Migrating Microsoft workloads to Azure

Bring your own subscription guidance

# Setup instructions

To deploy the environment for this OpenHack, you will need to execute two Azure Resource Manager templates within your Azure subscription - azuredeployOnPrem.json and azuredeployCloudNetwork.json.

While the environment provisions, you can begin reading through the [Overview](https://openhackguides.blob.core.windows.net/guides/microsoft-open-hack-migration/Overview.html) and [Challenge 1](https://openhackguides.blob.core.windows.net/guides/microsoft-open-hack-migration/Challenge-1.html).

## General Azure subscription requirements

If you are using your own Azure subscription:

* Each Azure subscription(s) must be standalone
  + You must create new Azure Active Directory for attendees and coaches
* Azure subscription(s) should be created new with no existing workloads
* Each team (max. 5-6 people) should have their own Azure subscription
* Each person on the team should have Owner access on the Azure subscription and Global Administrator rights to the Azure AD tenant.
* There should be no policies in place that could block resources from being created in the OpenHack

## azuredeployOnPrem.json

* Create a resource group called openhackonpremrg in a region with support for Standard\_D16s\_v3 virtual machines.
* This template deploys a Standard\_D16s\_v3 Hyper-V host and bootstraps the host with the attendee environment.
* It is recommended that you make sure you deploy the template into a region with support and availability of Standard\_D16s\_v3.
* The template itself takes ~7-10 minutes to run, however there are a series of scripts and reboots which occur automatically as the host is configured. This can take ~2-2.5 hours. It is recommended that you deploy the template and let the scripts run for at least that amount of time before verifying the host.

[](https://portal.azure.com/#create/Microsoft.Template/uri/https%3A%2F%2Fopenhackguides.blob.core.windows.net%2Fmigration-open-hack-artifacts%2Farmtemplates%2FazuredeployOnPrem.json)

## azuredeployCloudNetwork.json

* In the same region as the resource group and resources created earlier, create another resource group called openhackcloudrg and deploy this template to it.
* You can deploy this template at the same time as the first one.
* This template takes ~45 minutes to execute as it stands up a VPN gateway.

[](https://portal.azure.com/#create/Microsoft.Template/uri/https%3A%2F%2Fopenhackguides.blob.core.windows.net%2Fmigration-open-hack-artifacts%2Farmtemplates%2FazuredeployCloudNetwork.json)

# Services consumed

The following services are expected to be consumed over the duration of the OpenHack. You should ensure that capacity is available and that quotas for each subscription you are running the OpenHack in are at an appropriate capacity.

Due to the open nature of OpenHack execution, services that are not on this list may be consumed as well. Core consumption is expected to be at least 30 cores per team per subscription.

## Required resources

The following are the required resources to successfully complete the OpenHack.

|  |  |  |  |
| --- | --- | --- | --- |
| Service | SKU | Count | Cores |
| Azure Virtual Machines | Standard\_D16s\_v3 | 1 | 16 |
| Azure Virtual Machines | Standard\_Ds | 5 | Minimum 10 |
| Azure Virtual Machines | Standard\_Fs | 5 | Minimum 10 |
| Azure Active Directory | Free | 1 |  |
| Azure App Service | S1 | 2 |  |
| Azure SQL Database | S0 | 1 |  |
| Azure App Gateway | WAF\_v2 | 1 |  |
| Public IP | Standard | 5 |  |
| Azure Database Migration Service | Premium | 1 |  |
| App Service Domain |  | 1 |  |
| Azure Load Balancer | Standard | 1 |  |
| Azure Storage | GPv1 | ~5 |  |
| VPN Gateway | VpnGw1 | 1 |  |

## Other resources

The following are resources that teams have used in the past to complete the OpenHack that are not required.

|  |  |
| --- | --- |
| Service | SKU |
| Azure App Service | Premium v2 Plan - P1 v2 |
| Azure App Service | SSL Certificates - Standard SSL - 1 Year Certificate |
| Azure Key Vault |  |
| Azure Traffic Manager |  |
| Azure Front Door Service |  |

# Permissions

Elevated permissions are required to provision this OpenHack and for each team member to successfully complete the OpenHack. At this time, our guidance is that each team be provisioned into their own dedicated Azure subscription and Azure AD tenant.

* Each person on the team should have Owner access on the Azure subscription and Global Administrator rights to the Azure AD tenant.

# Additional notes

* If the Azure AD tenant for the OpenHack is not associated with the Azure subscription, there are success criteria in Challenges 4 and later that must be adjusted as RBAC cannot be set on resources in the Azure subscription using identities from Azure AD.