

# LAB12: Connect a SQL Server to Azure Arc

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Azure Arc automatically installs the Azure extension for SQL Server when a server connected to Azure Arc has SQL Server installed. All the SQL Server instance resources are automatically created in Azure, providing a centralized management platform for all your SQL Server instances.

## Student Lab Manual

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## Exercise 1 - Pre-Requisites

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### Objective

Review the necessary pre-requisites to Arc-enable SQL Servers.

### Estimated Time to Complete This Exercise

10 minutes

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## Task 1: Review Pre-requisites

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Before you add an Azure Arc-enabled SQL Server you will need the following pre-requisites. **Note that in this lab environment these pre-requisites have already been provided and are listed here for information only.**

1. [] A virtual or physical machine running SQL Server: The machine hosting SQL Server must be connected to the internet directly or via a proxy server.

2. [] A user account with permissions: An account with local admin rights. [Learn more about the required Azure permissions.](#)
3. [] PowerShell: Powershell must be installed on the computer executing the onboarding script. [Learn how to install Powershell](#)
4. [] Registered resource providers: The Microsoft.AzureArcData and Microsoft.HybridCompute resource providers must be registered. [Learn more about registering resource providers](#)

### Task 1 has been completed

Click **Next** for the next exercise or [Go back to the main table of content](#)

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## Exercise 2 - Review Existing Arc Resources

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### Objective

The deployment process that you have walked through in Lab01 should have set up a number of Server VMs running on Hyper-V in the ArcBox-Client machine. One of these Servers *ArcBox-SQL* has a SQL server deployed. In this exercise you will Arc-enable this SQL server.

