# SFM In Azure (Nested Virtualization)

This document describes how to deploy a custom template that automates the entire deployment of the Sophos Firewall Manager (SFM) on a hyper-v VM in Azure. The template was created by the IaaS team (iaas@sophos.com) and hosted on the IaaS team's github account - https://github.com/iaasteamtemplates/XgOnAzureHAPoC

23 May 2018 Upgraded firmware image to SFMv17 GA

10 Aug 2018 Extended the option to include deployment into an existing vNet

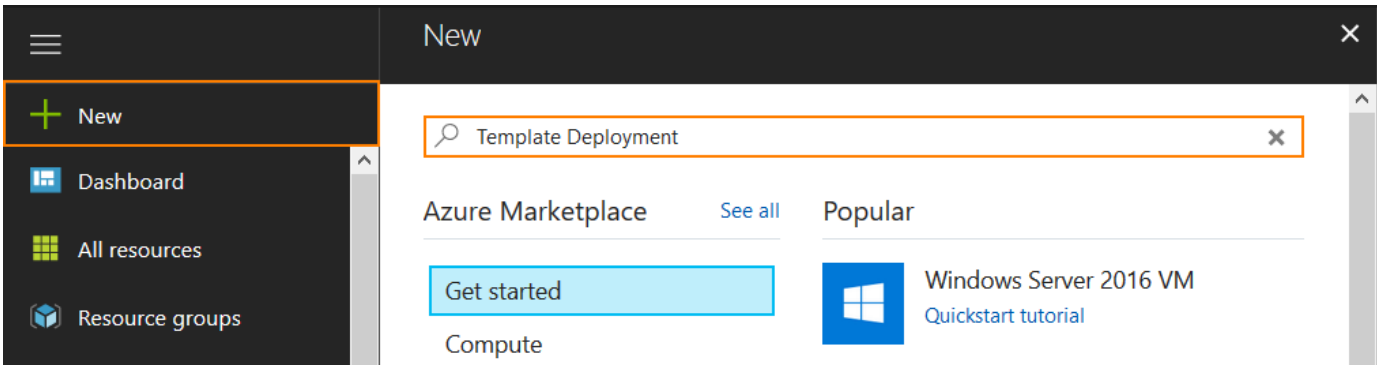
## Pre-Requisite

1. Obtain a SFM license from Sophos
   - https://secure2.sophos.com/en-us/products/next-gen-firewall/free-trial/sfm.aspx
2. Download the "SFM on Azure" ARM template
   - https://raw.githubusercontent.com/iaasteamtemplates/XgOnAzureHAPoC/master/sfmazure.json

