

Module 6: Assignment- 5

Tasks To Be Performed:

1. Use the previously created Apache2 VM
2. Get a free domain from freenom.com
3. Use Azure DNS to point this free domain to your VMs IP

The image displays two screenshots of the Microsoft Azure portal interface, illustrating the configuration of a virtual machine (VM) and its associated DNS settings.

Top Screenshot: VM Overview

The top screenshot shows the 'Overview' page for a virtual machine named 'vmwest'. The left sidebar lists various settings categories: Overview, Activity log, Access control (IAM), Tags, Diagnose and solve problems, Connect, Network settings, Application security groups, Network manager, Settings, Disks, Extensions + applications, Configuration, Advisor recommendations, Properties, Locks, Availability + scale, and Size. The main content area displays the VM's details:

- Essentials:** Resource group (vmwest), Status (Running), Location (Central India (Zone 1)), Subscription ID (0fc3ae4-3e1b-4217-9077-976b1fb6cddc), Availability zone (1), Tags (Add tags).
- Properties:** Computer name (vmwest), Operating system (Linux (ubuntu 20.04)), Image publisher (canonical), Image offer (0001-com-ubuntu-server-focal), Image plan (20_04-lts-gen2), VM generation (V2), VM architecture (x64), Agent status (Ready), Agent version (2.10.0.8), Hibernation (Disabled), Host group (-), Host (-), Proximity placement group (-), Colocation status (N/A), Capacity reservation group (-).
- Networking:** Public IP address (20.197.47.121), Private IP address (10.0.0.4), Virtual network/subnet (vmwest-vnet/default), DNS name (Not configured).
- Size:** Standard B1s, Size (Standard B1s), vCPUs (1), RAM (1 GiB).
- Disk:** OS disk (vmwest_disk1_50e05d763ae84249a6597a5d085f627f), Encryption at host (Disabled), Azure disk encryption (Not enabled).

Bottom Screenshot: VM IP Configuration

The bottom screenshot shows the 'Configuration' page for the 'vmwest-ip' public IP address. The left sidebar lists settings categories: Overview, Activity log, Access control (IAM), Tags, Settings, Configuration, Properties, Locks, Monitoring, Diagnostic settings, Automation, CU / PS, Tasks (preview), Export template, and Help. The main content area displays the IP address configuration:

- IP address assignment:** Static.
- IP address:** 20.197.47.121.
- Idle timeout (minutes):** 4.
- DNS name label (optional):** vmwest.
- Alias record sets:** Create an alias record in Azure DNS. Learn more.
- Subscriptions:** No results.
- Need help?** Using custom domains with your IP address. Secure a web server on a Linux Virtual Machine with TLS/SSL. Secure a web server on a Windows Virtual Machine with TLS/SSL.

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The screenshot displays the Microsoft Azure portal interface. On the left, the 'Virtual machines' section is active, showing a list of VMs with 'vmwest' selected. The main pane shows the 'Overview' tab for 'vmwest'. Key details include:

- Essentials:** Resource group (Project_Resource), Status (Running), Location (Central India (Zone 1)), Subscription ID (0fc3ae4-3e1b-4217-9777-976b1fb6cddc), Availability zone (1), and Tags (Add tags).
- Properties:** Computer name (vmwest), Operating system (Linux (ubuntu 20.04)), Image publisher (canonical), Image offer (0071-com-ubuntu-server-focal), Image plan (20_04-fs-gen2), VM generation (V2), VM architecture (amd64), Agent status (Ready), Agent version (2.10.0.8), Hibernation (Disabled), Host group (-), Host (-), Proximity placement group (-), Colocation status (N/A), and Capacity reservation group (-).
- Networking:** Public IP address (20.197.47.121), Private IP address (10.0.0.4), Virtual network/subnet (vmwest-vnet/default), and DNS name (venkat.centralindia.cloudapp.azure.com).
- Size:** Standard B1s, 1 vCPU, 1 GiB memory.
- Disk:** OS disk (vmwest_disk1_50e05d763aa84249a5997a5085f627f), Encryption at host (Disabled), and Azure disk encryption (Not enabled).

The screenshot shows the 'Apache2 Ubuntu Default Page' with the following content:

Apache2 Ubuntu Default Page

It works!

This is the default welcome page used to test the correct operation of the Apache2 server after installation on Ubuntu systems. It is based on the equivalent page on Debian, from which the Ubuntu Apache packaging is derived. If you can read this page, it means that the Apache HTTP server installed at this site is working properly. You should **replace this file** (located at `/var/www/html/index.html`) before continuing to operate your HTTP server.

If you are a normal user of this web site and don't know what this page is about, this probably means that the site is currently unavailable due to maintenance. If the problem persists, please contact the site's administrator.

Configuration Overview

Ubuntu's Apache2 default configuration is different from the upstream default configuration, and split into several files optimized for interaction with Ubuntu tools. The configuration system is **fully documented in `/usr/share/doc/apache2/README.Debian.gz`**. Refer to this for the full documentation. Documentation for the web server itself can be found by accessing the **manual** if the `apache2-doc` package was installed on this server.

The configuration layout for an Apache2 web server installation on Ubuntu systems is as follows:

```
/etc/apache2/
|-- apache2.conf
/   |-- ports.conf
|-- mods-enabled
/   |-- *.load
/   |-- *.conf
|-- conf-enabled
/   |-- *.conf
|-- sites-enabled
/   |-- *.conf
```

- `apache2.conf` is the main configuration file. It puts the pieces together by including all remaining configuration files when starting up the web server.
- `ports.conf` is always included from the main configuration file. It is used to determine the