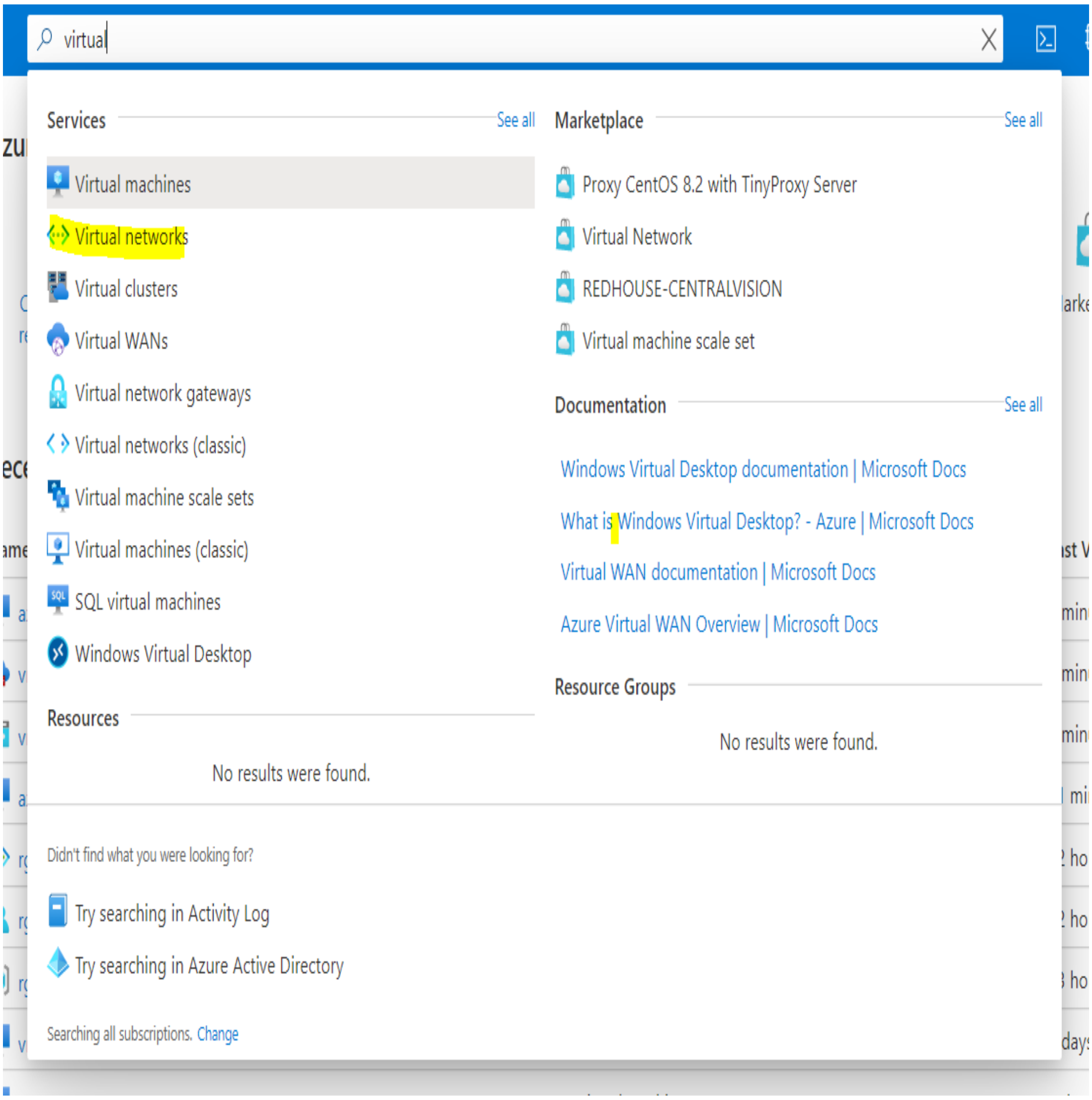
## CREATING VNET

Goto -> Search -> Virtual networks -> Create



virtual

Services — See all

- Virtual machines
- Virtual networks
- Virtual clusters
- Virtual WANs
- Virtual network gateways
- Virtual networks (classic)
- Virtual machine scale sets
- Virtual machines (classic)
- SQL virtual machines
- Windows Virtual Desktop

Resources

No results were found.

