

Tech Data Small Business Cloud Deployment Guide

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1.0 Things to know prior to using this Guide

- You would need to familiarize yourself with this document prior to diving in.
- All the Screen Shots in this Guide are for reference only.
- This Guide will assist you in finalizing the deployment of the Small Business Cloud Server (SBCS) in a CSP that was purchased thru the StreamOne Portal.
 - In depth training on Azure is outside of this guide.
- **Accessing the SBCS Services in Azure**
 - You would need to login to the Azure portal
 - <https://portal.azure.com>
 - You would need to login using the same user name and password as the one created in StreamOne and what was emailed to you.
 - For example: john.doe@contoso.onmicrosoft.com
 - It will give you a one time password and you will need to change it.
 - To access the Virtual Machines (VM) thru the Azure Portal. You must ensure you have the **SYSAAdmin Login** and **Password** that was created during the StreamOne ordering process.
 - If you were not the person who accessed the StreamOne ordering portal to do the purchasing please get with that person and obtain the user login and password that were initially created.
 - If the VM User name and Password are no longer accessible you will need to follow the link below to change it thru the Azure Portal.
 - [How to reset the Remote Desktop service or its login password in a Windows VM](#)
- Architecture and Diagrams of the SBCS is located at the back of this document.
- Prior knowledge is required on how to configure Active Directory, O365 and Remote Desktop Services.
 - The SBCS server will have completed installation (but not final configuration) of Microsoft Essentials roles and features.
 - When you first login (to SRA-01) the Windows Server Essentials installation would have already deployed:
 - Active Directory
 - Certificate Services
 - DNS
 - File and Storage Services
 - IIS
 - Remote Desktop Services (RDS)
- **Windows Server Essentials**
 - There Must Not Be Any Pre-Existing Domain Controllers deployed.
 - During the final stages of Windows Server Essentials it will ask you to configure Active Directory as the first Domain Controller.
 - If you plan to attach the SBCS servers to an existing Windows Active Directory Domain.
 - You can remove Windows Server Essentials and keep certain other Domain Controller roles and features.
 - **It will fall outside the scope of this document.**
 - Here is guidance to assist you: [Install Windows Server 2012 R2 Essentials as a new replica domain controller](#)
 - Or you would need to **UNINSTALL** Windows Server Essentials from all the SBCS VM's.
- **During the StreamOne ordering process**

-
- There would have been given a choice to create Small, Medium and Large VM's.
 - Small Deployment (< 5 Users)
 - Medium Deployment (< 20 Users)
 - Large Deployment (< 50 Users)
 - You would also have been given the choice of using Windows Server 2012 R2 or Windows 2016 for the deployment.
 - This document can be used for either one. Since there are many similarities between the two.
 - **O365**
 - You must have an O365 **Administrator** account and a working knowledge of it.
 - Since you will be connecting the SBCS SRA-01 Server to the O365 tenant.
 - **Windows Server Remote Desktop Services (RDS)**
 - Part of this guide will refer you to configuring RDS Server
 - To configure external internet access to the RDS Session you would need to follow this guide:
 - [Remote Desktop Web Access \(RD Web Access\)](#)
 - If RDS Services are only to be accessed internally using VPN connections then external web access is not required.
 - **Azure VPN**
 - Creating an Azure Site to Site VPN Connection is not covered in this guide. You would need to refer to:
 - [Create a Site-to-Site connection in the Azure portal](#)
 - **Azure Backup**
 - Prior to doing the final configuration it is highly recommended that a backup is performed of the VM's.
 - The reason why that is; in Azure there is no concept of snap shots as there is when working with on-premises virtualization technologies such as Windows Server Hyper-V or VMware.
 - Section 1.2.6 of this document covers using Azure Backup.
 - Azure Back-up (IaaS Back-up) has been configured for the VM's running in your resource group. A Default policy has been made with retention points (30Days, 104Weeks, 60Months & 10Years). The Daily back-Up is scheduled at 7.30AM.
 - More information located here on how to perform Azure Backups:
 - [Back up Azure virtual machines to a Recovery Services vault](#)

YouTube Video on Deploying SBCS:

<https://www.youtube.com/watch?v=jsDmpndYiH8&feature=youtu.be>

At TechData we have created a series of Webinars to help you on this Azure journey.

Follow this link and it will direct you to the [Tech Data Technical Services](#) page on YouTube.

1.1 SMB Solution Template Goal

This is a template that will show you how to deploy the equivalent of the old Small Business Server which has been updated and is now based on Office 365 and Azure. The idea is to **simplify deployment** to the public cloud.

Initially we're looking to support typical **SMB scenarios**:

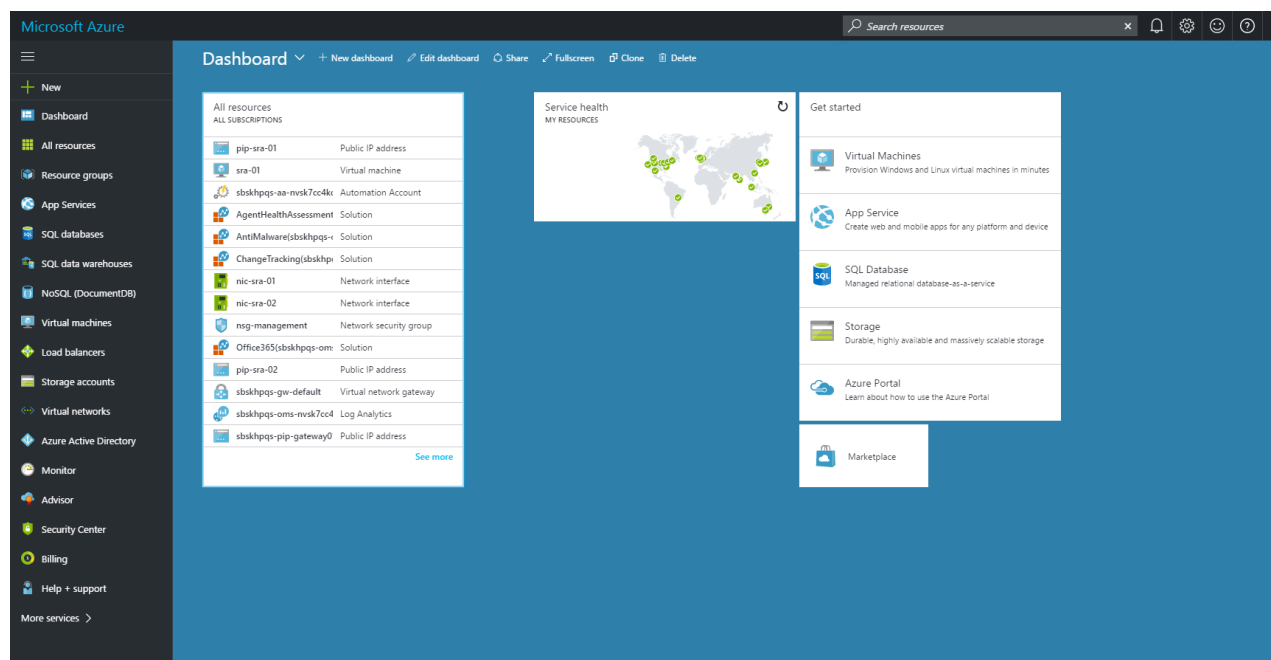
- Your e-mail server in the cloud by connecting to an O365 subscription.
- Your file server in the cloud.
- Running your legacy applications in the cloud.
- Increasing your protection against ransomware by leveraging cloud technologies.

1.2 Post-deployment

After the deployment has happened via StreamOne you will have all necessary resources. Of course final configuration needs to be executed by you as this is your customer. This solution template has been split out into the various different deployment elements.

1.2.0 Azure

When you first login to Azure you are greeted with a screen similar to this. This is called the Azure Resource Manager (ARM).



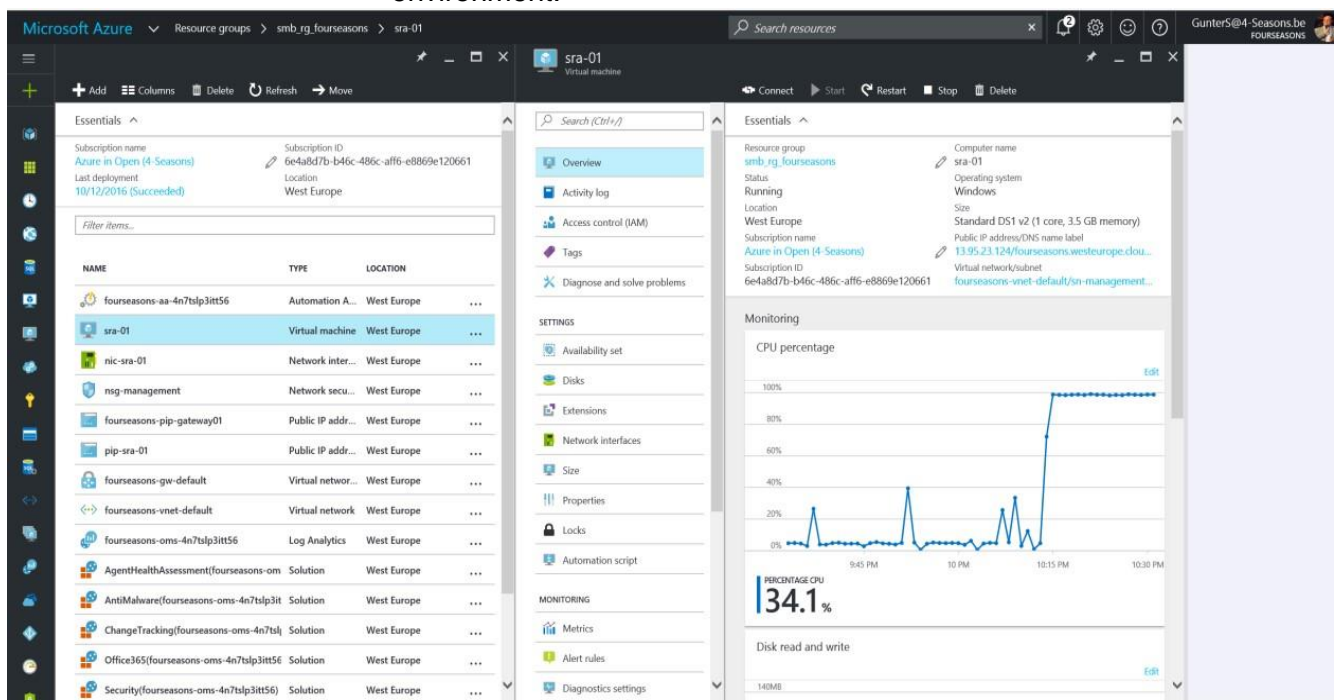
- If you are not familiar with this screen please refer to the following link to assist you.

[Azure Video Center](#)

1.2.2 Virtual Machine

1.2.2.1 Details

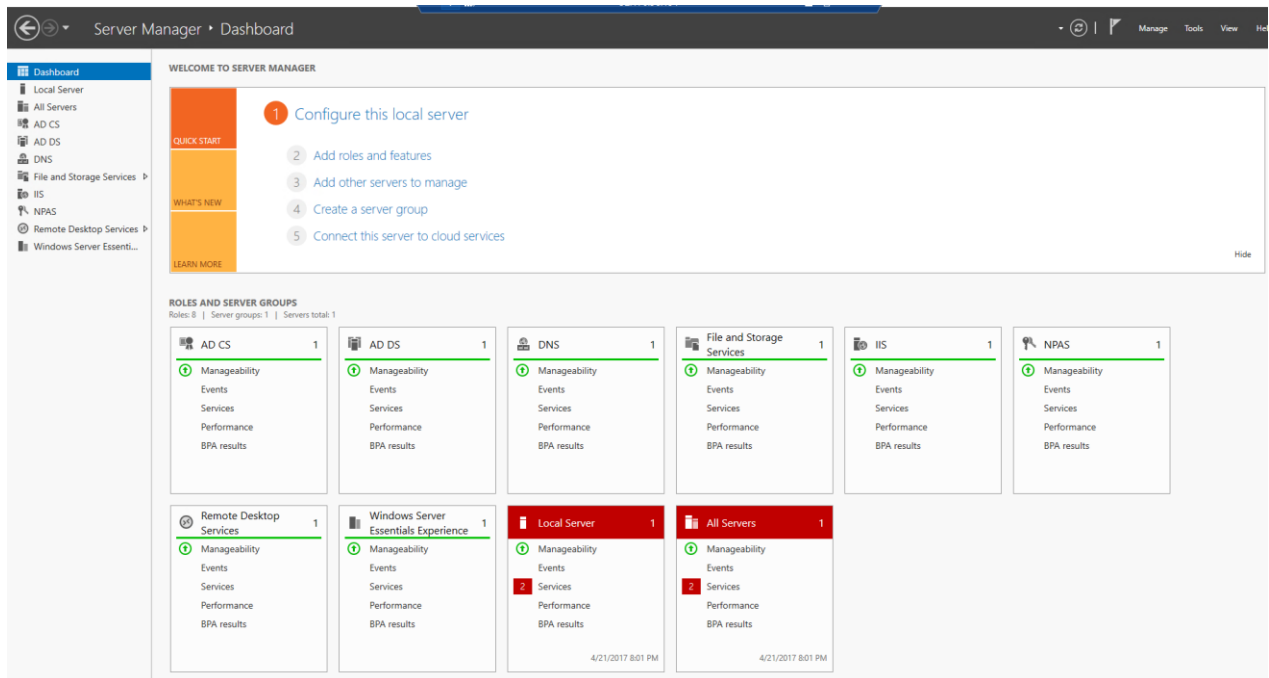
- By default a VM is provisioned including a set of extensions to allow monitoring and protection. The NIC is **not** connected to a **Network Security Group**.
- VM Details:
 - Small:
 - SRA-01 Compute is: Standard_DS2v2 (2 cores 7gb ram, 126gb Storage)
 - Domain Controller, RDS etc...
 - SRA-02 Compute is: Standard_DS1v2 (1 core 3.5gb ram, 126gb Storage)
 - Used non concurrent usage for RDS session hosts
 - Best for cloud server
 - Standard Blob Storage
 - Medium:
 - SRA-01 Compute is: Standard_DS2v2 (2 cores 7gb ram, 126gb Storage)
 - Domain Controller, RDS etc...
 - SRA-02 Compute is: Standard_DS1 v2 (1 core 3.5gb ram, 126gb Storage)
 - Used for RDS session hosts
 - Standard BLOB storage
 - Large:
 - SRA-01 Compute is: Standard_DS4_v2 (8 CPU - 28 GB RAM)
 - Standard BLOB Storage
 - Is still the AD DC and contains several RDS roles except the RDS Session Host role.
 - Servers SRA-02 & SRA 03 are RDS Session hosts.
 - Best for concurrent usage and heavy usage.
 - A “Jump Server” is foreseen. This server is supposed to be stopped/deallocated in normal circumstances but admin's will activate it when they need to do admin work in the server environment.



