

ENVIRONMENT

1

SOFTWARE TOOLS

Software tools required for this course

2

SETUP

Software tools setup

3

AZURE RESOURCES

Azure Resources required for this course

4

SETUP AZURE RESOURCES

Setup Azure Resources through the Azure Portal



SECTION 1

SOFTWARE TOOLS

SOFTWARE TOOLS

Tools recommended for this Course

Visual Studio Code

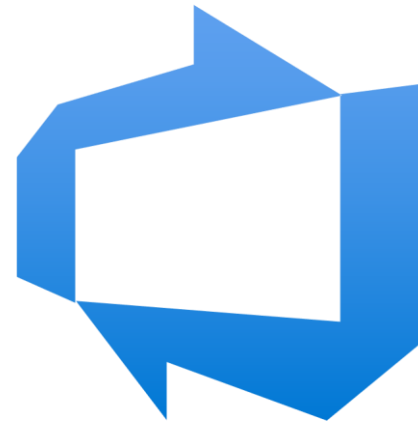


Open Source IDE for development

Multiple extensions

Intellisense

Git or Azure DevOps Account



Git or Azure DevOps account is highly recommended

Git Repository for Version Control

Free DevOps account for Git Repo or for CI/CD pipelines

SOFTWARE TOOLS

Tools Optional for this Course but recommended

Azure Data Studio

- Open source cross-platform tool for analytics
- Connect to Sql Server or Azure databases on-premise or multi-cloud

<https://azure.microsoft.com/en-us/products/data-studio/#features>

Azure Storage Explorer

- Free tool to manage Azure cloud storage resources from the desktop

<https://azure.microsoft.com/en-us/products/storage/storage-explorer/#overview>



SECTION 2

SOFTWARE TOOLS SETUP

SOFTWARE TOOLS SETUP

Setup Visual Studio Code and Azure DevOps

What we will learn

- *Install Visual Studio Code and Extensions*
- *Setup Git*
- *Create an Azure DevOps Account*
- *Show how to link Visual Studio Code with Azure DevOps*



SECTION 3

AZURE RESOURCES

AZURE RESOURCES

Azure Resources Required for this Course

Azure Resources that we will setup

➤ *Azure Data Lake Storage Gen2*

➤ *Azure Data Factory*

➤ *Azure Sql DB*



SECTION 4

SETUP AZURE RESOURCES

SETUP AZURE RESOURCES

Ways to setup Azure Resources

- Use the Portal to create your Azure Resources
 - Tedious and not repeatable

AZURE PORTAL

01

VS CODE AZURE TOOLS EXTENSIONS

- Set of extensions for VS Code that allow you to manage Azure resources from VS Code
 - VS Code extensions such as Azure Storage, Azure Databases

02

03

COMMAND LINE TOOLS

- Use command line tools such as Azure CLI or Azure PowerShell
- Use Infrastructure as a Code (IaC) such as ARM, Bicep or Terraform templates.
- Repeatable, Incremental, and automates tasks

SETUP AZURE RESOURCES

Overview of Setup

What we will learn?

- *How to create a resource group*
- *How to create an ADLS Gen2 resource*
- *How to create an Azure Data Factory resource*
- *How to create Azure Sql DB*

MODULE SUMMARY

In this module we learnt



OVERVIEW

Software tools we need for this course

Setup the required tools



AZURE RESOURCES

Azure Resources required for this course



SETUP AZURE RESOURCES

Ways to setup Azure Resources

Setup of Azure Resources through Azure Portal

REFERENCES

How to create Azure Resources

[How do I create and manage resources in Azure? | Microsoft Learn](#)

ARM Template Full Reference

<http://docs.microsoft.com/en-gb/azure/templates>

ARM Template documentation

<https://learn.microsoft.com/en-us/azure/azure-resource-manager/templates/>



SECTION 5

MANAGE AZURE USAGE

MANAGE AZURE USAGE

Ways to Manage Azure Usage

MONITOR USAGE

- Tag your resource group and its resources
 - Monitor usage by tags
 - Monitor usage by resources

SET ALERTS

- Set budgets alerts
- Automate actions with budgets

CONTROL COSTS

NEED BASED USAGE

- Delete resources that you don't use
- Delete resource groups after a session