Marketplace — See all

- Proxy CentOS 8.2 with TinyProxy Server
- Virtual Network
- REDHOUSE-CENTRALVISION
- Virtual machine scale set

Documentation — See all

- Windows Virtual Desktop documentation | Microsoft Docs
- What is Windows Virtual Desktop? - Azure | Microsoft Docs
- Virtual WAN documentation | Microsoft Docs
- Azure Virtual WAN Overview | Microsoft Docs

Resource Groups

No results were found.

Didn't find what you were looking for?

- Try searching in Activity Log
- Try searching in Azure Active Directory

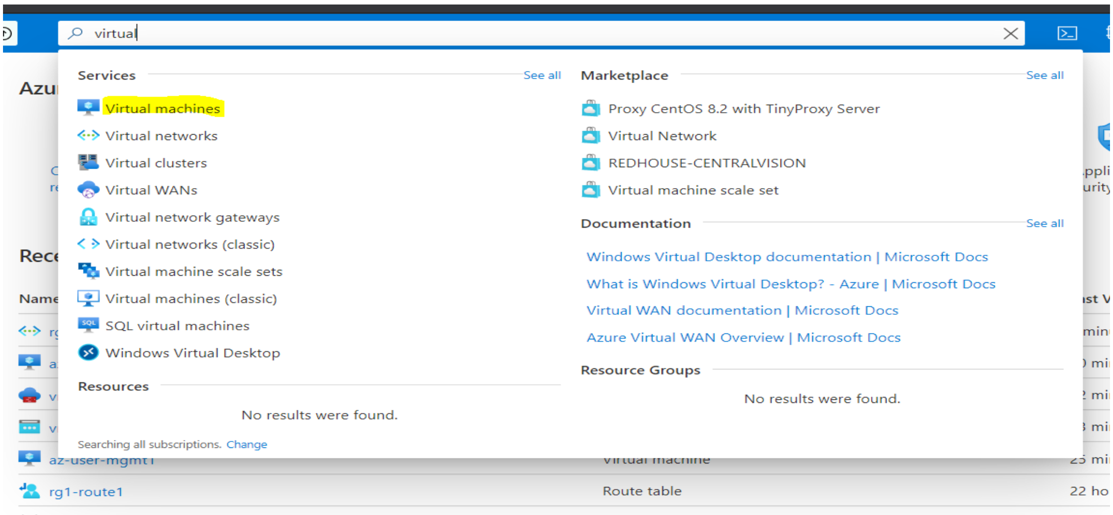
Searching all subscriptions. Change

- Resource group : rg1
- Name : Rg1-vnet1
- Region : East US
- Subnet name : Rg1-vnet1-subnet1
- Subnet address : 10.3.0.0/24
- Create another subnet by clicking on add
- Subnet name : Rg1-vnet1-subnet2
- Subnet address : 10.3.1.0/24

**REST ALL LEAVE AS DEFAULTS AND CLICK REVIEW & CREATE.**

## CREATING VMs

Goto -> Search -> Virtual Machines -> Create



virtual

Services — See all

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Resources

No results were found.

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- Virtual WAN documentation | Microsoft Docs
- Azure Virtual WAN Overview | Microsoft Docs

Resource Groups

No results were found.

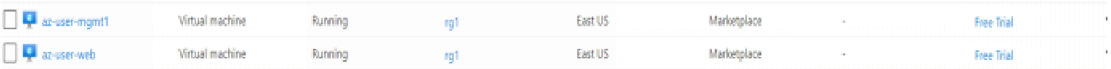
| | | |
|---|---|---|
| az-user-mgmt1 | Virtual machine | 23 mi |
| rg1-route1 | Route table | 22 ho |

- Resource group - rg1
- Virtual Machine name: rg1-vm1-mgmt1
- Region : East US
- Avialiablity options : No infrastructure redundancy required.
- Image : Keep Default, i.e. Ubuntu server 18.04 LTS - Gen1
- Size : Standard_B1s
- Authentication Type: Password
- Username : azuser-mgnt1
- Password : 16 character password of your choice.
- Select inbound ports: SSH, RDP
- Virtual network : Rg1-vnet1
- Subnet : Rg1-vnet1-subnet1

## REPEAT SAME FOR VM2 WITH SAME DETAILS AS

- Virtual Machine name : Rg1-web1
- Username : azuser-mgnt1
- Password : 16 character password of your choice.
- Subnet : Rg1-vnet1-subnet1

## REST ALL LEAVE AS DEFAULTS AND CLICK REVIEW & CREATE.



| | | | | | | | |
|---|---|---|---|---|---|---|---|
| □ az-user-mgmt1 | Virtual machine | Running | rg1 | East US | Marketplace | - | Free Trial |
| □ az-user-web | Virtual machine | Running | rg1 | East US | Marketplace | - | Free Trial |

## INSTALLING APACHE WEB SERVER IN Rg1-web1 VM

Login into server via ssh using below command

**ssh <Username>@public ip address**
**password: Pa$$word**

Using below commands install Apache web server.

