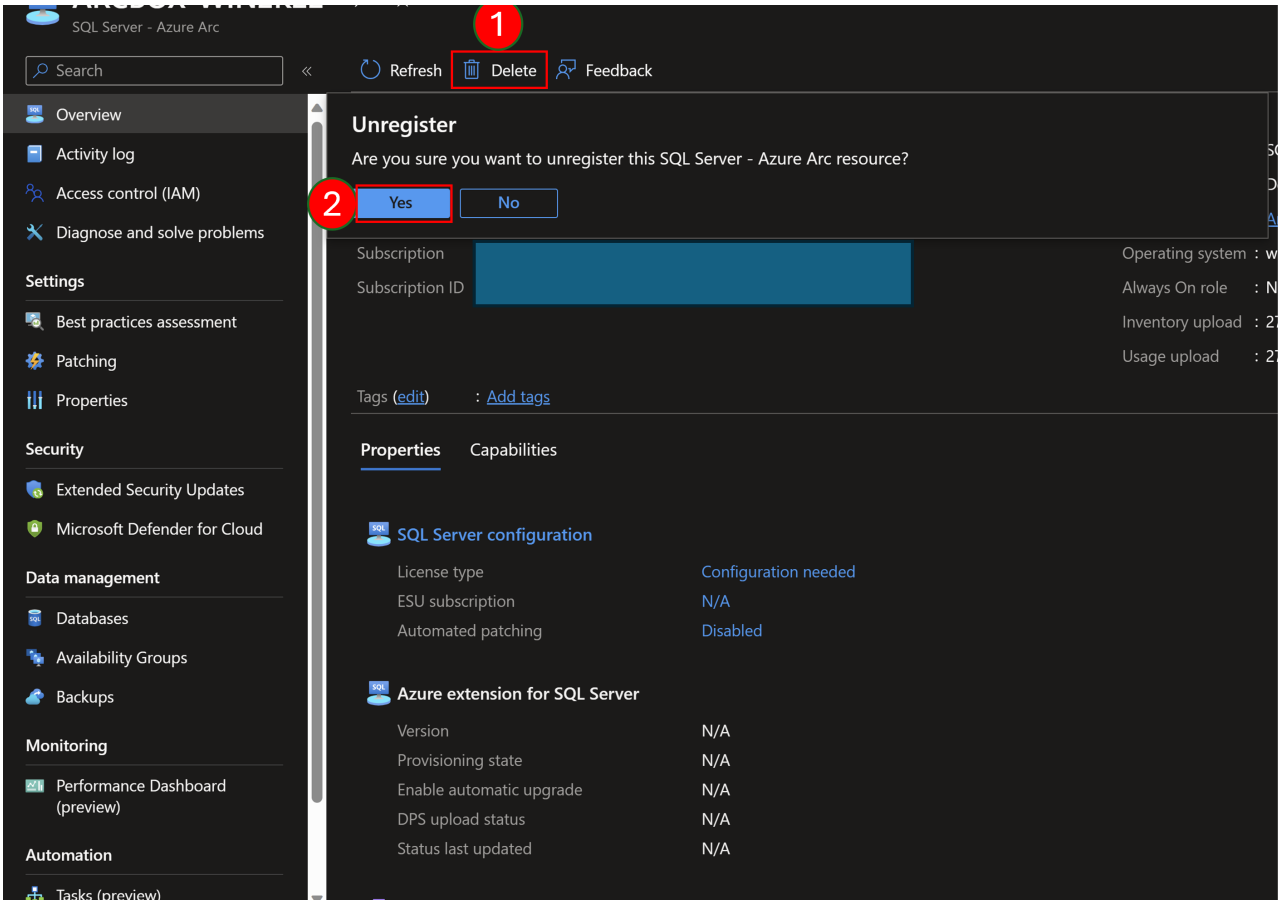
Task 2: Remove the Arc-enabled SQL Server

1. [] From the Azure portal go the *Azure Arc* page and select the *All Azure Arc Resources* option. Select the SQL Server *ArcBox-SQL*



2. [] Click on the Delete tab and Confirm that you want to unregister the resource when prompted



Task 2 has been completed

Click **Next** for the next exercise or **Go back to the main table of content**

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Exercise 2 - Install SQL Server extension using offline MSI installer and using PowerShell remote execution

Objective

There are many ways to install SQL server extension depending on the your preference. In this module you will learn how to install SQL Server extension using offline MSI installer and using PowerShell remoting.