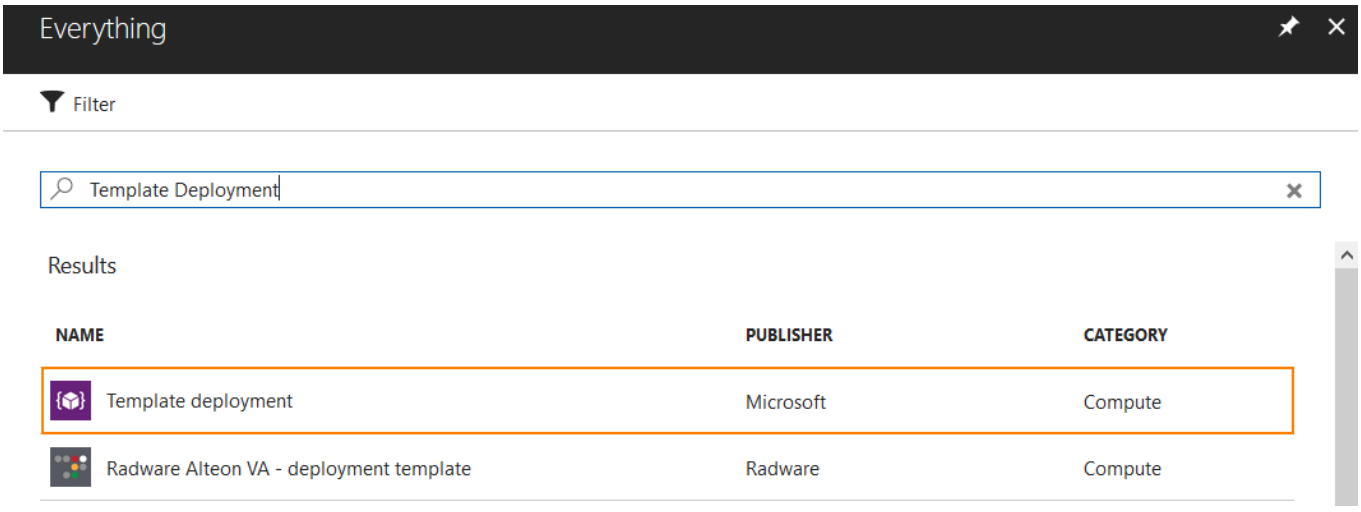
## Deployment Process

1. Log into the Azure Portal

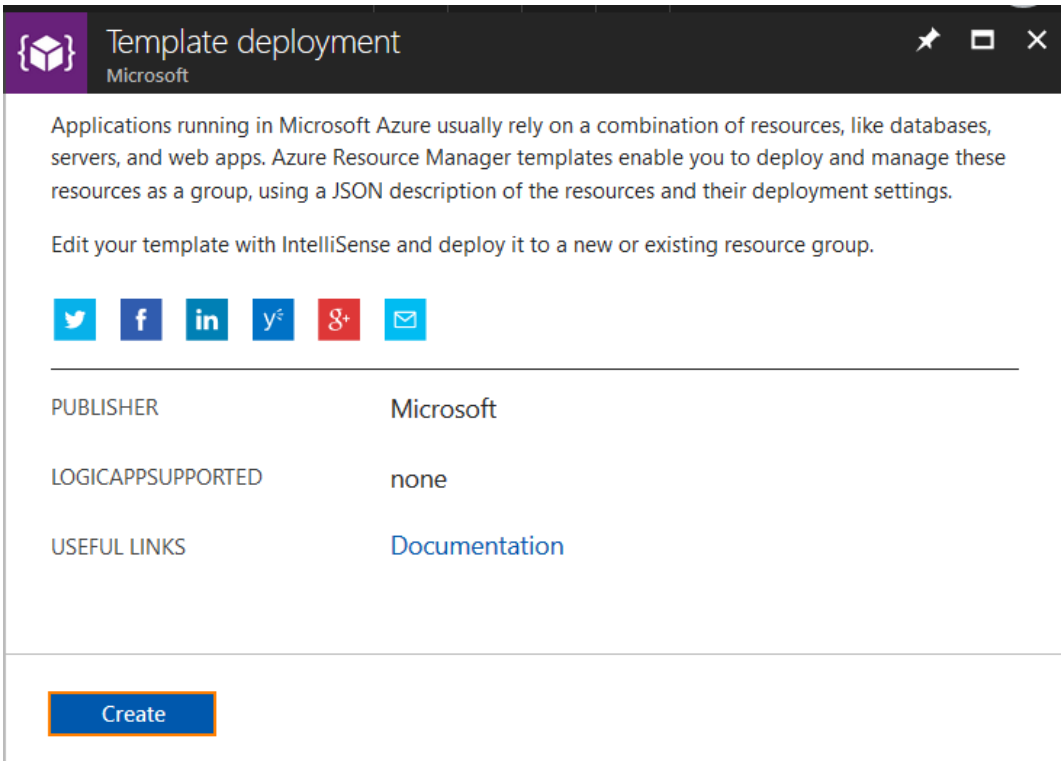
2. Select "**New**" from the left pane  Type "**Template Deployment**" into search window  Press "**Enter**"