### Estimated Time to Complete This Exercise

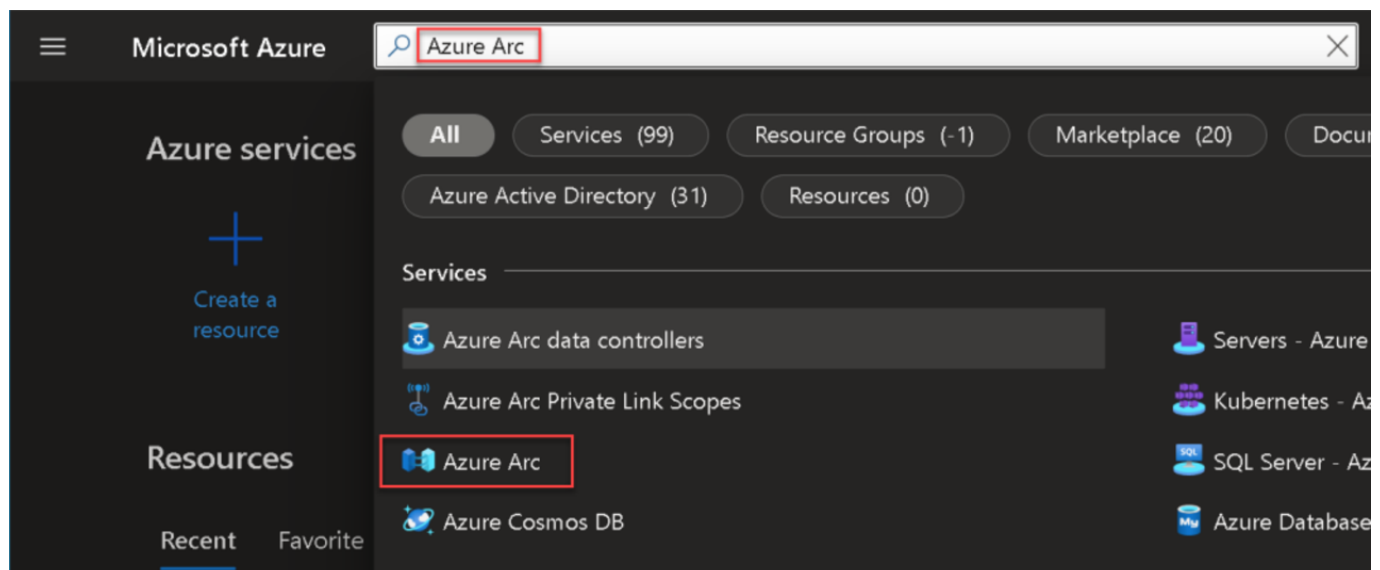
15 minutes

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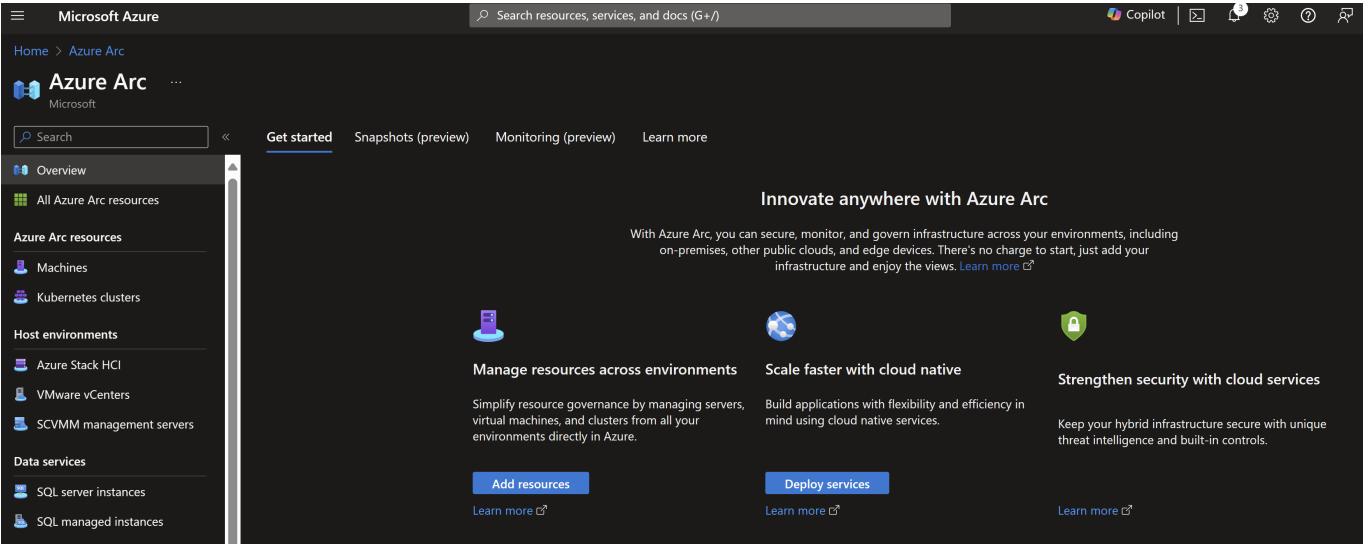
## Task 1: Use the Azure portal to examine you Arc-enabled machines inventory

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1. [] In the Azure portal search for *Azure Arc* in the search bar



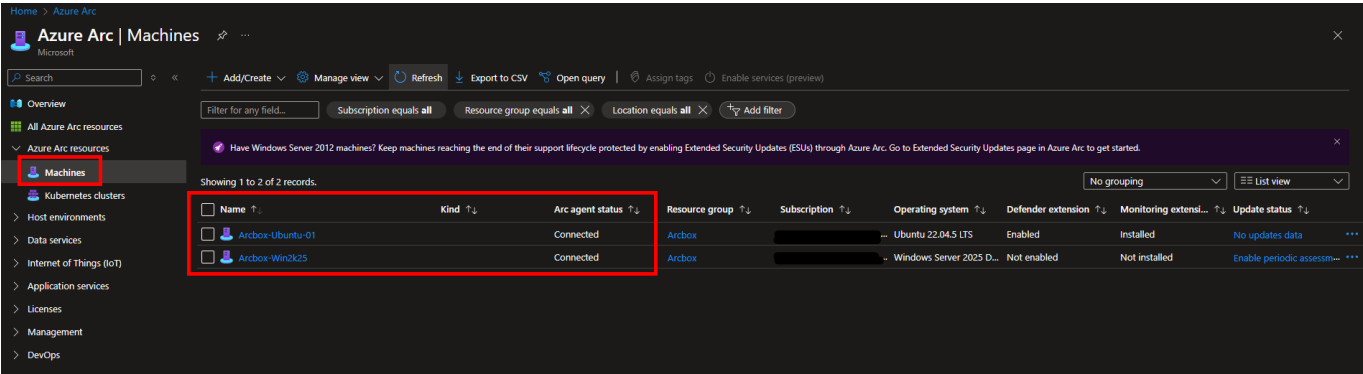
2. [] In the Azure Arc page you should see the *Overview* option



3. [] Click the *All Azure Arc Resources* option, and you should see the Arc-enabled Windows and Linux servers, but you notice that the *ArcBox-SQL* Windows machine is not Arc-enabled, neither is the SQL Server deployed on it

[!Important] Note that the Azure Arc resources showing in your portal might be different from the picture below but you should not see the *ArcBox-SQL* machine unless you have onboarded the the Windows server *ArcBox-SQL* optionally in Lab02.