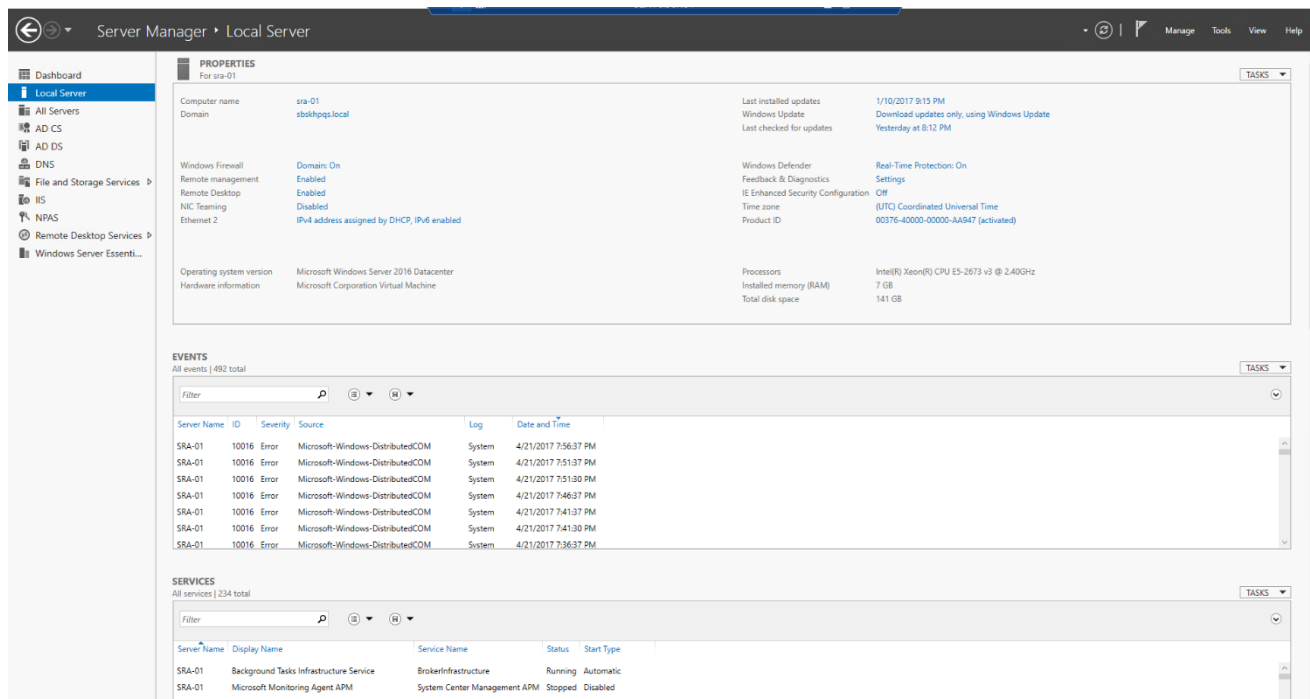
1.2.2.2 Tasks

- The way you connect to the VM's is thru the RDP. By Default during the creation of the VM access is allowed
- You will need to ensure that the appropriate port (3389) is open on the Firewall/Router to allow access.
- As you can see in the above screen shot there is a Connect icon.
- You will need to ensure you are on the SRA-01 VM
 - Click on the Connect icon and it will download an RDP Package. Once the download is complete you will need to open it.
- Connect to the SRA-01VM with the **sysadmin** account and password that was provided. If you need to reset the **sysadmin** password refer to:
 - [How to reset the Remote Desktop service or its login password in a Windows VM](#)

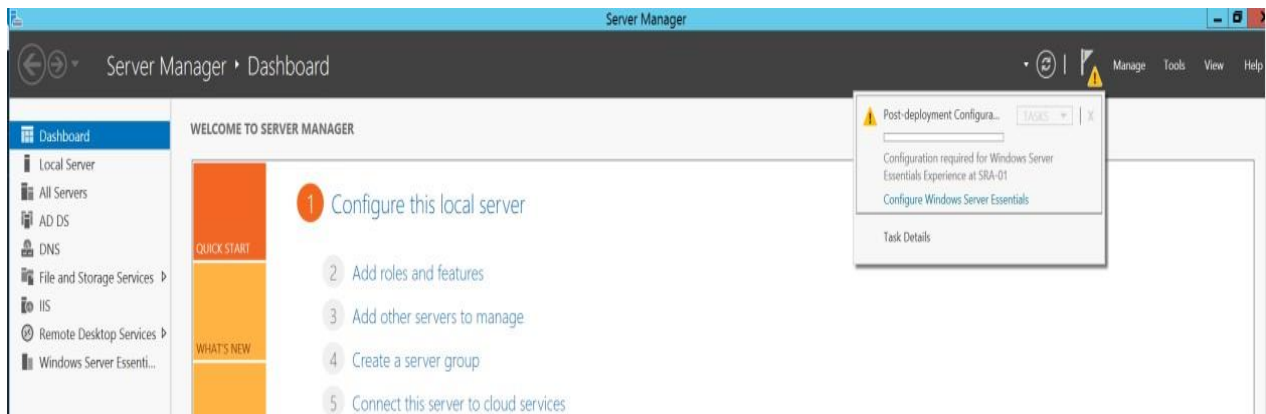
- Once you have gained access to the SRA-01 VM you will see that there are many Roles and Features that are already deployed
- The Time is set to UTC and you will need to change it for the local time zone you desired.



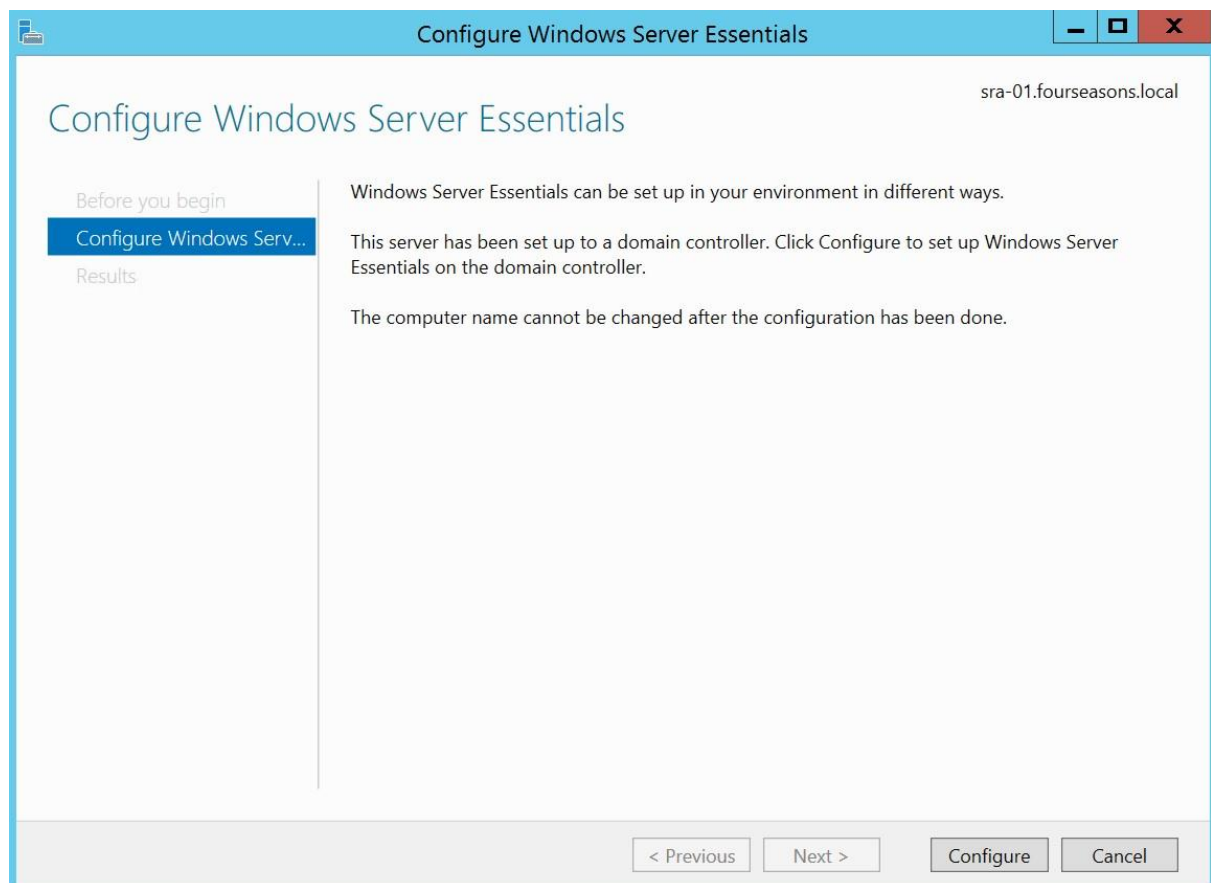
- You will need to do the following:
 - You need to ensure IE Enhanced Security Configuration is set to Off.



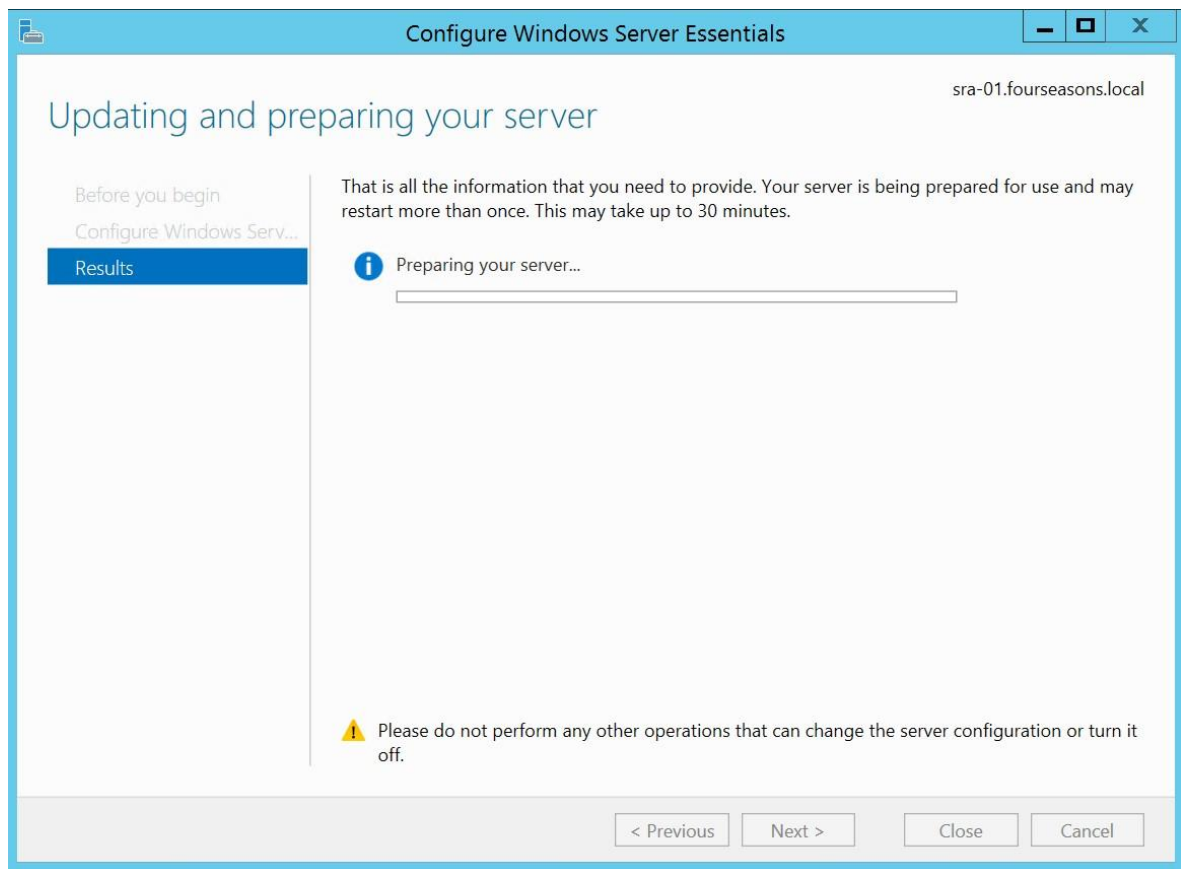
- At this point you will need to complete the Server Essentials Post-Role Configuration.