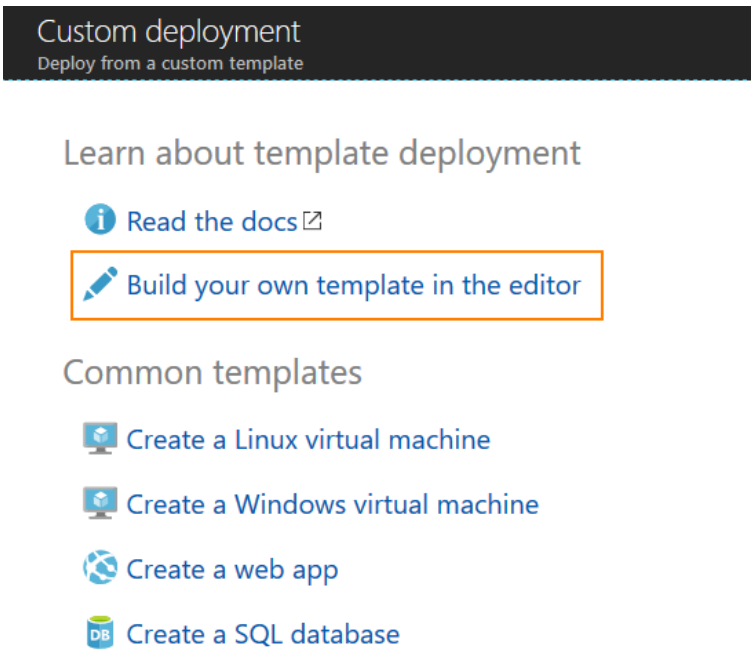

3. In the "**Everything**" blade, select "**Template deployment**"



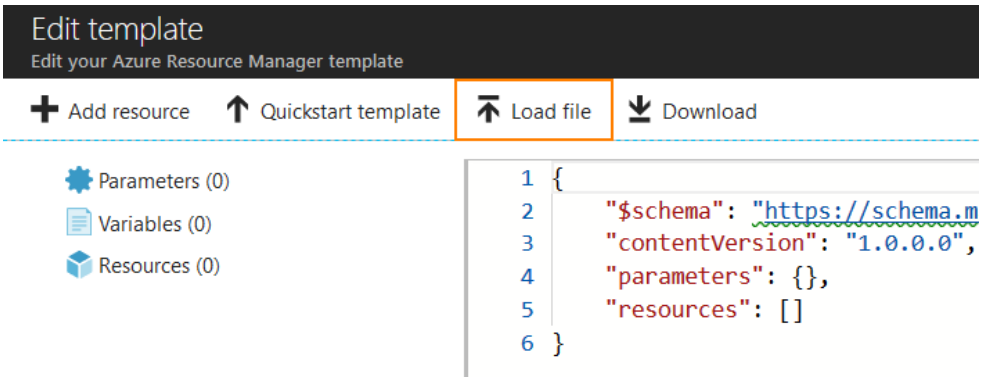

4. In the "**Template deployment**" blade, click on "**Create**"



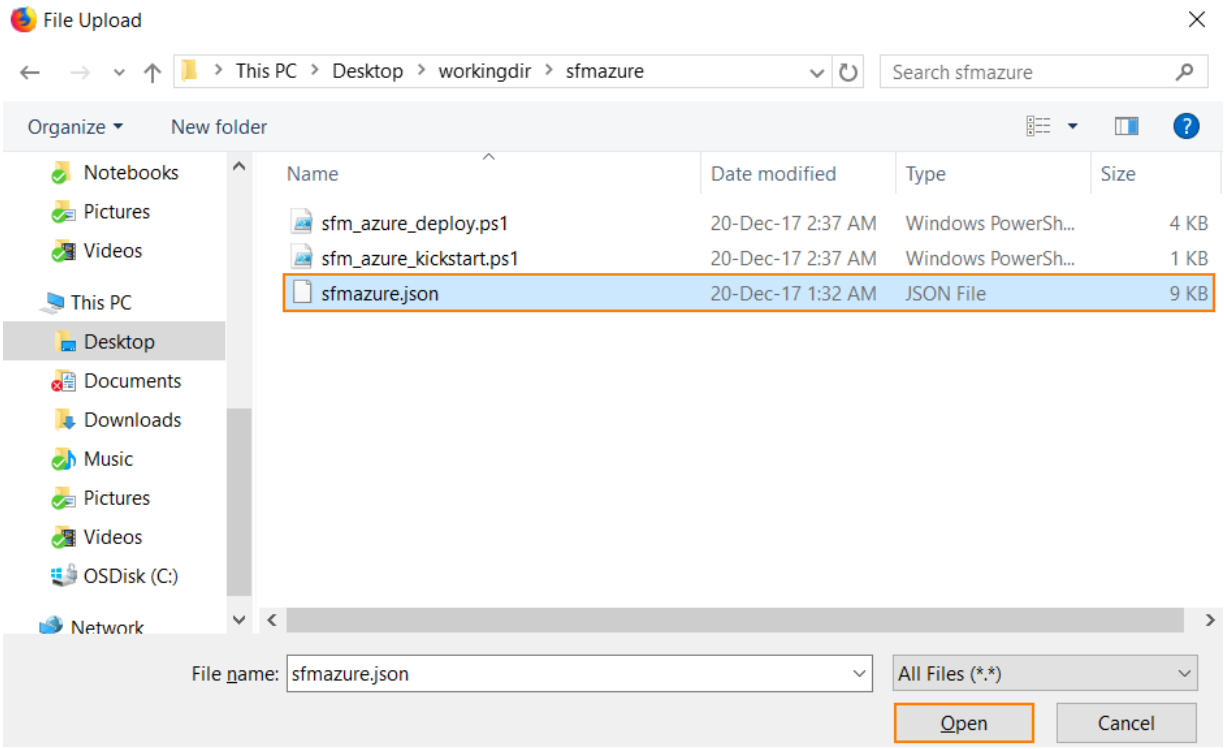

5. In the "**Custom deployment**" blade, select "**Build your own template in the editor**"



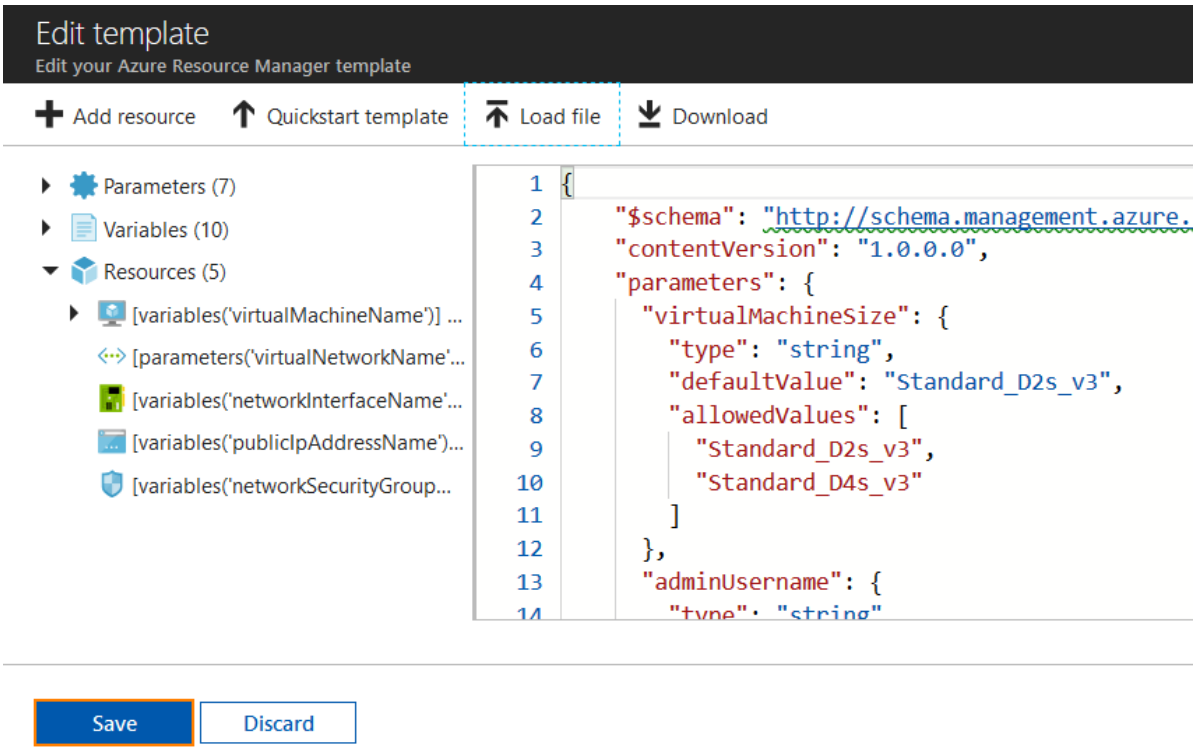

6. In the "**Edit template**" window, click on "**Load file**"