[!Important] If during Lab02 of this workshop you have also onboarded the Windows server *ArcBox-SQL* then you will see two Arc-enabled resources one for the Windows server and one for the SQL server hosted inside the Windows server. In the latter case you can jump to Exercise 3 - Task 2.



**Task 1 has been completed**

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

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# Exercise 3 - Add SQL Server to Azure Arc

**Objective**

In this exercise you will onboard a SQL Server to Azure Arc by first onboarding the Windows Server hosting the SQL Server. Once the Windows Server is Arc-enabled, it will automatically Arc-enable the SQL Server.

## Estimated Time to Complete This Lab

20 minutes

## Explanation

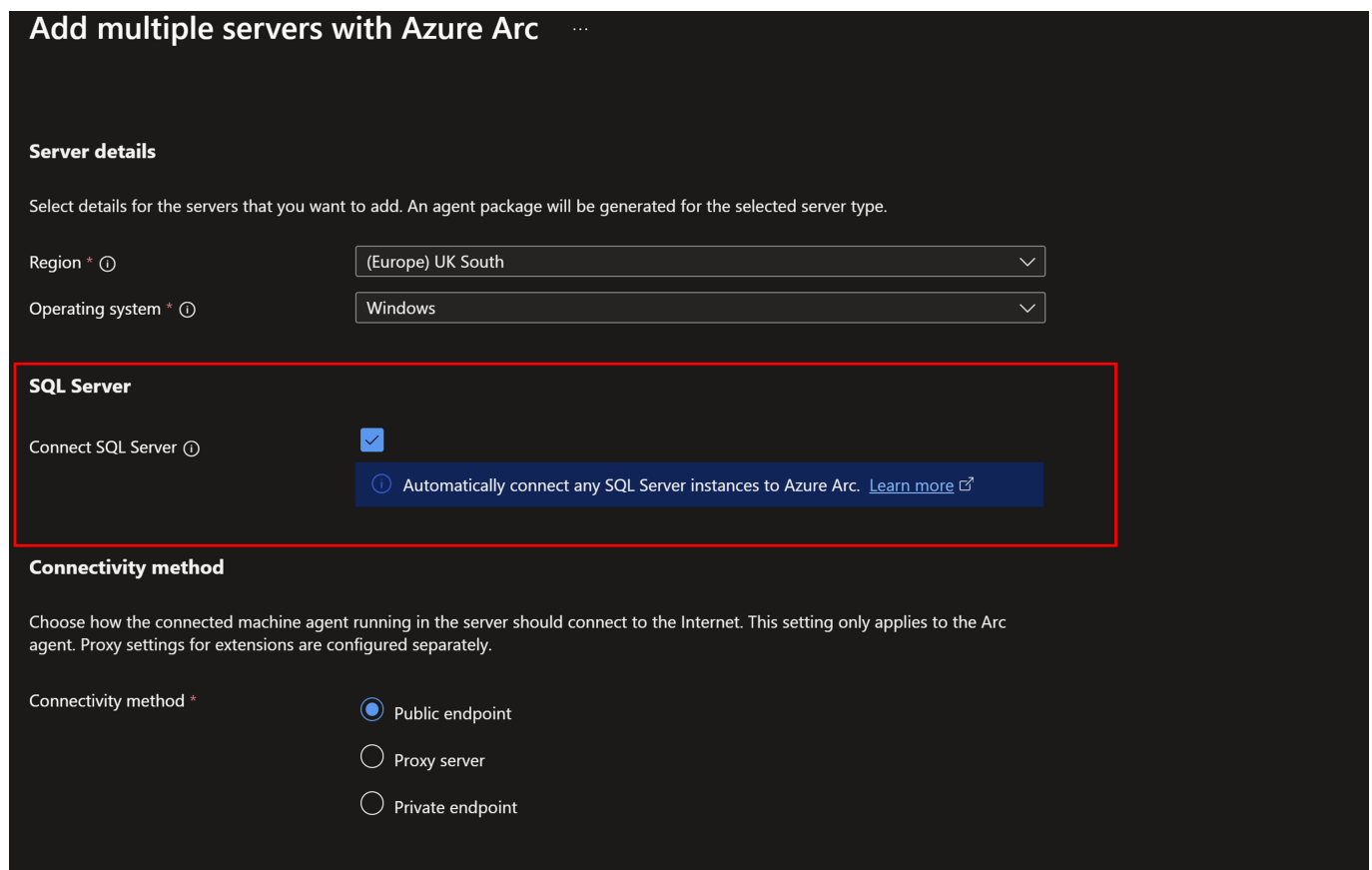
Connecting machines in your hybrid environment directly with Azure can be accomplished using different methods, depending on your requirements and the tools you prefer to use. In this instance you will use the same method of *Lab02* to onboard the Windows machine that hosts the SQL Server.