Estimated Time to Complete This Exercise

30 minutes

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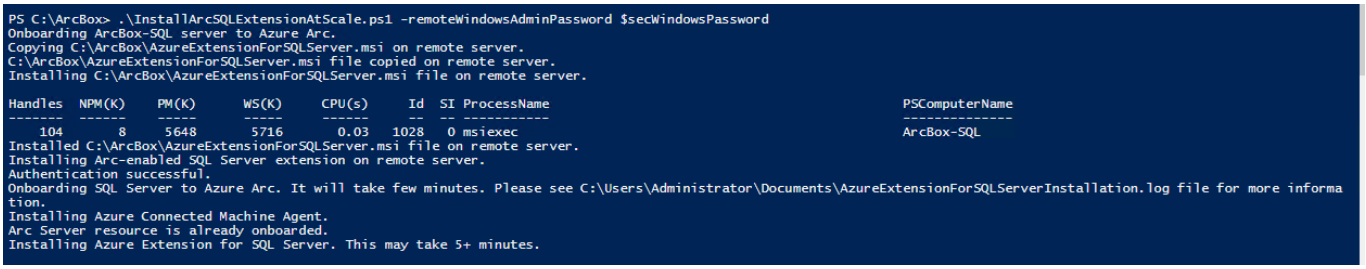
Task 1: Connect A SQL Server to Arc using remote Powershell

1. [] Logon to ArcBox-Client VM, open Windows explorer and navigate to C:\ArcBox folder. Verify that the *InstallArcSQLExtensionAtScale.ps1* PowerShell script file exists.

2. [] Open *InstallArcSQLExtensionAtScale.ps1* in PowerShell ISE editor to review script. Note that the script attempts to download the .msi installer and then tries to run the installer on the list of servers (in this case only one server is specified, *ArcBox-SQL*). The action installs the *WindowsAgent.SqlServer* extension on the specified servers remotely.

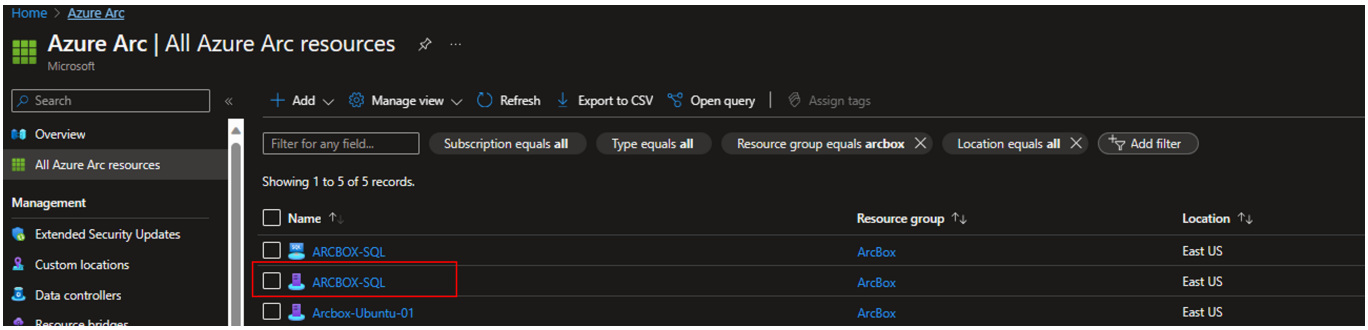
3. [] Open PowerShell command line window and change directory to "C:\ArcBox" folder. Then run the following commands to install the SQL Server extension at scale , **after inserting the password *JS123!!* in the script**.

```
$secWindowsPassword = ConvertTo-SecureString "<Insert password before running>" -
AsPlainText -Force
.\InstallArcSQLExtensionAtScale.ps1 -remoteWindowsAdminPassword
$secWindowsPassword
```