7. Browse to and select the template file that you downloaded earlier and click "**Open**"



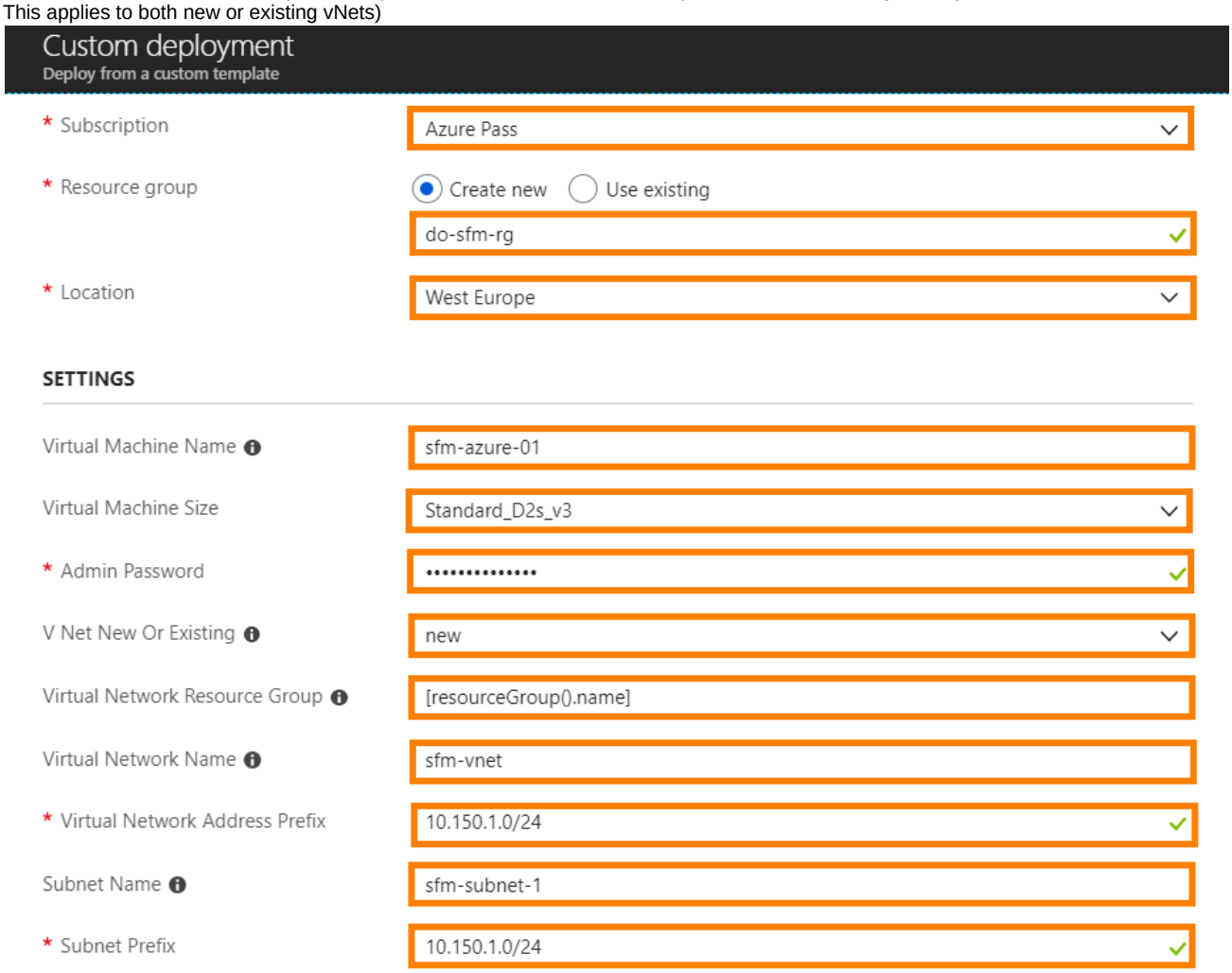

8. In the "**Edit Template**" blade, click "**Save**"



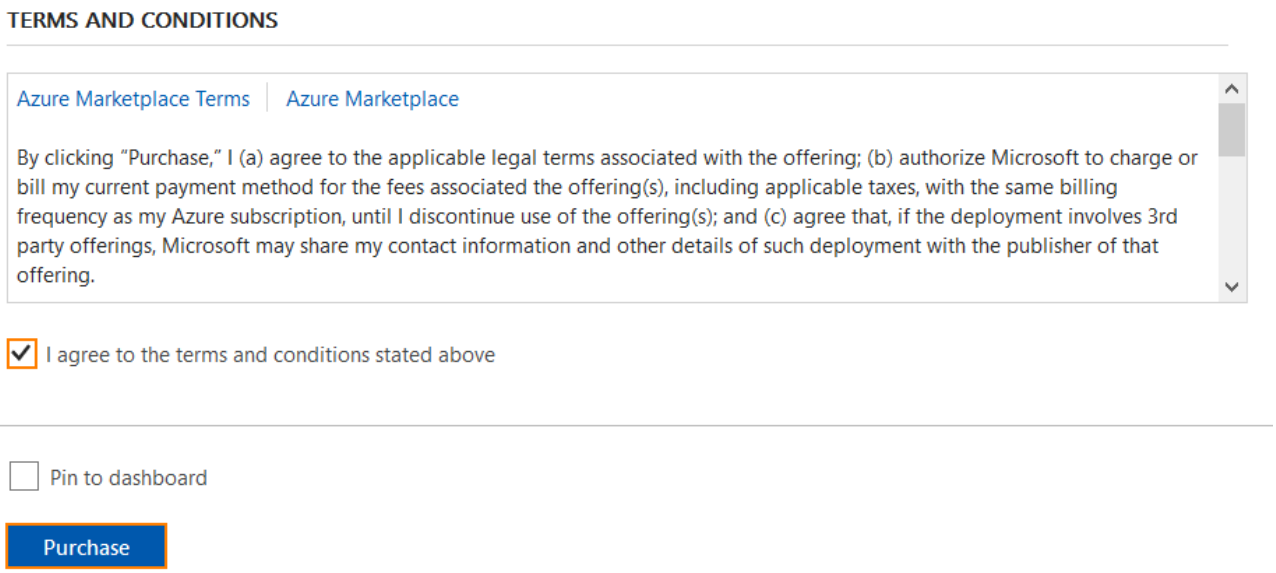

9. In the "**Custom deployment**" blade, configure the following:

- **Subscription**: Select the subscription that you'll like to use for the deployment
- **Resource group**: Select "Create new" or "Use existing"
    - If you selected "create new", insert the name for the resource group
- **Location**: If you selected "create new" for the "resource group", insert the location for the resource group and all resources that will be deployed into it
- **Virtual Machine Size**: Select either Standard_D2s_v3 (2vCPU, 8GB RAM) or Standard_D4s_v3 (4vCPU, 16GB RAM)
- **Admin Password**: Enter the password for the host vm
- **vNet and Subnet New or Existing**: Select "**New**" to create a new vNet; Select "**Existing**" to deploy into an existing subnet
- **Virtual Network Resource Group**: Enter the resource group name of the virtual network (new or existing)
- **Virtual Network Name**: Enter a name for the virtual network that the vm will be deployed into (new or existing)
- **Virtual Network Address Prefix**: Enter the CIDR prefix that you will like to use for the virtual network (new or existing)
- **Subnet Name**: Enter a name for the subnet that the vm will be deployed into. If you selected an existing vNet" earlier, you must use an existing subnet also. **A new subnet will only be created when if a new vNet is selected**