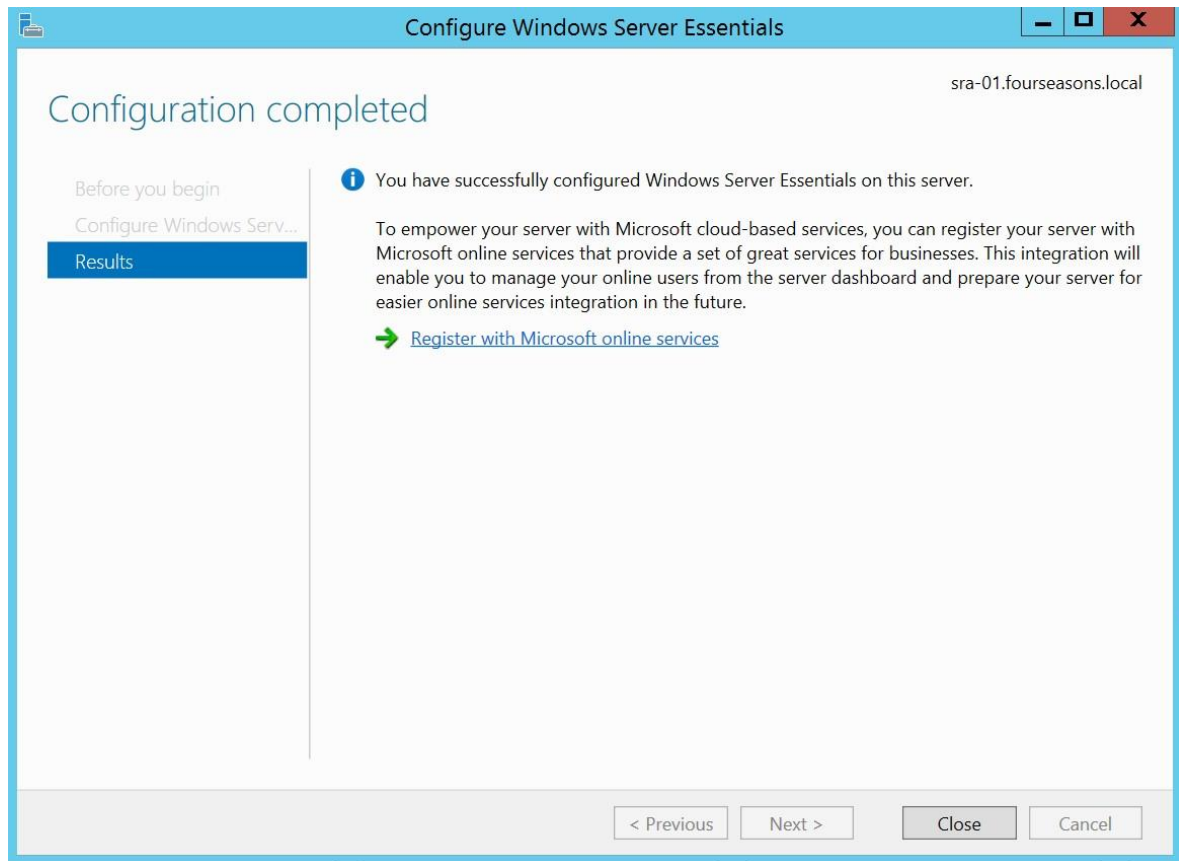
- In the SRA-01 VM you will see the Post-Deployment Configuration Alert and click the “Configure Windows Server Essentials”.
- This will open the Configure Windows Server Essentials Wizard as shown.
- You will next need to click on Configure.



- Wait until configuration is complete. This may take several minutes depending on the VM compute size that was chosen.

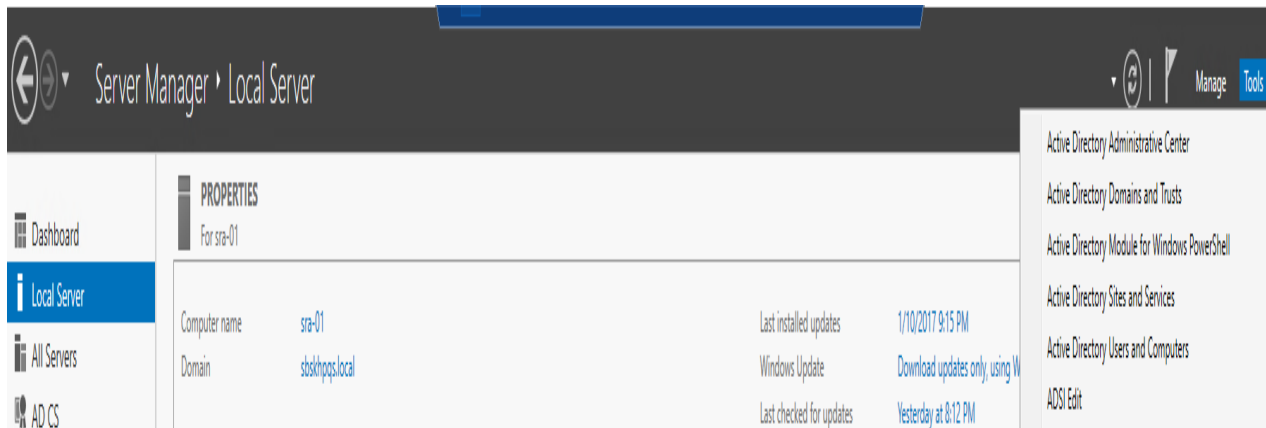


- Once it has finished you will see the following screen
- You can Click Close.

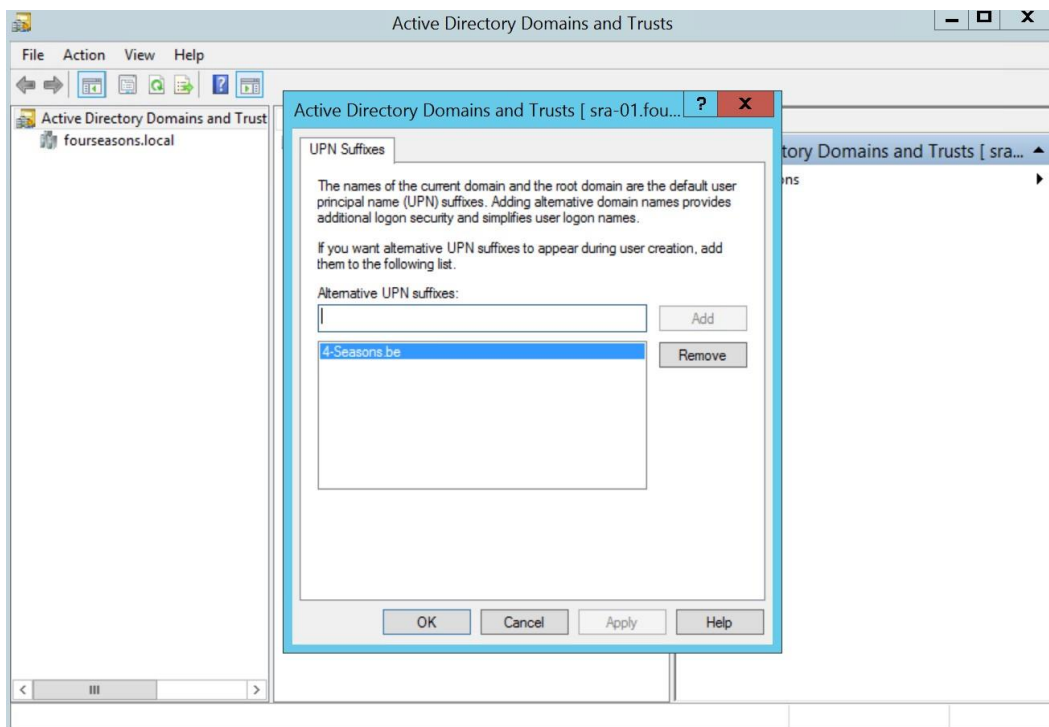
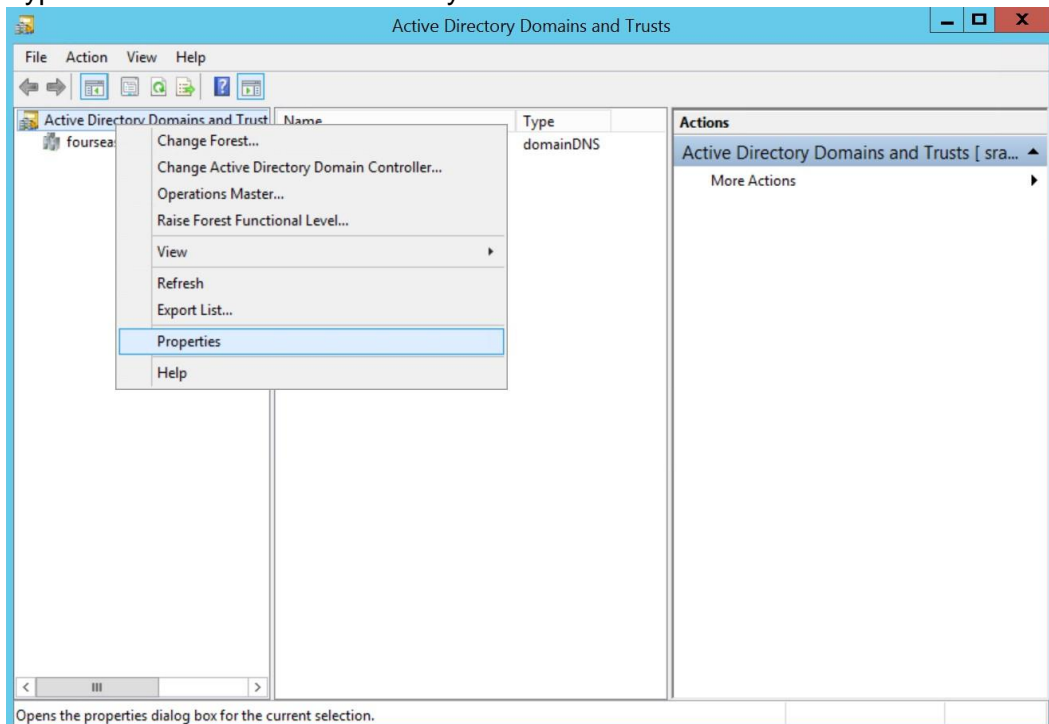


You will next need to Add User UPN.

- This will allow the users to logon on the server with the same userid as in Office 365
 - We need to add the customer domain to the UPN Suffixes list.
- As you can see from the screen shot you will need to open Server Manager.
- Under Tools you will need to Choose Active Directory Domains and Trusts.

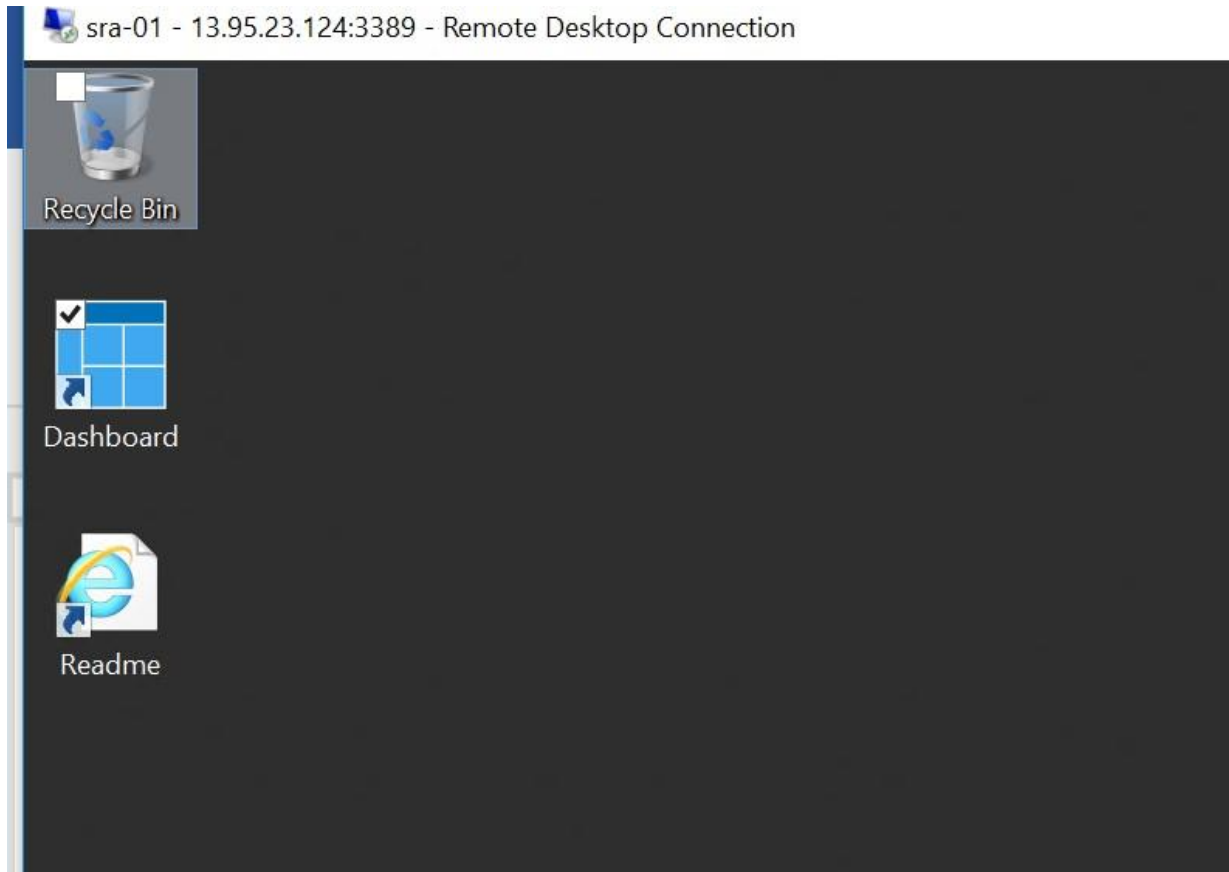


- You will see that a .Local domain has been created by default.
- You will need to highlight Active Directory Domains and Trusts and right click for Properties.
- Type in the correct UPN suffix for your tenant.



Now to Import the users from AAD/Office 365. (You might need to restart the dashboard and/or Server)

- If you had to reboot SRA-01 you will need to wait a few minutes.
- Once the SRV-01 VM is made available you will need to log back in using RDP using the previous steps.
- Once you are logged in you will see a “Dashboard” icon on the desktop.
- Highlight and click on the Dashboard icon.