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## Task 1: Onboard a Windows Server to Azure Arc to automatically Arc-enable the SQL Server

1. [] Refer to *Lab02*, *Exercise 2* and follow the steps to onboard the nested *ArcBox-SQL* VM. However, this time make sure that you tick the *Connect SQL Server* option as shown below. This will automatically onboard the SQL Server to Arc in addition to the Windows server.

## Task 2: Verify that the SQL Server has been onboarded



**Add multiple servers with Azure Arc** ...

**Server details**

Select details for the servers that you want to add. An agent package will be generated for the selected server type.

Region \* ⓘ (Europe) UK South ▼

Operating system \* ⓘ Windows ▼

**SQL Server**

Connect SQL Server ⓘ ☒

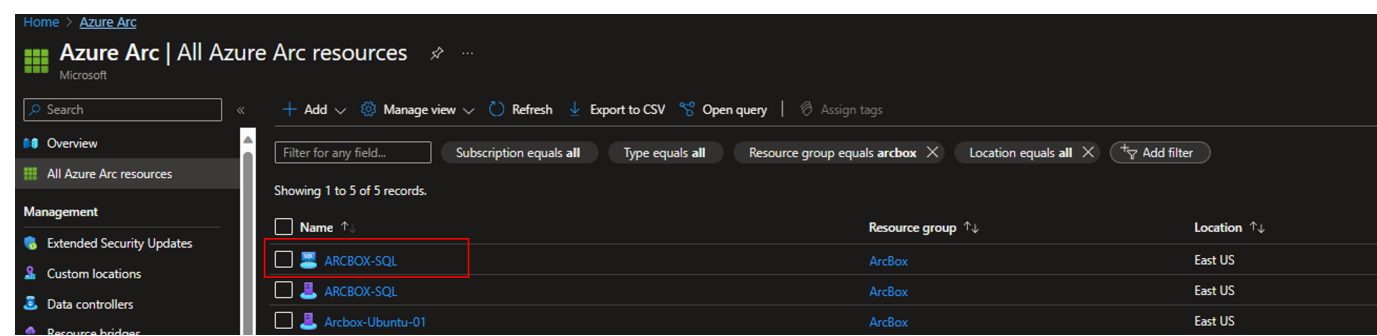
ⓘ Automatically connect any SQL Server instances to Azure Arc. [Learn more](#) ↗

**Connectivity method**

Choose how the connected machine agent running in the server should connect to the Internet. This setting only applies to the Arc agent. Proxy settings for extensions are configured separately.

Connectivity method \* ☒ Public endpoint ☐ Proxy server ☐ Private endpoint

1. [] After 5-10 minutes you should notice that the SQL Server *ArcBox-SQL* has also been onboarded. Confirm that the *ArcBox-SQL* VM has been onboarded by viewing all the Azure Arc resources as explained above in *Exercise 1* of this lab.



[!hint] **If after more than 10 minutes** you still do not see the SQL Server *ArcBox-SQL* in the portal, then go to the **ArcBox-SQL Windows server** from the Arc page on the Azure portal and check the installed extensions. If you do not see the *WindowsAgent.SqlServer* extension then install it manually by adding it from the portal. After the installation completes you should see the SQL server onboarded.