- **Subnet Prefix**: Enter the CIDR prefix that you will like to use for the subnet (must be within the range configured for the virtual network. This applies to both new or existing vNets)



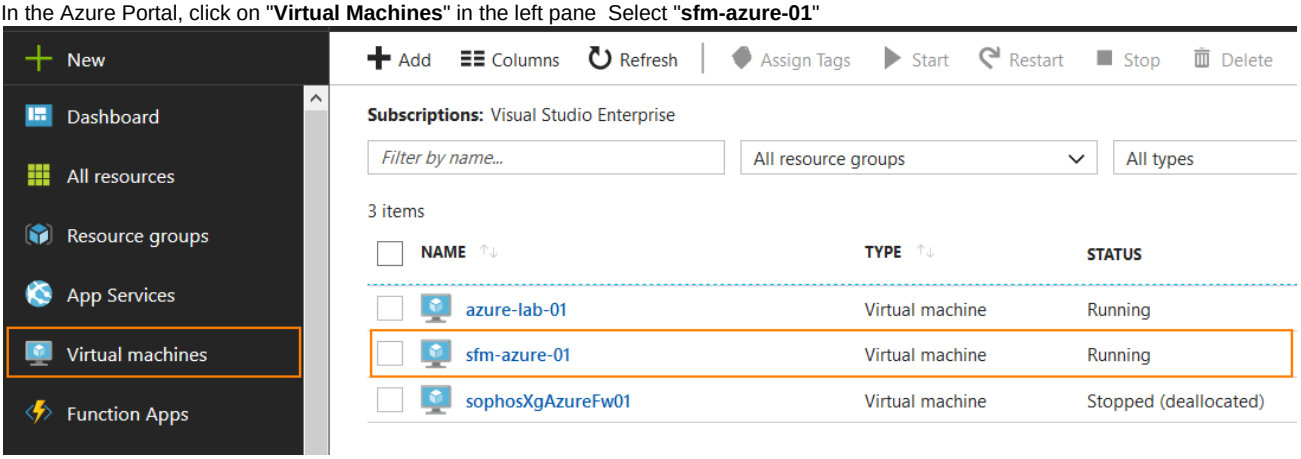

10. Select the checkbox to agree to the terms and conditions  Click on "**Purchase**"




11. **The deployment takes about 10 minutes to complete. Even after the deployment has completed, allow another 10 minutes** (for the powershell scripts to complete the setup of SFM and the restarts needed)

12. Obtain the public IP for the VM by doing the following:

- In the Azure Portal, click on "**Virtual Machines**" in the left pane  Select "**sfm-azure-01**"




- In the "sfm-azure-01" blade, in the "**overview**" section, make note of the public IP