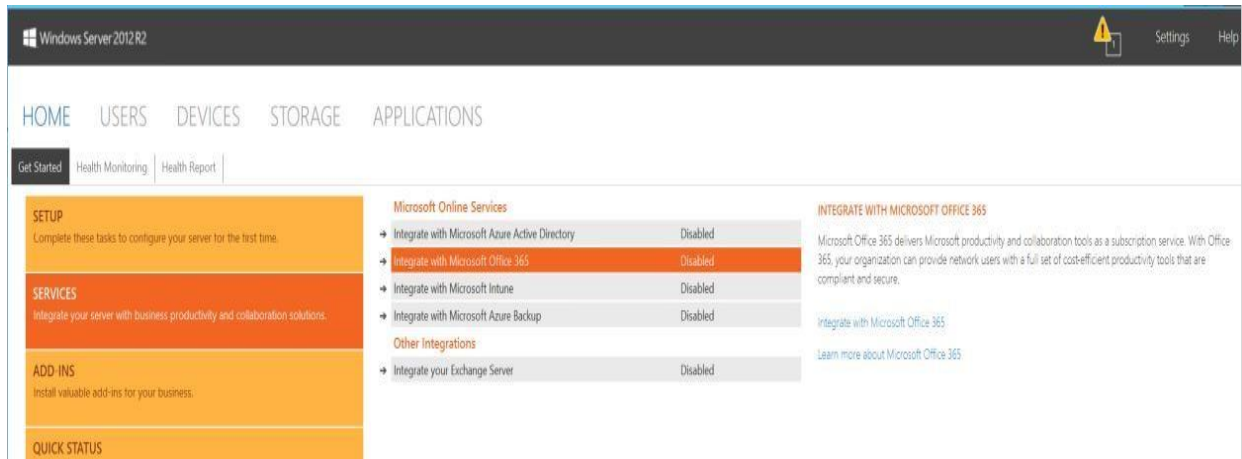


This Section will cover Managing O365 Users Information in Windows Server Essentials

- You will need to ensure you and or the end user customer has a pre-existing O365 subscription. You will need to have this information ready as we move forward.
- If you do not have this information **DO NOT** proceed.
- If you need more information go to:
 - [https://technet.microsoft.com/en-us/library/dn737016\(v=ws.11\).aspx](https://technet.microsoft.com/en-us/library/dn737016(v=ws.11).aspx)
- When you integrate your Windows Server Essentials server with Microsoft Office 365, you can manage your online accounts along with user accounts from the Dashboard.
- When you use the Dashboard to assign a Microsoft Online Services account to a user account, the account passwords are automatically synchronized, and you can maintain the two accounts together throughout the user account's lifecycle.
- It's convenient for the user, who can use the same password to access resources on the server and in Office 365. And you can apply the same password requirements for access to resources in Office 365 that you require for your in-house resources.
- **How does password synchronization work?**
 - When you use the Dashboard to assign a Microsoft Online Services account to a user account, the user account password is automatically synchronized with the user's online account. This means that a user only needs a single password to access both the resources on the server and in Office 365. Furthermore, you can use the same name for the user account and the users online ID.
 - Password synchronization occurs immediately and automatically when a user changes the password for their user account from a domain-joined computer or by using Remote Web Access.
- **Important:** If Office 365 is integrated with Windows Server Essentials, users should not change the password for their Microsoft online account from the Office 365 portal. Doing so will break the password synchronization.

As Pictured below you will need to highlight “Services” then Office 356

- Click on “Integrate with Microsoft Office 365”.



- To enable integration to the right click on “Integrate with Microsoft Office 365”.
 - Then click next.

Integrate with Microsoft Office 365

Get started

This wizard helps you integrate a new or existing subscription for Microsoft Office 365 into your server network.

When you complete this wizard, you can:

- Add and manage Microsoft Office 365 accounts from the server dashboard.
- Keep your users' passwords synchronized between the local network and Microsoft Office 365.

☒ I already have a subscription

Next

Cancel

- This username must have full access to the customers O365 subscription.

- The User name and password you see here is for **reference only**.
- Please ensure you use the correct Username and password for the O365 subscription you are going to connect to.

Integrate with Microsoft Office 365

Provide your account information

Type the user name and password that you use to manage your subscription.

User name:
gunters@4-Seasons.be

Password:

[Clear user name history](#)

[Forgot your password?](#)

[Read the privacy statement.](#)

[Next](#) [Cancel](#)

- Once that is done Click Next.

- Please read and when completed Check the box as below and click Next.

Integrate with Microsoft Office 365

Apply strong password policy

To ensure secure access to Microsoft online services, the wizard will change the level of the server's password policy to Strong. In addition, the Strong password policy is enhanced to enforce the following requirements:

- Passwords must contain 8-16 characters.
- Passwords cannot contain a space or Microsoft online services account name.

☒ I understand that this wizard sets the password policy to Strong.

What should I know about password policies?

Next

Cancel

- After completing the wizard restart the dashboard and select the option to import accounts from Microsoft Online Services.
- For reference you will see a list similar of all the users in O365 as shown below.

Windows Server 2012 R2

HOME USERS DEVICES STORAGE APPLICATIONS

Users User Groups

Name	Login name	File History	Anywhere...	Access level	Status	Microsoft o...
Administrator (1)						
sysadmin sysadmin				Administrat...	Active	

sysadmin Tasks

- View the account properties
- Change the user account password
- Assign a Microsoft online account

Users Tasks

- Refresh
- Add a user account
- Set the password policy
- Change the File History setting
- Export all remote connections
- Add Microsoft online accounts
- [Import accounts from Microsoft online service](#)

Microsoft Online Services Service Integration - Import accounts from Microsoft online

Import accounts from Microsoft Online Services

To add a server user account for an existing Microsoft Online Services account, you can accept the recommended account name or type a new name. Microsoft Online Services accounts that are already assigned to a server user account do not appear in this list.

<input checked="" type="checkbox"/> Microsoft Online Services account	Server user account
admin@4Seizoenen.onmicrosoft.com	admin
BoardRoom@4-seasons.be	BoardRoom
qunter qobarca.Be#EXT#@4Seizoenen....	qunter qobarca Be#EXT#
GunterS@4-Seasons.be	GunterS
GunterS-Admin@4-seasons.be	GunterS-Admin
gunters-secadmin@4-seasons.be	gunters-secadmin
GunterS-User@4-Seasons.be	GunterS-User
Info@4-seasons.be	Info
NorthwindTraders@4-seasons.be	NorthwindTraders
Sales@4-seasons.be	Sales
SMO-Sales@4-seasons.be	SMO-Sales

Next Cancel

- Click next and wait for completion.

- Once those Users are imported it will look very similar to what is shown below.

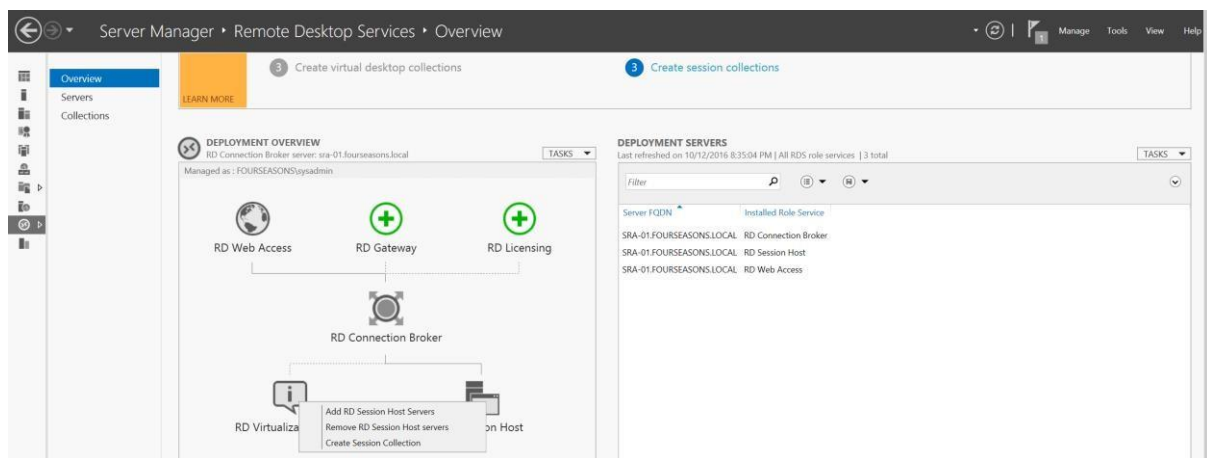
The screenshot shows the Windows Server 2012 R2 Users management console. The interface includes a top navigation bar with 'HOME', 'USERS', 'DEVICES', 'STORAGE', and 'APPLICATIONS'. The 'USERS' tab is selected, displaying a list of users. The table below represents the data shown in the screenshot.

Name	Logon name	File History	Anywhere Access	Access level	Status	Microsoft online account
Administrator (1)						
sysadmin	sysadmin			Administrator	Active	
Standard user (11)						
admin	admin			Standard user	Active	admin@4Seasonen.onmicrosoft.com
BoardRoom	BoardRoom			Standard user	Active	BoardRoom@4-seasons.be
GunterGoB...	GunterGoB...			Standard user	Active	gunter_gobarca@EXT@4Seasonen.onmicrosoft.com
GunterS	GunterS			Standard user	Active	GunterS@4-Seasons.be
GunterS-Admin	GunterS-Admin			Standard user	Active	GunterS-Admin@4-seasons.be
gunters-sec...	gunters-sec...			Standard user	Active	gunters-secadmin@4-seasons.be
GunterS-User	GunterS-User			Standard user	Active	GunterS-User@4-Seasons.be
Info	Info			Standard user	Active	Info@4-seasons.be
NorthwindTraders	NorthwindTraders			Standard user	Active	NorthwindTraders@4-seasons.be
Sales	Sales			Standard user	Active	Sales@4-seasons.be
SMD-Sales	SMD-Sales			Standard user	Active	SMD-Sales@4-seasons.be

On the right side, the 'Users Tasks' panel is visible, containing options like 'Refresh', 'Add a user account', 'Set the password policy', 'Change the File History setting', 'Export all remote connections', 'Add Microsoft online accounts', and 'Import accounts from Microsoft online service'.

This Section will cover Remote Desktop Services:

- If you are not familiar with Windows Server Remote Desktop Services(RDS) please refer to:
 - [Welcome to Remote Desktop Services](#)
- You would need to ensure you are logged in to SRA-01. This is the primary RDS server.
 - As an FYI, anything that has a Green Plus needs to be configured.
- You would need to ensure that you have installed the applications the end users will need to have access to.
- You will complete the configuration of RDS by publishing the applications that will be executed remotely.
- Select “Session Host”
- Right Click choose “Create Session Collection” and the wizard will appear.



- Click “Next” in the “Before You Begin” page.
- You will need to name the Collection as shown.

Create Collection

Name the collection

Before You Begin
Collection Name
RD Session Host
User Groups
User Profile Disks
Confirmation
Progress

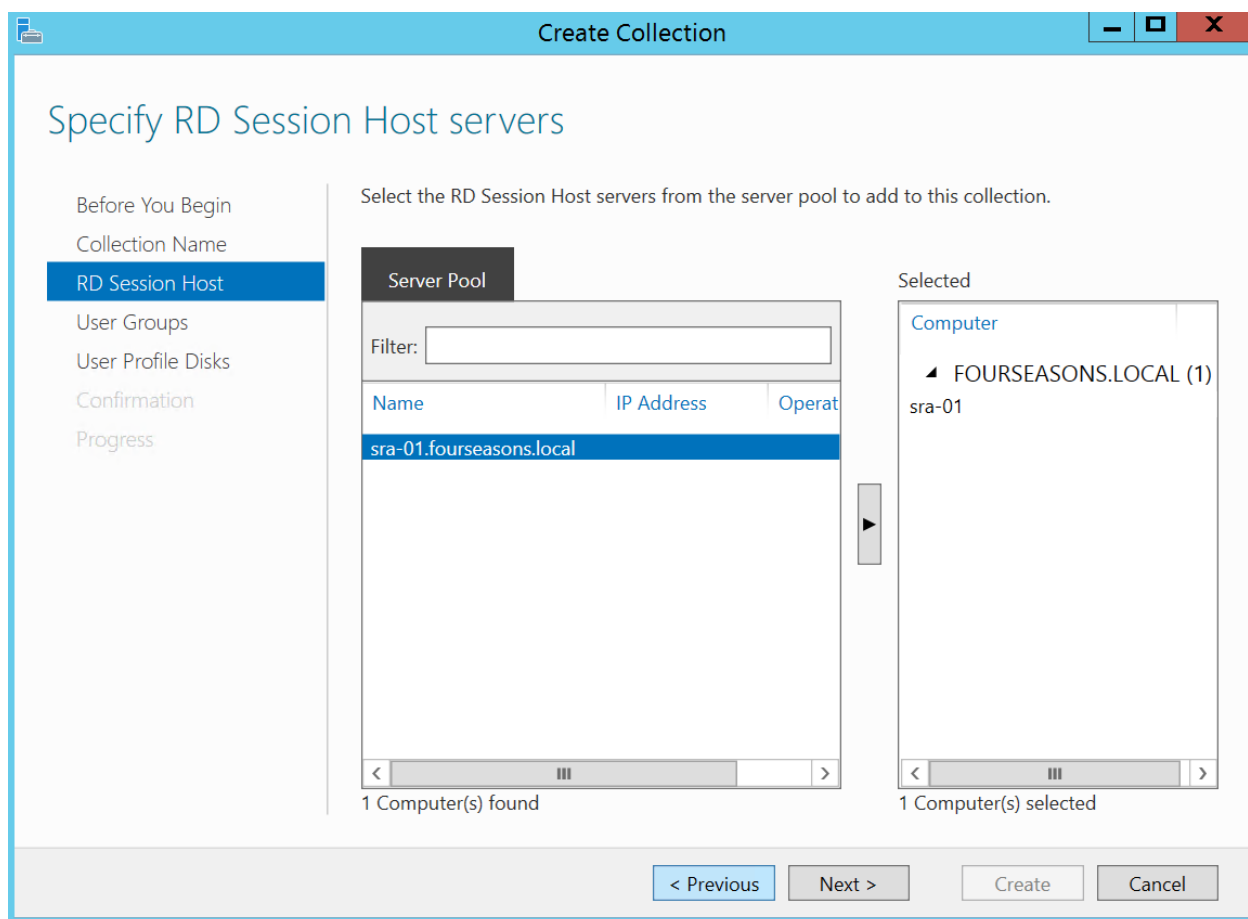
A session collection name is displayed to users when they log on to a Remote Desktop Web Access server.

