

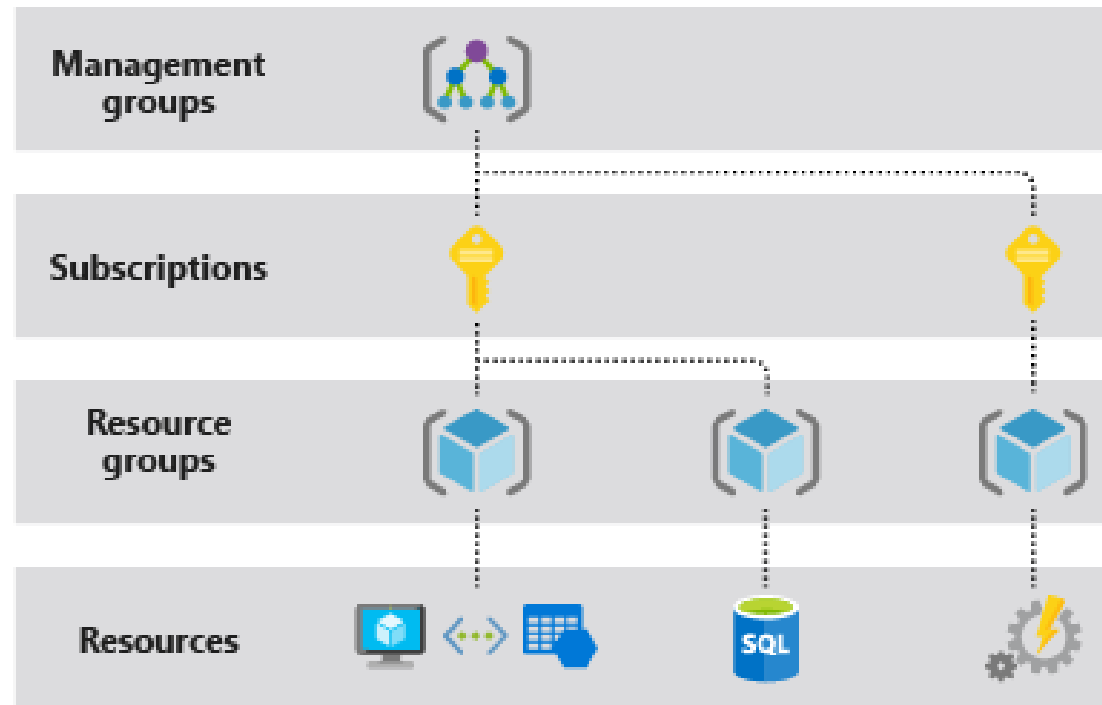


Module 3: Azure Resources

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Azure Resource Management Scope Levels





Module Objectives:

- **Module 3-1:** Understanding Azure Resource Manager
- **Module 3-2:** Understanding Azure Resource Groups
- **Module 3-3:** Understanding Azure Resources