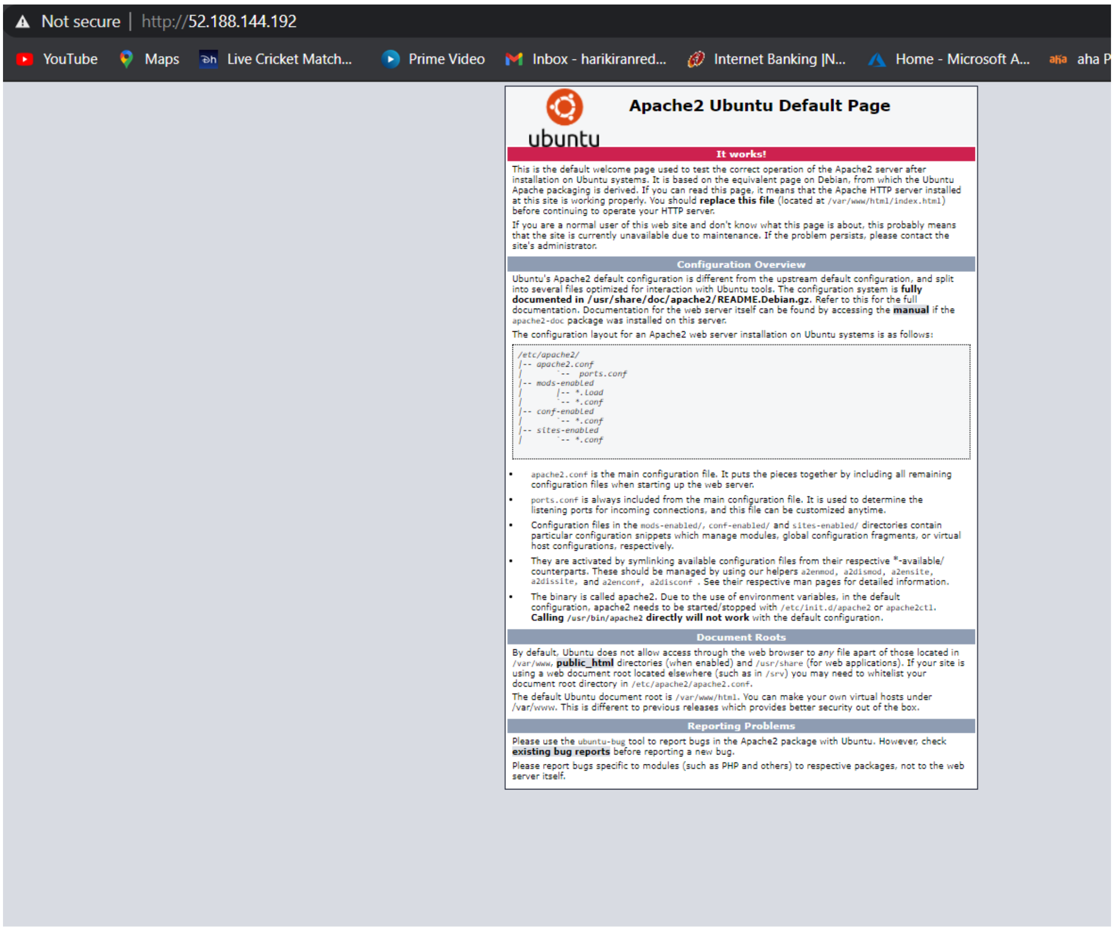
**sudo apt update**

**sudo apt install apache2**

That’s it, Apache is installed and automatically started. You can check the Apache service status by issuing:

**sudo systemctl status apache2**

Paste the public ip address of Rg1-web1 VM in web browser and you should see below page.