Name:
Remote Application Collection

Description (optional):

< Previous Next > Create Cancel

- RD Session Host is configured as part of the original deployment.
- You will need to choose SRA-01 as shown below.
- For larger deployments you would need to ensure SRA-02 and or SRA-03 has RDS services installed and it can be chosen as a Session Host.



- Next Add the “User Groups” as listed below.

The screenshot shows a Windows-style window titled "Create Collection". The window has a blue header bar with standard window controls (minimize, maximize, close) on the right. On the left side, there is a vertical navigation pane with the following items: "Before You Begin", "Collection Name", "RD Session Host", "User Groups" (which is highlighted with a blue background), "User Profile Disks", "Confirmation", and "Progress". The main area of the window is titled "Specify user groups" in a large blue font. Below this title, there is a sub-header "Add the user groups that should have access to connect to the collection." followed by a label "User Groups:". Below the label is a text box containing the text "FOURSEASONS\Domain Users". To the right of this text box are two buttons: "Add..." and "Remove". At the bottom of the window, there is a grey bar containing four buttons: "< Previous", "Next >", "Create", and "Cancel".

- You will need to decide if you are going to have User profiles.
- You need to ensure there is enough disk capacity on “C” to host all the user profiles
- Once complete click “Next”.

The screenshot shows the 'Create Collection' wizard window. The title bar says 'Create Collection'. The main heading is 'Specify user profile disks'. On the left is a navigation pane with the following items: 'Before You Begin', 'Collection Name', 'RD Session Host', 'User Groups', 'User Profile Disks' (which is highlighted with a blue bar), 'Confirmation', and 'Progress'. The main content area has the text: 'User profile disks store user profile settings and data in a central location for the collection.' Below this is a checkbox labeled 'Enable user profile disks' which is currently unchecked. Underneath the checkbox is a text box labeled 'Location of user profile disks:'. Below that is another text box labeled 'Maximum size (in GB):' with the number '20' entered. At the bottom of the main content area is an information icon (i) followed by the text: 'The servers in the collection must have full control permissions on the user profile disk share, and the current user must be a member of the local Administrators group on that server.' At the bottom of the window are four buttons: '< Previous', 'Next >', 'Create', and 'Cancel'.

Specify user profile disks

Before You Begin
Collection Name
RD Session Host
User Groups
User Profile Disks
Confirmation
Progress

User profile disks store user profile settings and data in a central location for the collection.

☐ Enable user profile disks

Location of user profile disks:

Maximum size (in GB):
20

i The servers in the collection must have full control permissions on the user profile disk share, and the current user must be a member of the local Administrators group on that server.

< Previous Next > Create Cancel

- Once you have verified all is correct
- Click “Create”.

The screenshot shows the 'Create Collection' wizard in the 'Confirm selections' step. On the left is a navigation pane with the following items: 'Before You Begin', 'Collection Name', 'RD Session Host', 'User Groups', 'User Profile Disks', 'Confirmation' (which is highlighted in blue), and 'Progress'. The main area displays the following configuration:

- Collection Name:** Remote Application Collection
- Users and User Groups:** FOURSEASONS\Domain Users
- Remote Desktop Session Host Servers:** SRA-01.FOURSEASONS.LOCAL
- User Profile Disks:** No

At the bottom right, there are four buttons: '< Previous', 'Next >', 'Create', and 'Cancel'.

- After creating the collection (which you did in the last steps) you will still need to publish the applications you want to make available to the users that will use Remote Applications.
- As you can see below you will need to navigate to this screen to “Publish” these applications.
- Once you click on “Publish RemoteApp Programs” a wizard will pop up.

The screenshot shows the 'Server Manager' console with the 'Remote Desktop Services' tree expanded to 'Collections' > 'Remote Application Collection'. The main pane is divided into three sections:

- PROPERTIES:** Shows 'Collection Type' as 'Session', 'Resources' as 'Remote Desktop', and 'User Group' as 'FOURSEASONS\Domain Users'.
- REMOTEAPP PROGRAMS:** Shows 'Published RemoteApp programs | 0 total'. Below this, there is a message: 'Remote Desktop is published for the users of FOURSEASONS\Domain Users'. At the bottom, it says 'Publishing RemoteApp programs will unpublish the Remote Desktop.' There are two buttons: 'Publish RemoteApp Programs' and 'Unpublish RemoteApp Programs'.
- CONNECTIONS:** A table showing active connections. The header row includes: 'Server FQDN', 'User', 'Session State', 'Log On Time', 'Disconnect Time', and 'Idle Time'. The table is currently empty.

- You will see a list of all the applications that are already installed on SRA-01.

- Will need to choose which applications to publish and click “Next”

Publish RemoteApp Programs

Select RemoteApp programs

Select the RemoteApp programs to publish to the Remote Application Collection collection. To add a RemoteApp program to the list, click Add.

The RemoteApp programs are populated from SRA-01.FOURSEASONS.LOCAL.

RemoteApp Program	Location
<input type="checkbox"/> Microsoft Azure Services	%SYSTEMDRIVE%\Windows\explorer.exe
<input type="checkbox"/> ODBC Data Sources (32-bit)	%SYSTEMDRIVE%\Windows\system32\odbcad...
<input type="checkbox"/> ODBC Data Sources (64-bit)	%SYSTEMDRIVE%\Windows\system32\odbcad3...
<input checked="" type="checkbox"/> Paint	%SYSTEMDRIVE%\Windows\system32\mspaint...
<input checked="" type="checkbox"/> Remote Desktop Connection	%SYSTEMDRIVE%\Windows\system32\mstsc.exe
<input type="checkbox"/> Remote Desktop Licensing Manag	%SYSTEMDRIVE%\Windows\system32\licmgr.exe
<input type="checkbox"/> Resource Monitor	%SYSTEMDRIVE%\Windows\system32\perfmon...
<input type="checkbox"/> Security Configuration Wizard	%SYSTEMDRIVE%\Windows\system32\scw.exe
<input type="checkbox"/> Server Manager	%SYSTEMDRIVE%\Windows\system32\ServerM...
<input type="checkbox"/> Snipping Tool	%SYSTEMDRIVE%\Windows\system32\Snipping...
<input type="checkbox"/> Sound Recorder	%SYSTEMDRIVE%\Windows\system32\SoundRe...

Add...

Verify that the program is installed on all the RD Session Host servers in the collection.

< Previous Next > Publish Cancel

Publish RemoteApp Programs

Confirmation

Confirm that the list of RemoteApp programs to be published is correct, and then click Publish.

3 RemoteApp programs:

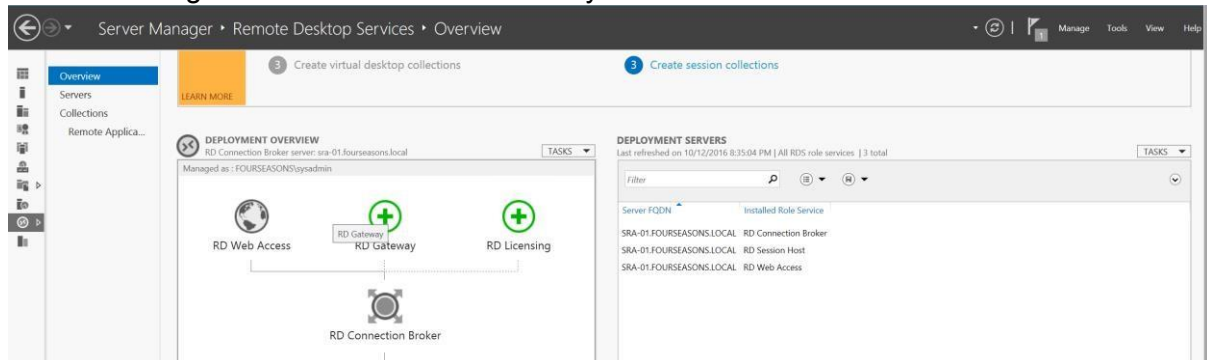
RemoteApp Program	Location
Calculator	%SYSTEMDRIVE%\Windows\system32\calc.exe
Paint	%SYSTEMDRIVE%\Windows\system32\mspaint...
Remote Desktop Connection	%SYSTEMDRIVE%\Windows\system32\mstsc.exe

< Previous Next > Publish Cancel

- Click “Publish” and close the wizard.

Next step is configure the RDS Gateway SSL Certificate.

- You will need to navigate back to the RDS screen shown below.
- Next you will need to right click on the RDS Gateway icon.
 - It should be pre-configured and colored grey.
- If not right Click and “Add RD Gateway Services”



- This is an example of how you would setup SSL for internal and external users would gain access to the RDS portal.
 - Here is a link if you are not familiar on this concept: [Configure trusted certificates on RD Connection Broker servers and clients](#)

Add RD Gateway Servers

Name the self-signed SSL certificate

Server Selection
SSL Certificate Name
Confirmation
Results

SSL certificates are used to encrypt communications between Remote Desktop Services clients and RD Gateway servers. The self-signed SSL certificate name must match the fully qualified domain name (FQDN) of the RD Gateway server.

SSL certificate name (use the external FQDN of the RD Gateway server):

The FQDN must match the RD Gateway server name used by the Remote Desktop Services client.

< Previous Next > Add Cancel

Add RD Gateway Servers

Confirm selections

Server Selection
SSL Certificate Name
Confirmation
Results

The RD Gateway role service will be installed on the servers and added to the deployment.

RD Gateway (1 server selected)

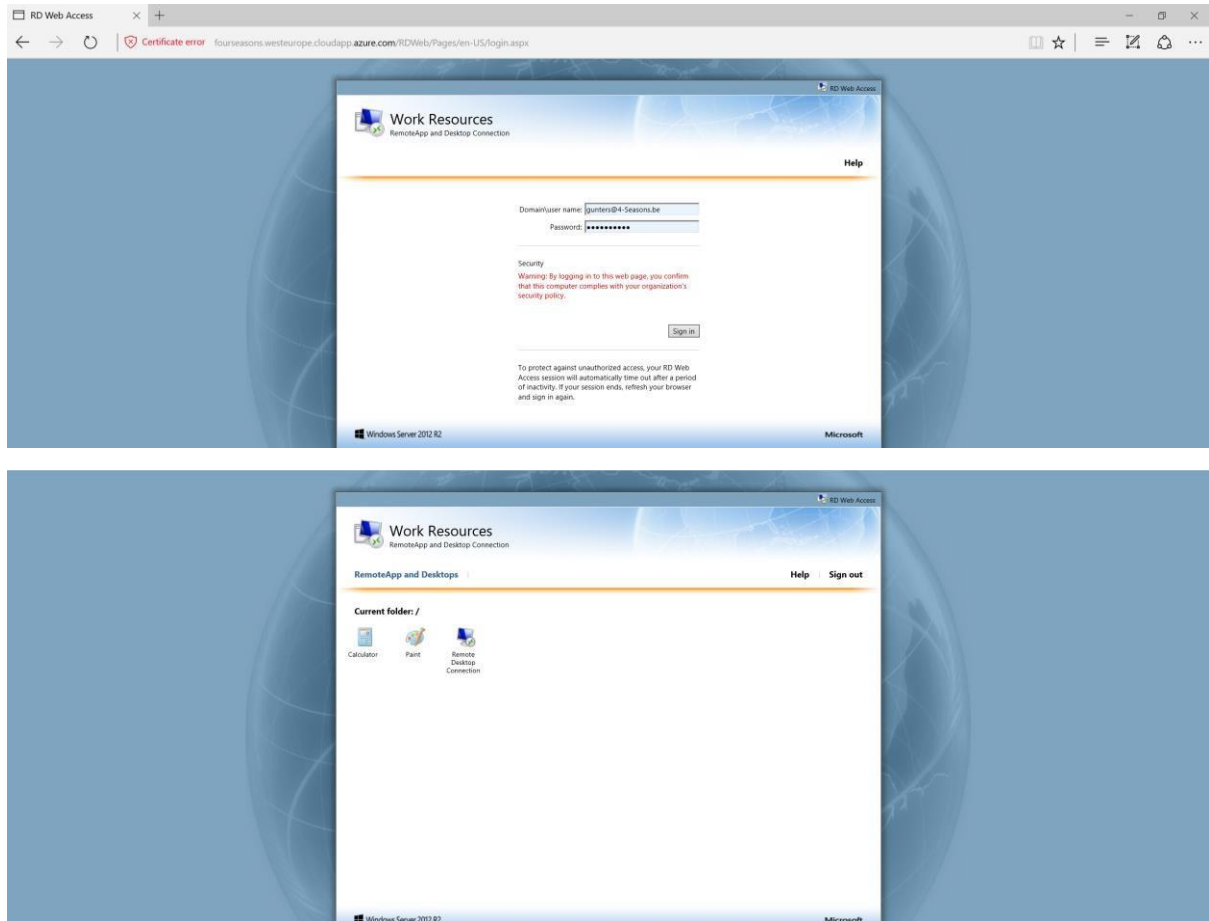
sra-01.fourseasons.local

RD Gateway External FQDN

fourseasons.westeurope.cloudapp.azure.com

< Previous Next > Add Cancel

- When the user navigates to the RD Web portal the users will be able to logon with their user@customerdomain.com user id and launch his applications.
- Once logged in the users will see the Applications that were chosen and they have access to.



1.2.2.3 Alternate & Complementary configurations.

- **Remove Windows Essentials role:** In case you prefer not to sync users & passwords you can uninstall the Essentials role.
- **AD Connect:** In case you prefer to manage users through Windows Server AD instead of AAD/O365 you can implement AD Connect.
- **Office 365 Pro Plus:** In case you need Office in the RDS Environment you can deploy Office 365 Pro Plus with the Office Deployment Tool.