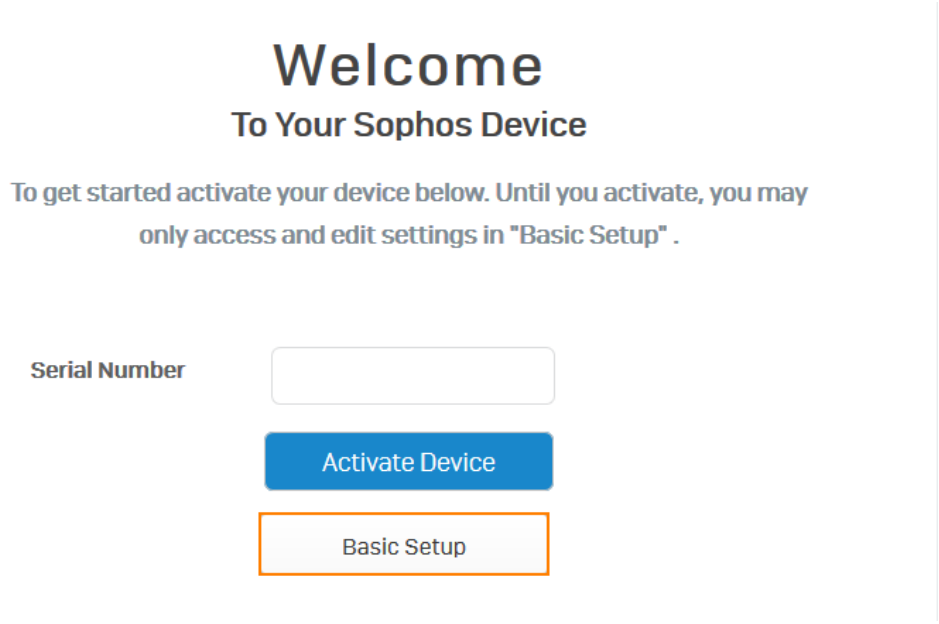

13. Open a new browser tab and browse to "https://<public ip>" ("public IP" is the IP that you made a note of in step 12)

- Depending on the browser that you're using and its configuration, you may need to add a security exception

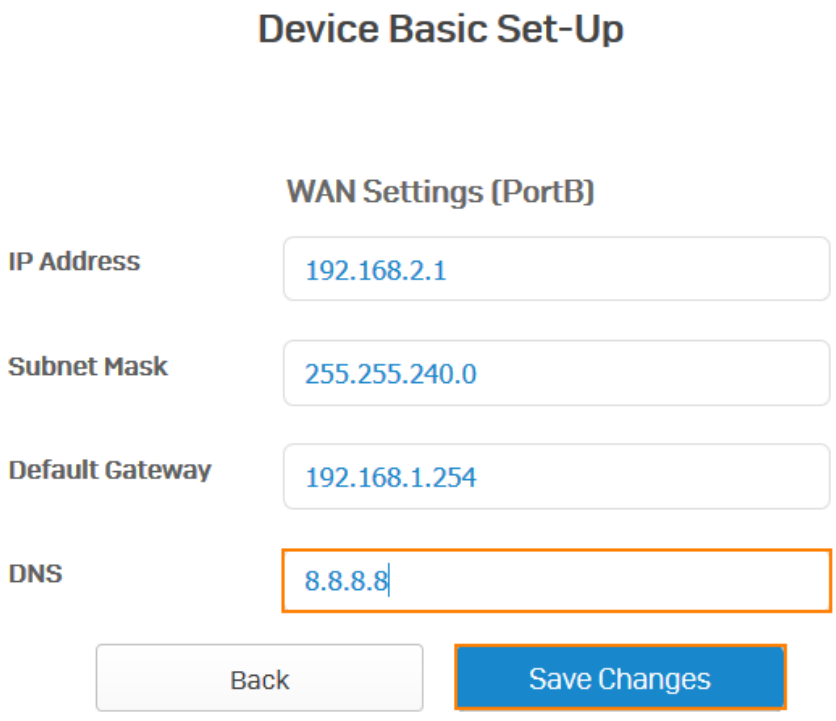
14. Login with a username of "**admin**" and a password of "**admin**"

15. Accept the Sophos EULA

16. In the "**Welcome To Your Sophos Device**" window, click on "**Basic Setup**"




17. In the "**Device Basic Set-Up**" window, change the DNS setting from "**127.0.0.1**" to "**8.8.8.8**", then click on "**Save Changes**"




18. Activate your license on the appliance
19. Follow the instructions here to change the admin password
    - https://community.sophos.com/kb/en-us/123082
20. Follow the instructions here to upgrade the firmware
    - https://community.sophos.com/kb/en-us/123091