**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 listening ports for incoming connections, and this file can be customized anytime.
- Configuration files in the mods-enabled/, conf-enabled/ and sites-enabled/ directories contain particular configuration snippets which manage modules, global configuration fragments, or virtual host configurations, respectively.
- They are activated by symlinking available configuration files from their respective *-available/ counterparts. These should be managed by using our helpers a2enmod, a2dismod, a2ensite, a2dissite, and a2enconf, a2disconf . See their respective man pages for detailed information.
- The binary is called apache2. Due to the use of environment variables, in the default configuration, apache2 needs to be started/stopped with /etc/init.d/apache2 or apache2ctl. **Calling /usr/bin/apache2 directly will not work** with the default configuration.

**Document Roots**

By default, Ubuntu does not allow access through the web browser to *any* file apart of those located in /var/www, **public_html** directories (when enabled) and /usr/share (for web applications). If your site is using a web document root located elsewhere (such as in /srv) you may need to whitelist your document root directory in /etc/apache2/apache2.conf.

The default Ubuntu document root is /var/www/html. You can make your own virtual hosts under /var/www. This is different to previous releases which provides better security out of the box.

**Reporting Problems**

Please use the ubuntu-bug tool to report bugs in the Apache2 package with Ubuntu. However, check **existing bug reports** before reporting a new bug.

Please report bugs specific to modules (such as PHP and others) to respective packages, not to the web server itself.

You can access VMs using SSH, if you need to access VMs via RDP please use below procedure to install **xrdp** to login VMs using RDP.

Install xfce using apt as follows:

```
sudo apt-get update
sudo apt-get -y install xfce4
```

Now that you have a desktop environment installed, configure a remote desktop service to listen for incoming connections. xrdp is an open source Remote Desktop Protocol (RDP) server that is available on most Linux distributions, and works well with xfce. Install xrdp on your Ubuntu VM as follows:

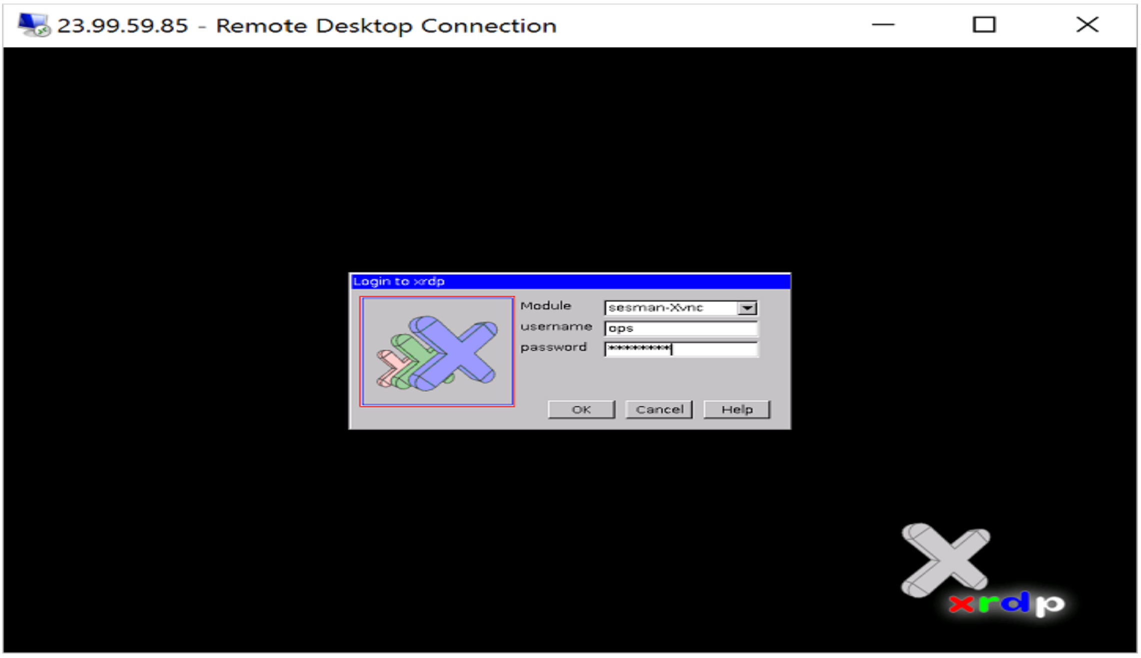
```
sudo apt-get -y install xrdp
sudo systemctl enable xrdp
```

Tell xrdp what desktop environment to use when you start your session. Configure xrdp to use xfce as your desktop environment as follows:

```
echo xfce4-session >~/.xsession
```

Restart the xrdp service for the changes to take effect as follows:

```
sudo service xrdp restart
```