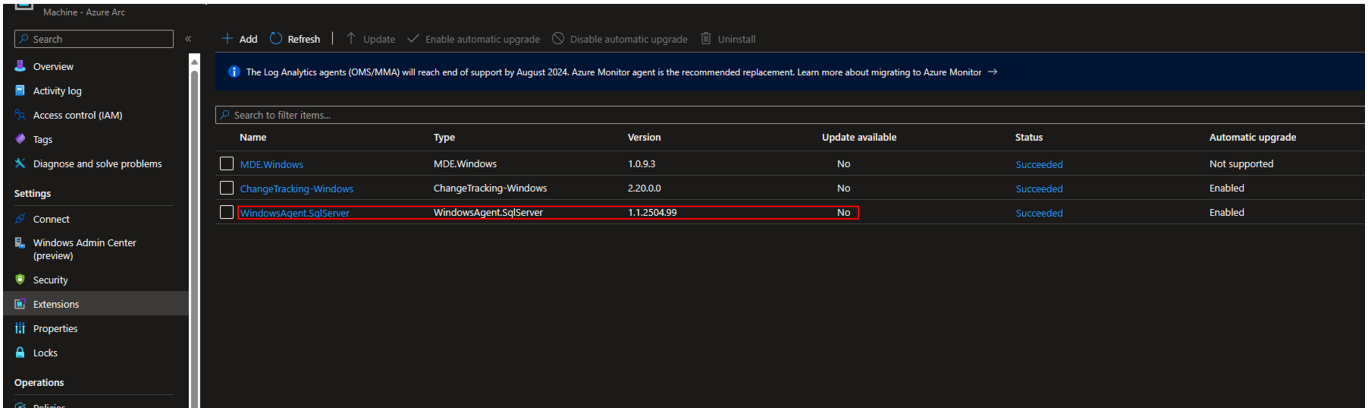


4. [] In case some of the servers are already onboarded to Arc, you might see a message indicating that the extension already exists. Otherwise the script will install the extension on the specified list of machines. Wait for the script execution to complete.

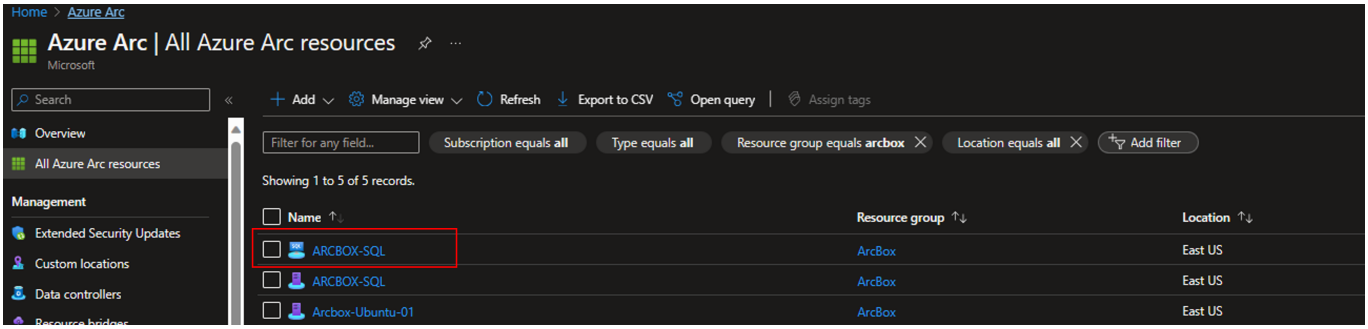
5. [] From the Azure portal go to *Azure Arc* page and select the *All Azure Arc Resources* option. Select the *ArcBox-SQL* machine hosting a SQL server.



6. [] On the Server page , under *Extensions* verify that the *WindowsAgent.SqlServer* extension has been re-installed.



7. [] From the Azure portal go to *Azure Arc* page and select the *All Azure Arc Resources* option. Verify that the *ArcBox-SQL* SQL Server is now Arc-enabled again.



Task 1 has been completed

Click **Next** for the next lab or **Go back to the main table of content**