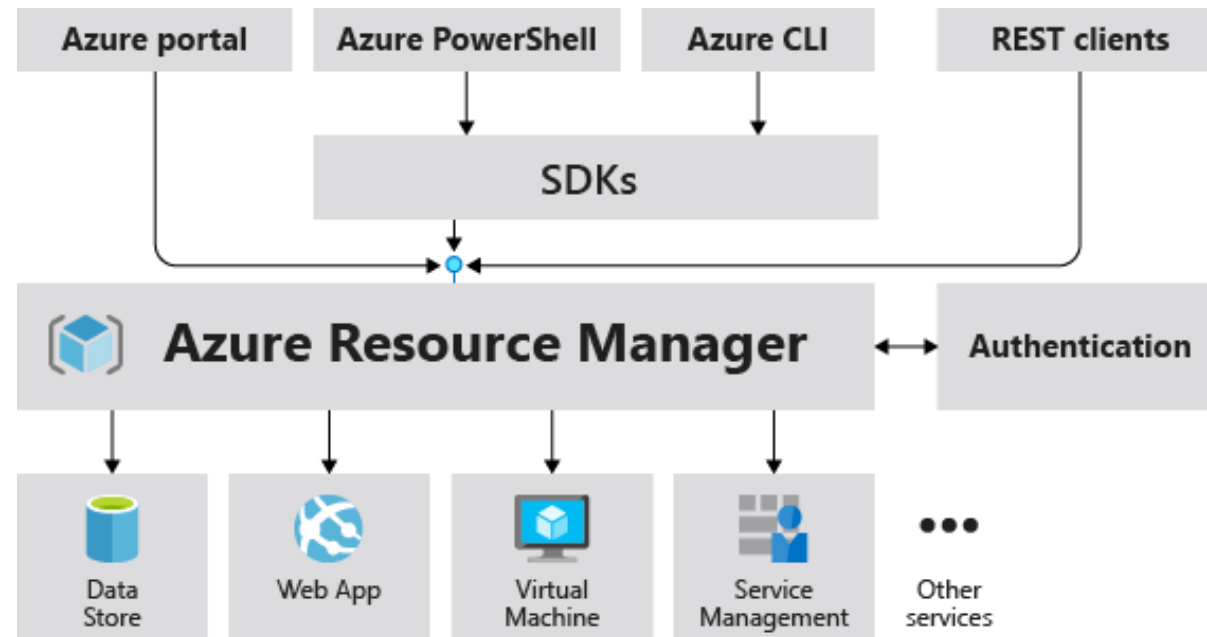
Understanding Azure Resource Manager

Azure Resource Manager is the deployment and management service for Azure. It provides a management layer that enables you to create, update, and delete resources in your Azure account. You use management features, like access control, locks, and tags, to secure and organize your resources after deployment.

Further reading: <https://learn.microsoft.com/en-us/azure/azure-resource-manager/management/overview>



Consistent Management Layer





Azure Resource Management Terminology

- Resource: A manageable item that is available through Azure
- Resource Group: A container that holds related resources for an Azure solution.
- Resource Provider: A service that supplies Azure resources.
- Declarative Syntax: Syntax that lets you specify resources to be created.
- ARM Template: A JavaScript Object Notation (JSON) file that defines one or more resources to deploy to a resource group, subscription, management group, or tenant.
- Bicep File: A file for declaratively deploying Azure resources.

Further reading: <https://learn.microsoft.com/en-us/azure/azure-resource-manager/management/overview>



Understanding Azure Resource Groups

A container that holds related resources for an Azure solution. The resource group includes those resources that you want to manage as a group. You decide which resources belong in a resource group based on what makes the most sense for your organization.



Factors to consider with resource groups

- All the resources in your resource group should share the same lifecycle.
- Each resource can exist in only one resource group.
- You can add to or remove a resource from a resource group at any time.
- You can move a resource from one resource group to another group.
- The resources in a resource group can be located in different regions than the resource group.
- When you create a resource group, you need to provide a location for that resource group.



Understanding Azure Resources

In Azure, a resource is an entity managed by Azure. Virtual machines, virtual networks, and storage accounts are all examples of Azure resources.

An Azure resource provider is a collection of REST operations that provide functionality for an Azure service. For example, the Key Vault service consists of a resource provider named **Microsoft.KeyVault**. The resource provider defines REST operations for working with vaults, secrets, keys, and certificates.

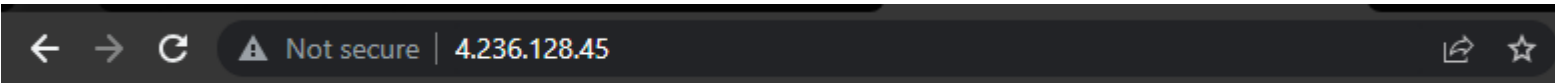
Further Reading: <https://learn.microsoft.com/en-us/azure/azure-resource-manager/management/resource-providers-and-types>



Azure AD Labs

Tasks:

- Create a Resource Group
- Assign an ENV:PRODUCTION tag to resource group
- Create an Azure VM
- SSH into the Azure VM instance
- Setup an Apache Web Server
- Delete the Azure VM instance



hello world