23.99.59.85 - Remote Desktop Connection

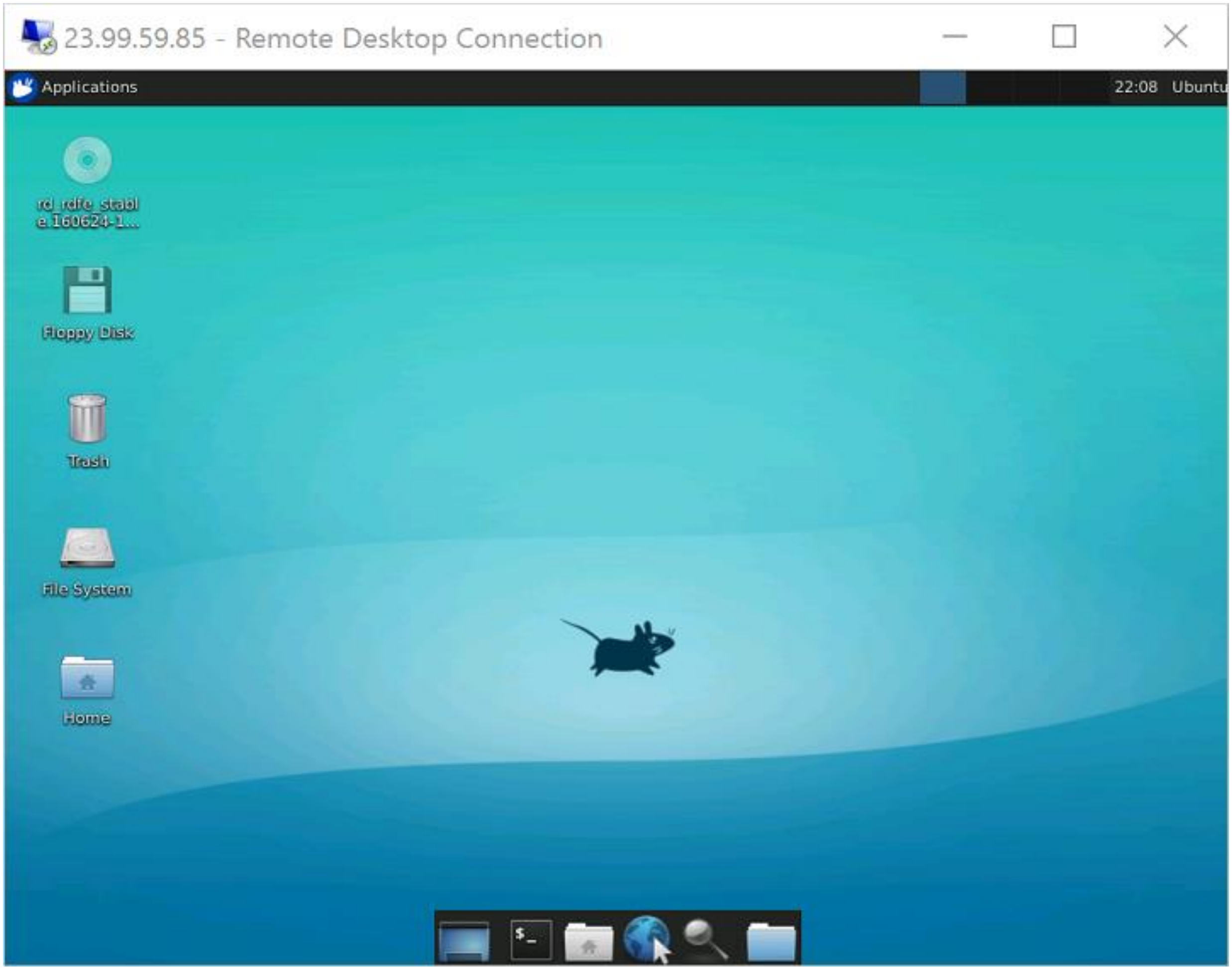
Login to xrdp

Module: sesman-Xvnc

username: ops

password: **********

After authenticating, the xfce desktop environment will load and look similar to the following example:


23.99.59.85 - Remote Desktop Connection
Applications
22:08
Ubuntu
rd_rdfe_stabl e.160624-1...
Floppy Disk
Trash
File System
Home

If your local RDP client uses network level authentication (NLA), you may need to disable that connection setting. XRDP does not currently support NLA. You can also look at alternative RDP solutions that do support NLA, such as FreeRDP.