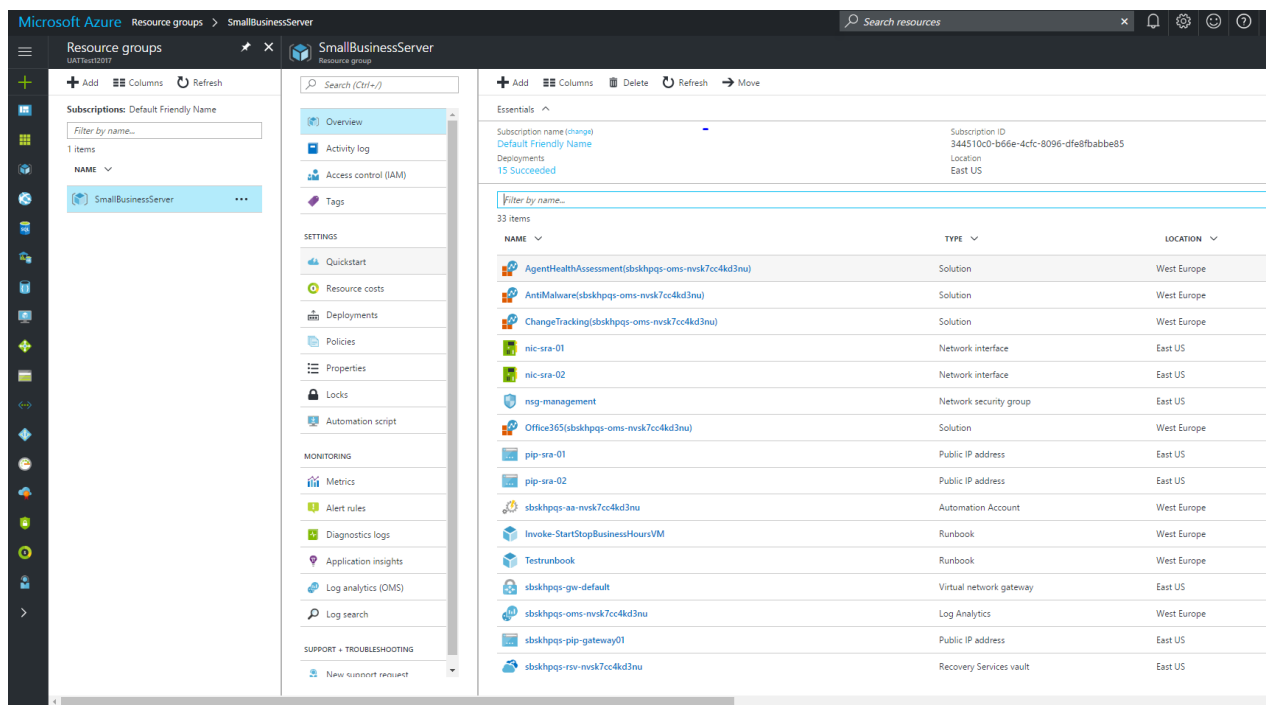
If you require further configuration of SRA-01 & SRA-02 you would need to complete it on your own.

These next steps we will be going back to the Azure portal

1.2.1 Automation

1.2.1.1 Details

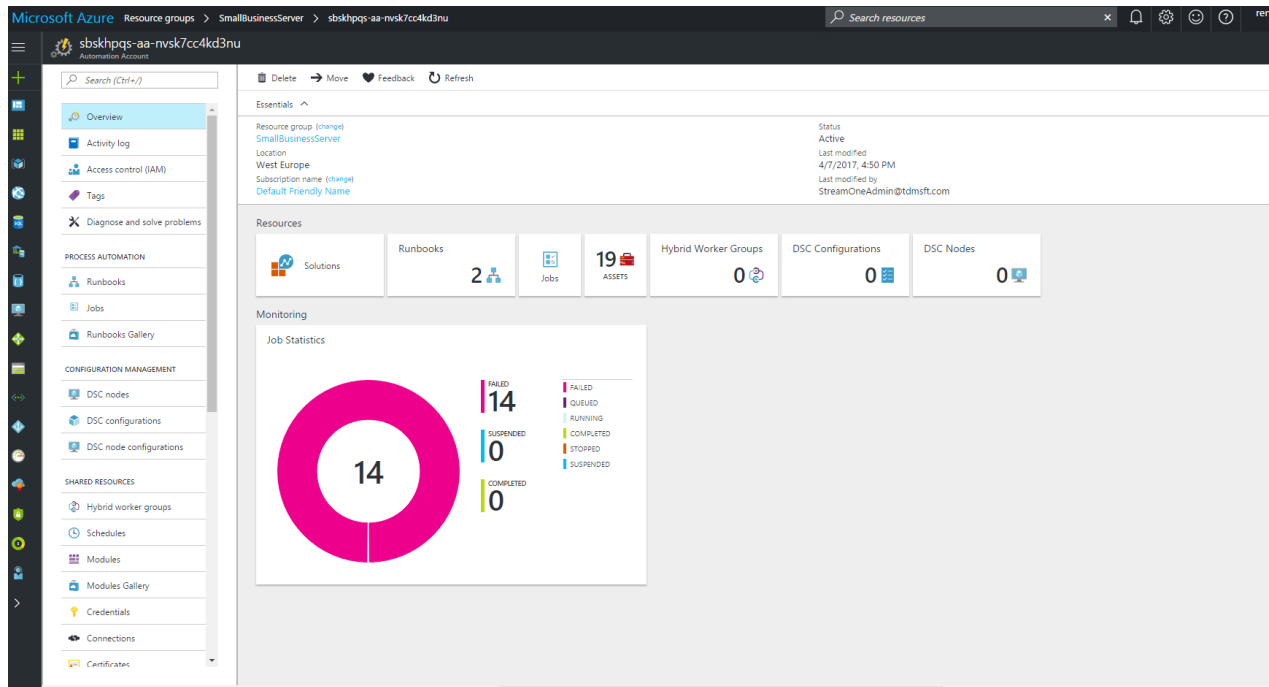
- **NO CONFIGURATION IS REQUIRED UNLESS YOU CHOOSE TO CHANGE THE TIMES.**
- The Deployment of the VM's in Azure are accomplished via Automation.
 - There is more automation within the Azure Portal itself
- The automation account contains 1 runbook that is scheduled 2 times per day
 - At 9a.m. to start the VM's. At 9p.m. to stop the VM's. You can change the schedules as required.
- This Automation Runbook is located in the Resource Group "SmallBusinessServer"



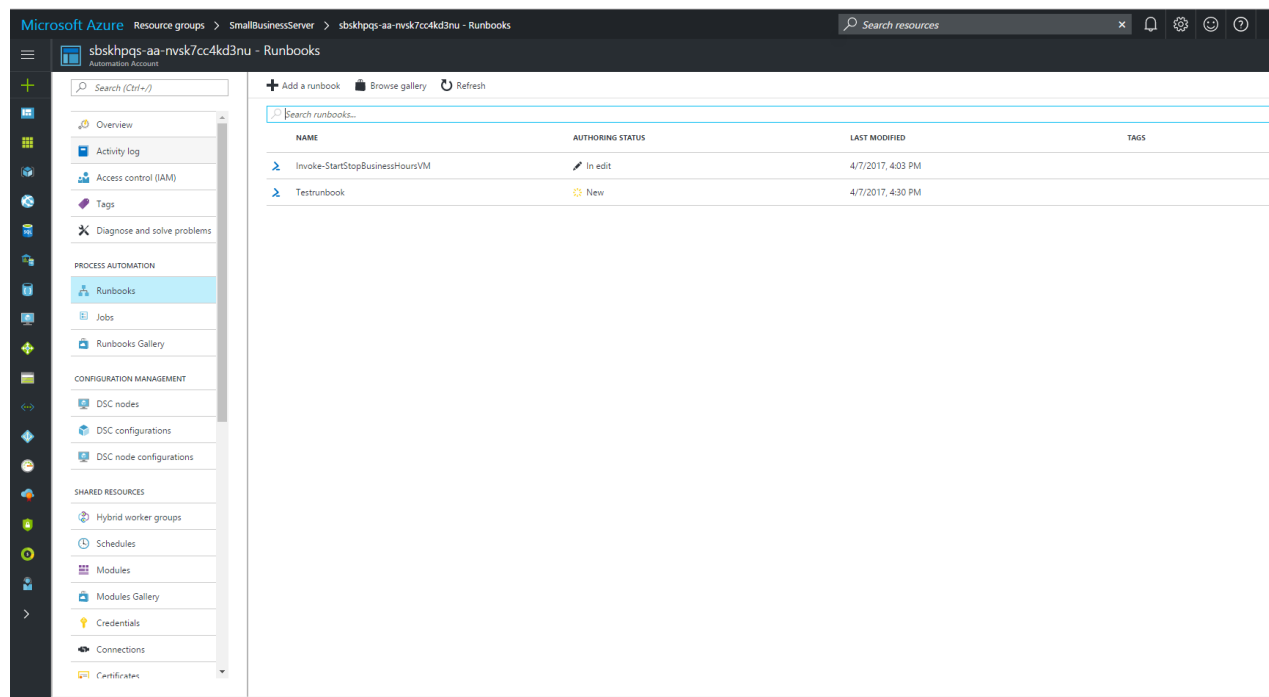
NAME	TYPE	LOCATION
AgentHealthAssessment(sbskhqps-oms-nvsk7cc4kd3nu)	Solution	West Europe
AntiMalware(sbskhqps-oms-nvsk7cc4kd3nu)	Solution	West Europe
ChangeTracking(sbskhqps-oms-nvsk7cc4kd3nu)	Solution	West Europe
nic-sra-01	Network interface	East US
nic-sra-02	Network interface	East US
nsg-management	Network security group	East US
Office365(sbskhqps-oms-nvsk7cc4kd3nu)	Solution	West Europe
pip-sra-01	Public IP address	East US
pip-sra-02	Public IP address	East US
sbskhqps-aa-nvsk7cc4kd3nu	Automation Account	West Europe
Invoke-StartStopBusinessHoursVM	Runbook	West Europe
Testrunbook	Runbook	West Europe
sbskhqps-gw-default	Virtual network gateway	East US
sbskhqps-oms-nvsk7cc4kd3nu	Log Analytics	West Europe
sbskhqps-pip-gateway01	Public IP address	East US
sbskhqps-rsv-nvsk7cc4kd3nu	Recovery Services vault	East US

- To further understand what the "Automation" blade does.

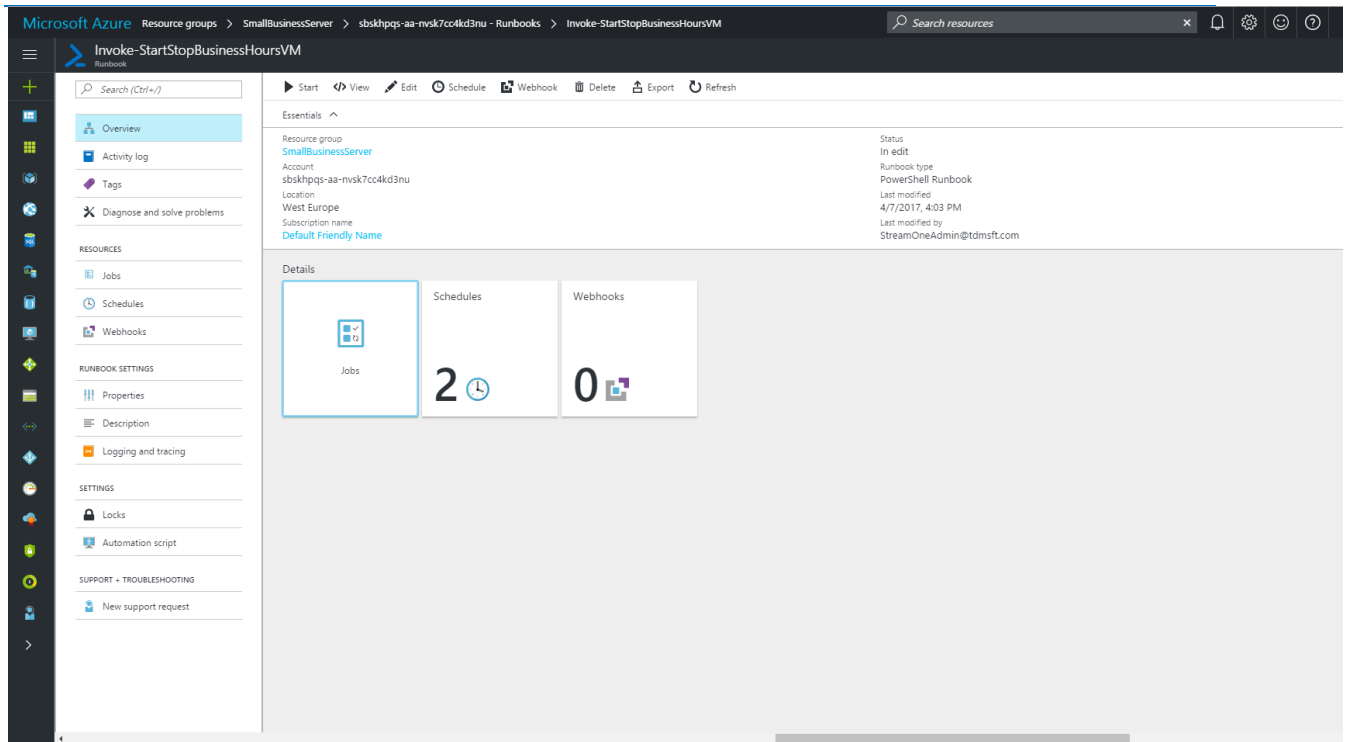
- You would need to navigate to



- On the left side you will see under Process Automation, **RunBooks** click on it. The Blade will expand to show you the different runbooks that are pre-populated.



