Microsoft

Azure CLI

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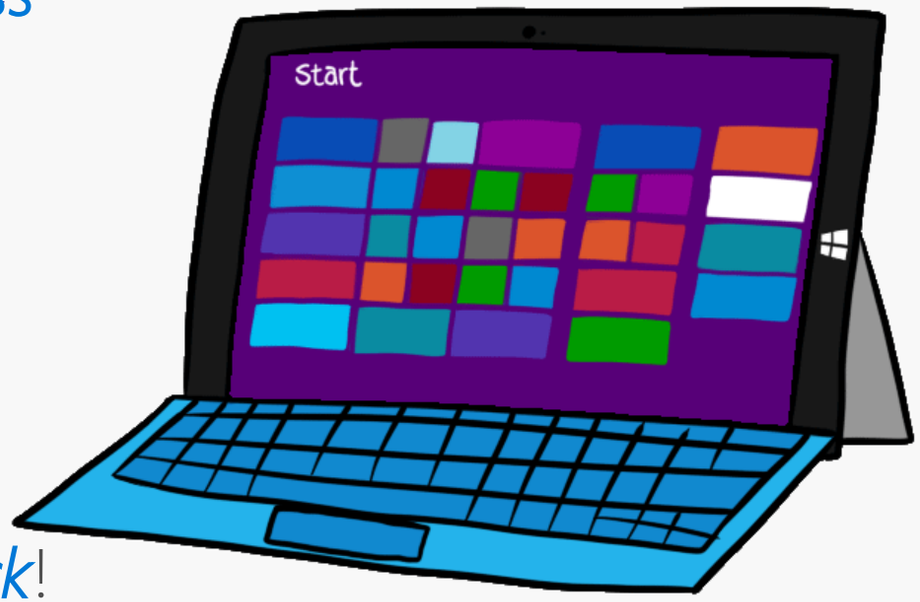
CLI – What is it?

- The Azure CLI is a set of open-source, cross-platform commands for working with Azure resources.
  - Available to use on macOS, Linux, and Windows.
- Optimized for managing and administering Azure resources and building automation scripts.
- Commands for availability of the vm, acs, storage and network.

CLI – Why use it?

- ✓ Provides *clean and pipe-able outputs* for interacting with popular command-line tools, such as grep, cut, and jq. Keeps simple with *predictable well-understood standards*. Open source.
- ✓ Easy management of subscriptions: If you have multiple Azure subscriptions, connecting to Azure grants *access to all subscriptions* associated with your credentials.
- ✓ Works with *both* Azure resources classic and ARM!
- ✓ Natural and *easy to install, regardless of platform*.
- ✓ Kept constantly *up-to date* with Azure for continuous integration.
- ✓ *Greater productivity* for your product, and constant updates to make it even *better based on your feedback*!



History of Azure CLI

- Azure XPlat CLI

Use both classic and Azure Resource Management mode

- ✓Resource Manager mode - for working with Azure resources in the Resource Manager deployment model. To set this mode, run *azure config mode arm*.
- ✓Service Management mode - for working with Azure resources in the classic deployment model. To set this mode, run *azure config mode asm*.

- CLI 2.0
  - Released Feb 2017
  - Based on Python
  - consistent experience across Windows, macOS, and Linux
  - easy integration with shell scripts
  - simpler syntax than Azure PowerShell or the bash shell

CLI – Moving to CLI 2.0

- You don't need to change anything!!!
  - **The XPlat CLI will continue to work** and scripts will continue to function. We are continuing to support and add new features to the CLI.
  - **You can install and use both CLIs side-by-side**: Try out the CLI 2.0 Preview while leaving your existing Azure XPlat CLI installation untouched.
  - **Note: ASM/Classic mode is not supported in the Azure CLI 2.0 Preview**: CLI 2.0 is designed around ARM primitives, such as resource groups and templates. ASM/Classic mode will continue to be supported by the XPlat CLI.
- Support for .NET Core and PowerShell continue to be available and fully supported.

Online conversion guide, with conversion table that maps commands between the CLIs.

- *https://github.com/Azure/azure-cli/blob/master/doc/azure2az_commands.rst*

CLI 2.0 – What can I do with it?

- Create/manage Resource Groups
- Create/manage VMs
- Create Azure Network Load Balancer
- Listing resources running in Azure and formatting output
- Query for resources that meet a specific condition
- Deleting resources
- ..and more!

Please see the documentation for specific examples of each:

- https://docs.microsoft.com/en-us/cli/azure/get-started-with-azure-cli

CLI 2.0 – Some Command Examples

- The simple list command with table output format returns a curated set of most common, simple properties for each resource type in an easy-to-read tabular format.

Azure CLI | Copy

```
az vm list --out table
```

- You can use the --query parameter to show just the Resource Group name and VM name for all virtual machines in your subscription.

Azure CLI | Copy

```
az vm list \
  --query [*].[name,resourceGroup]
```

- You can add friendly labels or names to the properties you select, as well. In the following example, we added the labels "VMName" and "RGName" to the selected properties "name" and "resourceGroup".

Azure CLI | Copy

```
az vm list \
  --query "[].{RGName:resourceGroup, VMName:name}"
```

CLI 2.0 – We Love Feedback!

- You can open issues directly with Microsoft support or on our github issues list.
- You can ask questions on StackOverflow using the *azure-cli tag*.
- Contact the product team at azfeedback@microsoft.com
- You can provide feedback from the command line with the az feedback command.

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Azure PowerShell

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Azure PowerShell

- ✓ Azure PowerShell is designed for managing and administering Azure resources from the command line, and for building automation scripts that work against the Azure Resource Manager.

History of Azure PowerShell

- Classic Commands
  - Classic mode commands will start with “Azure” and NOT “AzureRM”. Be careful when you find online tutorials of which mode the commands are targeting!
  - Only reason to use Classic mode is if you are dealing with legacy services that were initially made on Classic mode. Do NOT create new stuff on Classic mode.

- Resource Manager Commands
  - Use the “**AzureRM**” command.
  - Should try to use Resource Manager always / when possible.

Azure CLI vs Azure PowerShell?

- **Use Azure CLI if:**
  - You do not know PowerShell well or at all.
  - You prefer simpler, shorter commands.
  - You want to use the commands cross-platform (Windows, Mac, Linux).

- **Use Azure PowerShell if:**
  - You already use PowerShell regularly and do not want/need to pick up an additional CLI.
  - You are using mainly Windows, or can install PowerShell on Linux.
  - You want to create reusable complex automation scripts.

Lab

- Practice using the Azure CLI and Azure PowerShell.
- Create a resource group, VM, manage the VM, tag, then remote the resource group.

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Thank you!