Azure CLI

Azure CLI

The Azure Command-Line Interface (CLI) is a set of commands used to manage Azure resources. It's a powerful tool that allows you to interact with Azure services directly from your terminal or command prompt. Whether you're creating virtual machines, managing web apps, or configuring networks, Azure CLI provides a straightforward way to perform these tasks programmatically.

Why Use Azure CLI?

- **Efficiency**: Automate repetitive tasks and manage resources faster than using the Azure portal.
- **Scripting**: Write scripts to perform complex deployments and configurations.
- **Cross-Platform**: Available on Windows, macOS, and Linux.
- **Integration**: Easily integrates with other tools and services in your development workflow

Getting Started with Azure CLI?

First, you need to install Azure CLI -

https://learn.microsoft.com/en-us/cli/azure/install-azure-cli-windows?tabs=azure-cli

Then to start using Azure CLI, you need to log in to your Azure account:

az login

This command opens a web browser to authenticate your account.

Basic Commands

Here are some basic commands to get you started:

https://docs.google.com/document/d/1tC5e8LCrlR-2nLL33VF3nzlOXAXQ0K4FMxRNTx_qyaw/edit?usp=sharing

Command Structure

Azure CLI commands follow a consistent structure:

az <group> <subgroup> <operation> [parameters]

- **Group**: The main category of the service (e.g., vm for virtual machines).
- **Subgroup**: Further categorizes the command if necessary.
- **Operation**: The action you want to perform (e.g., create, list).
- **Parameters**: Additional details required to perform the operation.

Tips for Using Azure CLI

Help: Use the --help flag with any command to get detailed usage information.

az vm create --help

Output Formats: Azure CLI supports multiple output formats, including JSON, table, and yaml. Use the --output flag to specify the format.

az vm list --output table

Summary

Azure CLI is a powerful tool that simplifies the management of Azure resources. By mastering basic commands and understanding its structure, you can automate tasks, integrate with other tools, and improve your efficiency in managing Azure services.

Azure CLI Labs

- Setup and Configure Azure CLI
- Manage Resource Groups
- View and Manage Resources
- Create a VM and a VNET
- Manage a Storage Account

Resources

- Getting Started with Azure CLI - https://learn.microsoft.com/en-us/cli/azure/get-started-with-azure-cli
- Azure CLI Docs - https://learn.microsoft.com/en-us/cli/azure/

Azure CLI & ARM Templates

Azure CLI and ARM Templates

First, log in to your Azure account using Azure CLI:

```
az login
```

Creating a Resource Group

Before deploying an ARM template, you need to create a resource group. A resource group is a container that holds related resources for an Azure solution.

```
az group create --name MyResourceGroup --location eastus
```

Deploying an ARM Template

Basic Deployment

Prepare Your ARM Template: Save your ARM template file, for example, template.json, on your local machine.

Deploy the Template: Use the following command to deploy the ARM template to the specified resource group:

```
az deployment group create --resource-group MyResourceGroup --template-file template.json
```

Export the Template: Use the following command to export the ARM template from a specified resource group:

```
az group export --name MyResourceGroup --output json > exported-template.json
```

Summary

Deploying ARM templates using Azure CLI is a powerful way to manage your Azure resources. It allows for automation, consistency, and repeatability in your deployments. By mastering the basics of ARM templates and Azure CLI, you can streamline your workflow and efficiently manage your infrastructure as code.

Exporting ARM templates using Azure CLI is a straightforward process that enables you to capture the current state of your Azure resources as code. This capability is invaluable for automation, replication, and sharing of your infrastructure setups.

Labs

- Deploy ARM Templates with Azure CLI
- Export ARM Templates with Azure CLI
- Deploy a web app with ARM templates and Az CLI

Commands - https://docs.google.com/document/d/14AVBvlCBckvNA9zLV_WUZVfU6es1uyApCubLPLkjBCU/edit?usp=sharing

Assignment

- Deploy a web app with ARM templates and Azure CLI.

  (Ensure you deploy a beautiful website using any template of your choice).

- Submission Link: https://docs.google.com/forms/d/e/1FAIpQLSeFI3lfwPEfsTGNs2hf0fYdipS-5uo2_ue5cWDKIsn20BP-nw/viewform?usp=sf_link