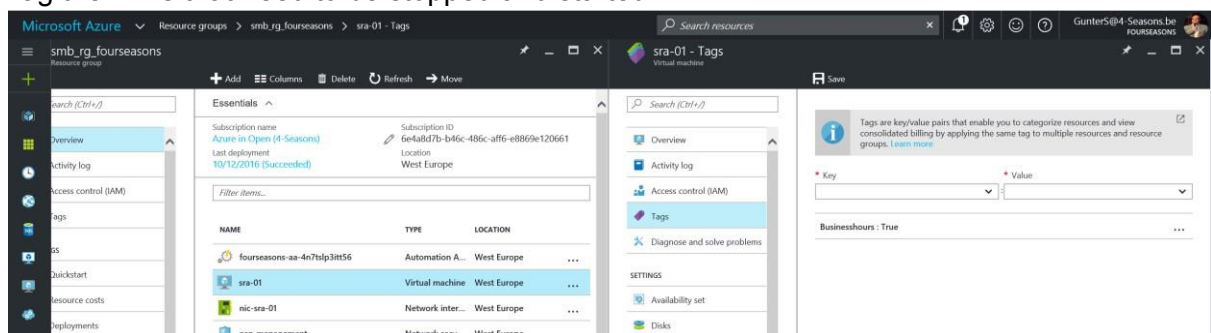
- Click on the Invoke-StartStopBusinessVM. You will see a new blade open. It will show you the Schedule and other information about the runbook. You can do many functions as you can see. Start, View, Edit, Schedule etc... If you want you can add more runbooks to increase the automation.



1.2.1.2 Tasks

- Review the schedule and check if it meets the customer's business requirements. Otherwise change/add or delete schedules as needed.
- Once you are finished you can exit out by clicking the X in the right corner of the blade.
- To select VM's applicable for this automation they need to be tagged with the "BusinessHours" tag with a value "True".

Tag the VM's that need to be stopped and started.



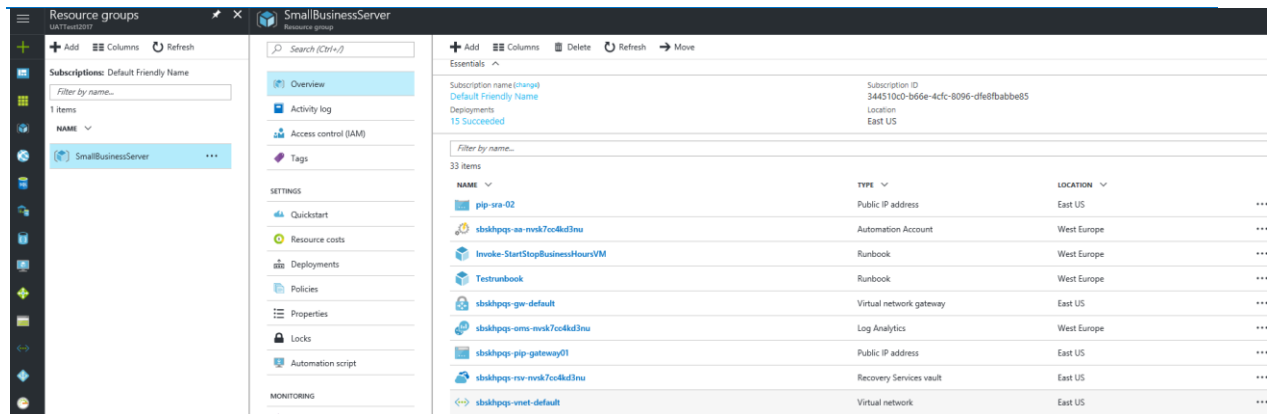
1.2.2 Virtual Network

1.2.3 This is more for your information since no configuring at this point is required.

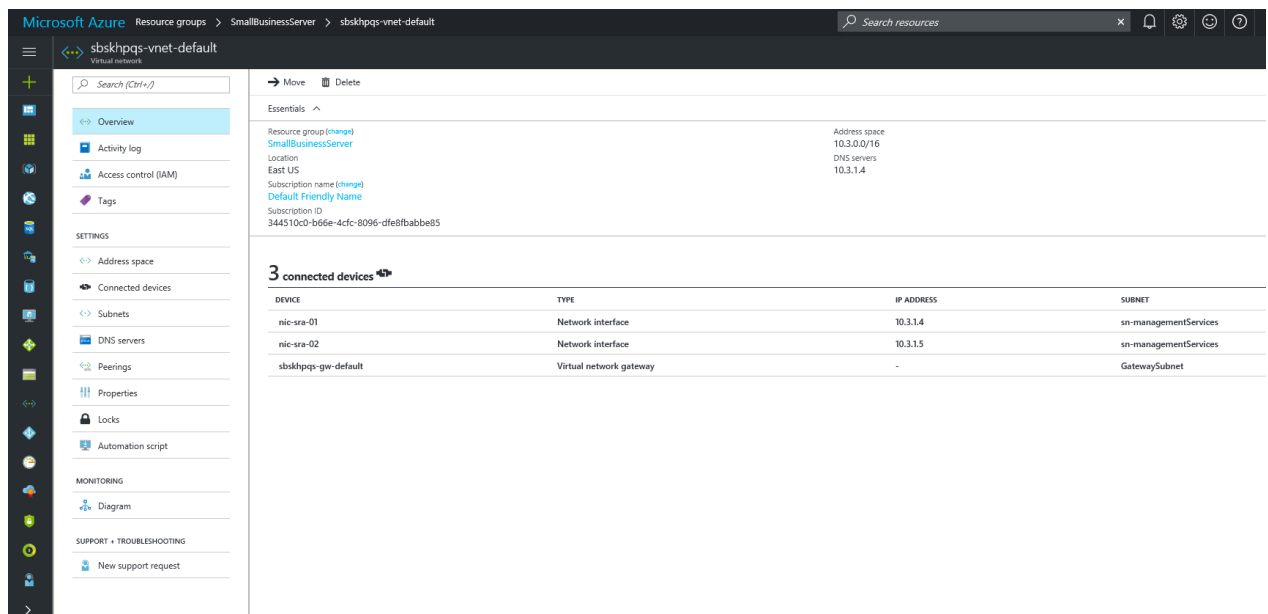
1.2.4 When you login to the Azure Portal you will be presented with the SmallBusinessServer Resource Group.

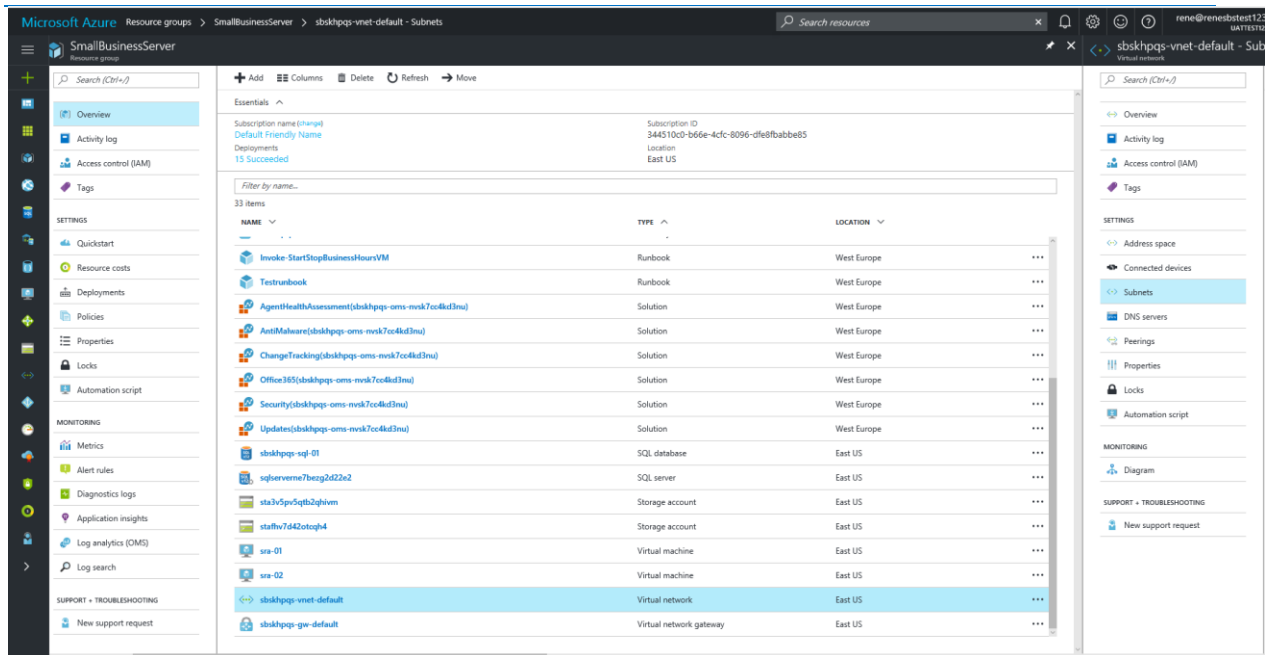
1.2.5 As pictured below scroll down to highlight sbskhpqs-vnet-default.

1.2.6 It will say Virtual Network for Type.

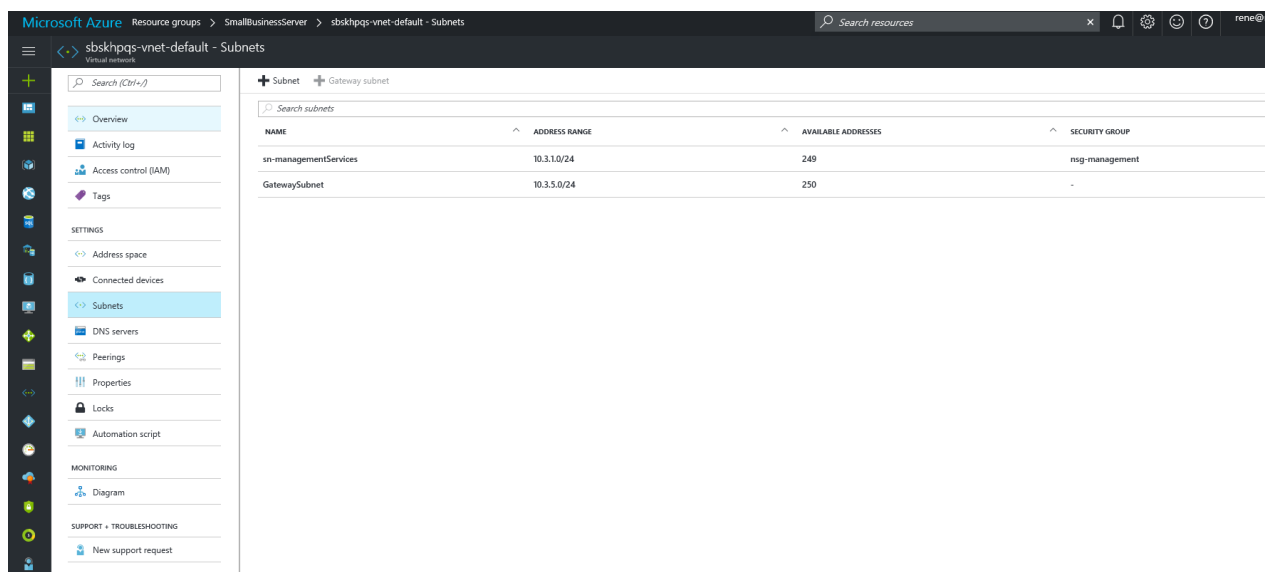


- 1.2.7 Click on it and the blade will expand to show the Address Space and the connected devices to it.
- 1.2.8 You will see the virtual NIC's for SRA-01 and SR-02 and the Gateway.
- 1.2.9 Once complete you can close the blades by clicking on the "X" in the right corner.





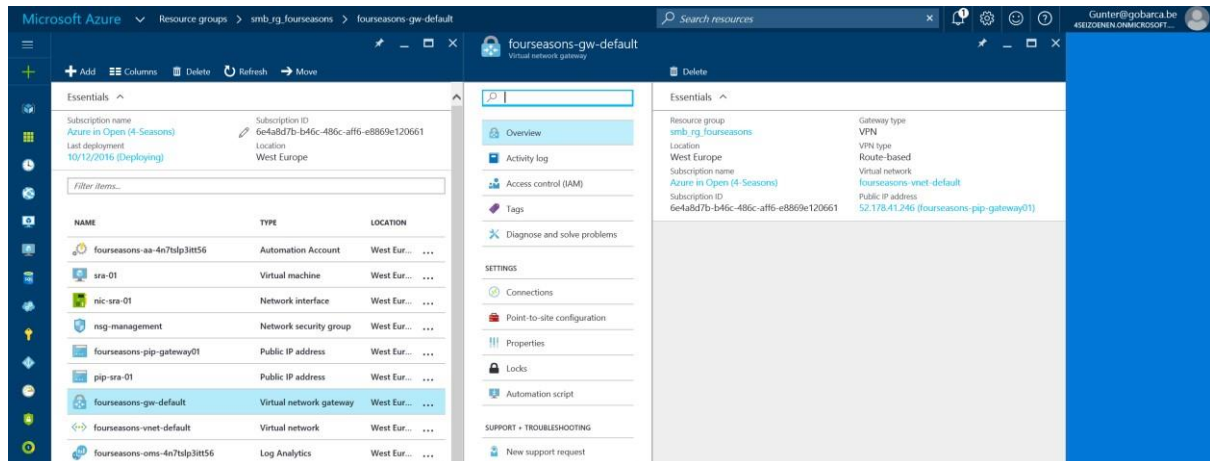
- The deployed network consists of 2 Subnets.
- The gateway subnet does not have a linked Network Security Group.



VPN Gateway (Optional)

- Creating an Azure VPN Connection is not covered in this guide.
- But will be required if you still have on premises resources you plan on having users access.
- You would need to refer to the following links for detailed information:
 - [About VPN Gateway](#)
 - [Create a Site-to-Site connection in the Azure portal](#)

Once a VPN connection is created it would similar to the one shown below:



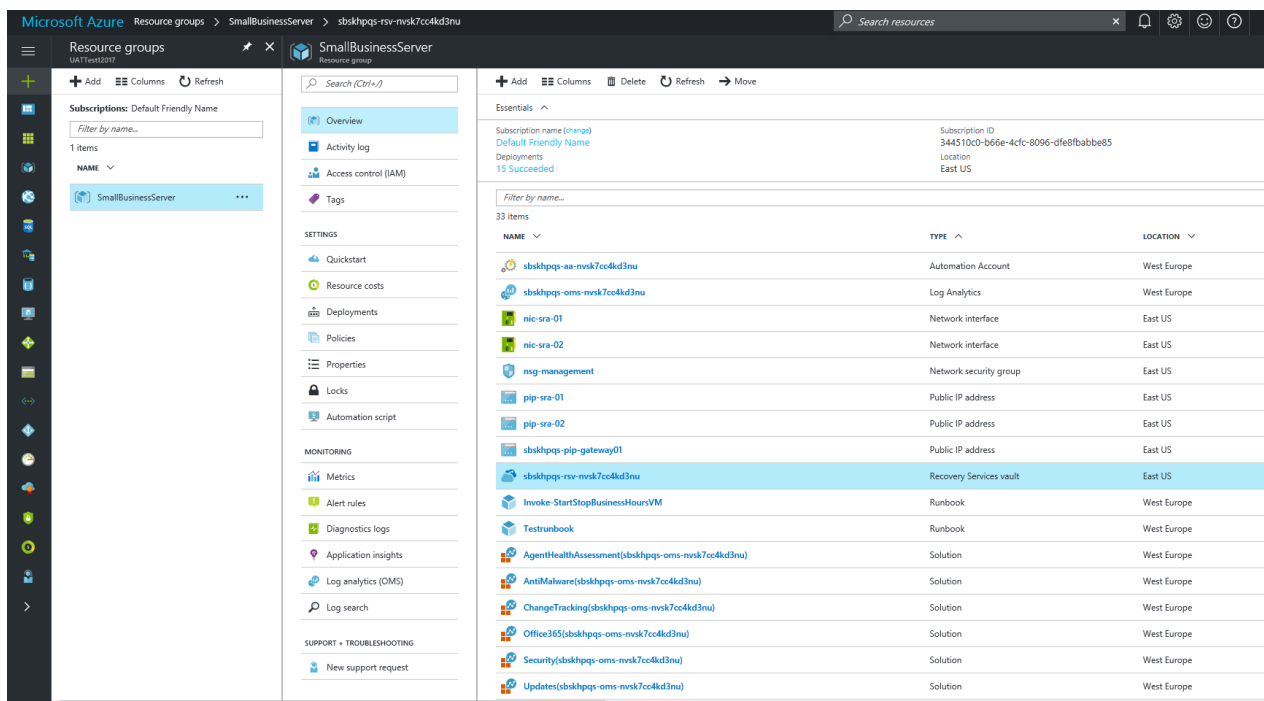
1.2.6 Azure Back-Up (Optional but recommended)

- Azure Back-up (IaaS Back-up) has been configured for the VM's running in your resource group. A Default policy has been made with retention points (30Days, 104Weeks, 60Months & 10Years). The Daily back-Up is scheduled at 7.30AM.
- More information located here on how to perform Azure Backups:
 - [Back up Azure virtual machines to a Recovery Services vault](#)

1.2.6.1 Post Provisioning Tasks

1.2.1 When you login to the Azure Portal you will be presented with the SmallBusinessServer Resource Group.

1.2.2 Scroll down until you see Recovery Services Vault as the Type pictured below.



Click on it and the blade will expand
Check Back-Up Schedule.

- Next you will highlight Backup Policies
- You will see there are two Policies
- You will need to click on defaultPolicy-01

Microsoft Azure Resource groups > SmallBusinessServer > sbskhpqs-rsv-nvsk7cc4kd3nu - Backup policies

sbskhpqs-rsv-nvsk7cc4kd3nu - Backup policies
Recovery Services vault

Search (Ctrl+/)

Overview

Activity log

Access control (IAM)

Tags

Diagnose and solve problems

SETTINGS

Properties

Locks

Automation script

GETTING STARTED

Backup

Site Recovery

MONITORING AND REPORTS

Jobs

Alerts and Events

POLICIES

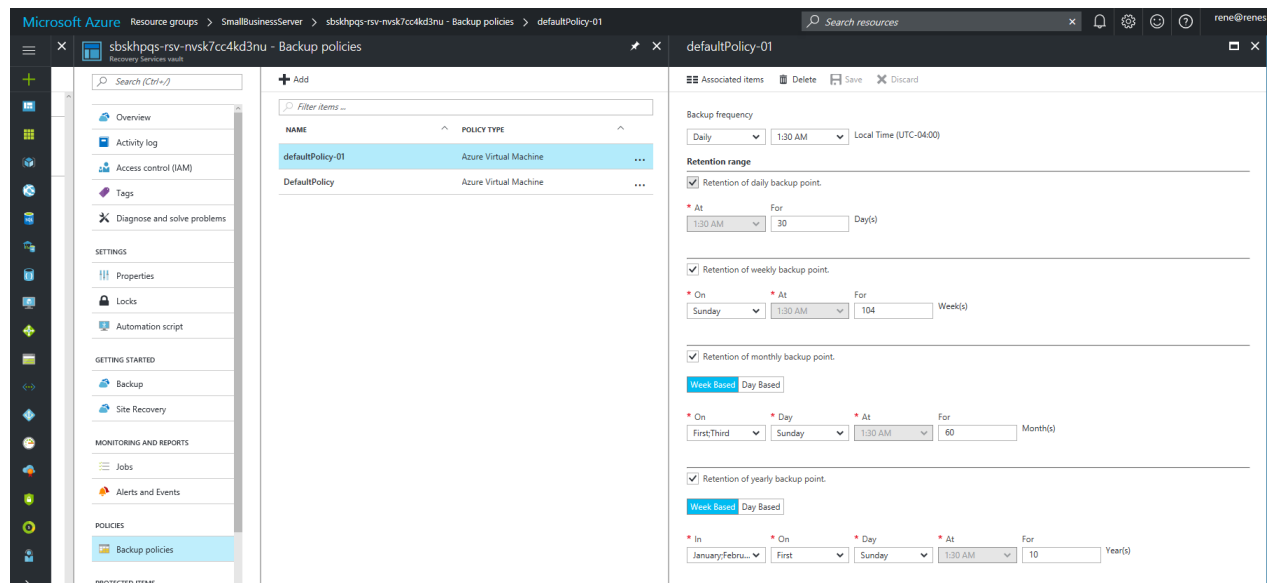
Backup policies

+ Add

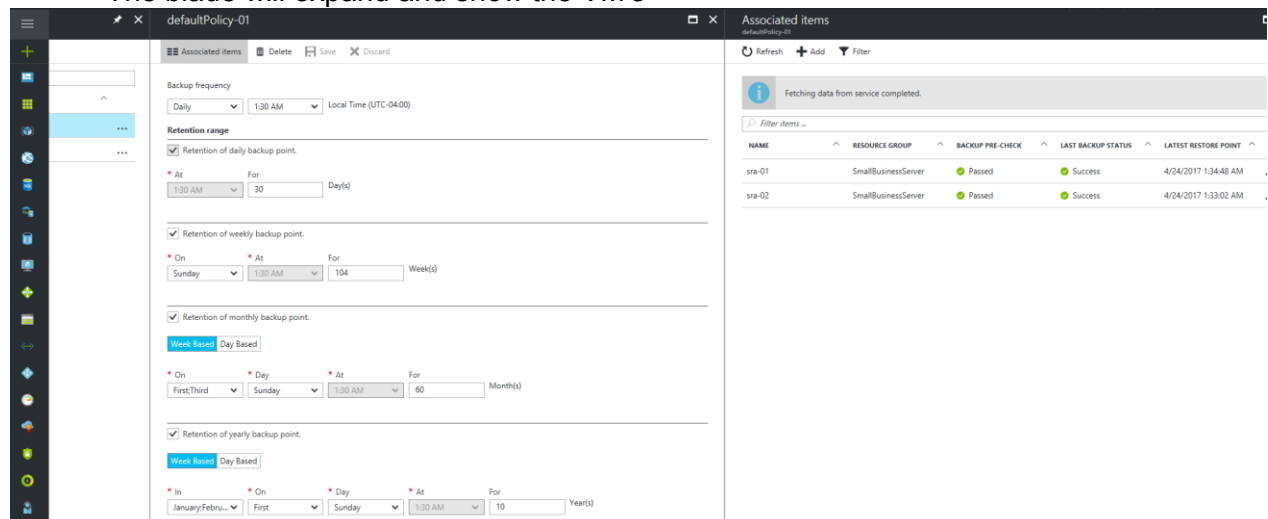
Filter items ...

NAME	POLICY TYPE	
defaultPolicy-01	Azure Virtual Machine	...
DefaultPolicy	Azure Virtual Machine	...

- You will see the retention policy for SRA-01 and SRA-02



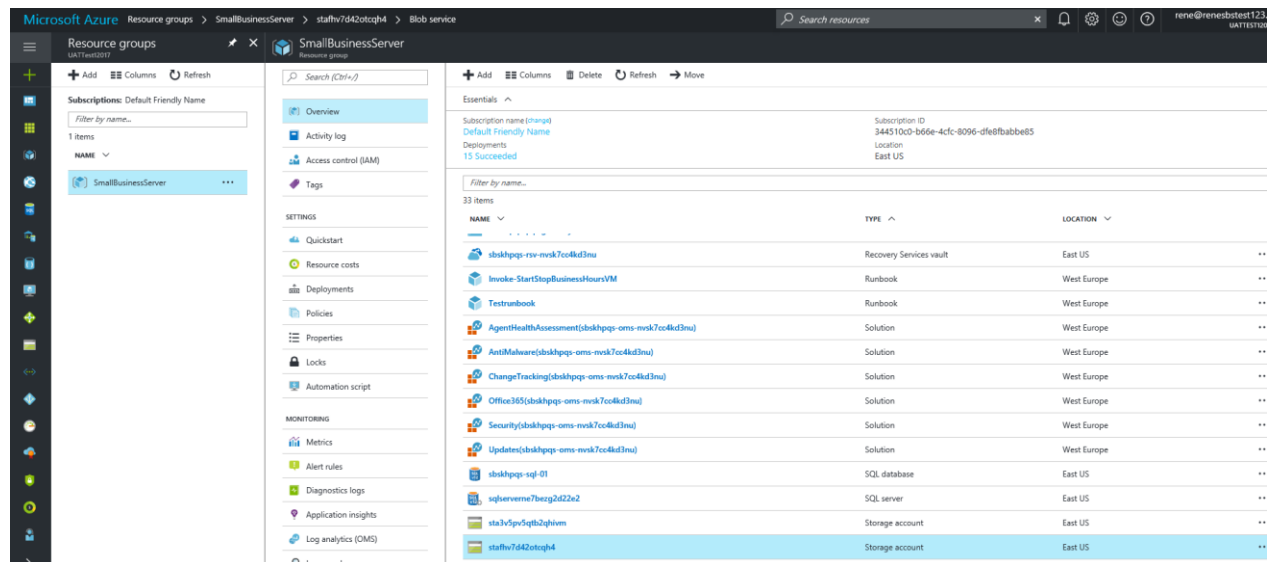
- Highlight Associated Items
- The blade will expand and show the VM's



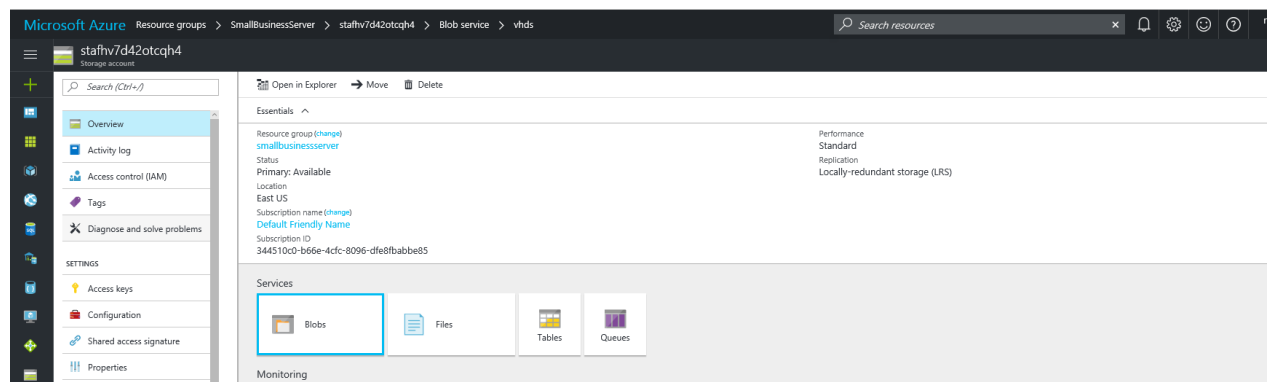
- Once you are finished you can close the blade by choosing the X in the right corner.

1.2.7 Azure Storage

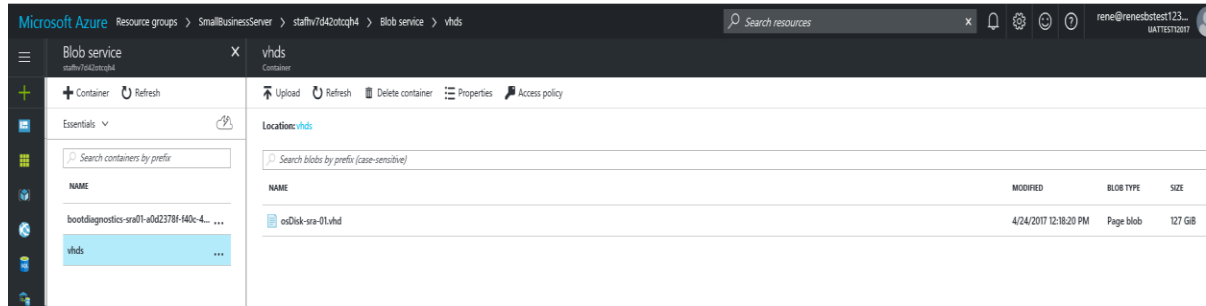
- This section is for your information and no configuration is required.
 - A Storage Account (Standard Storage LRS is provisioned) for each VM.
 - You will see two Storage accounts in the Azure Portal
 - You will click on the Storage Account highlighted



- Next you will see the blade expand
- Click on Blobs

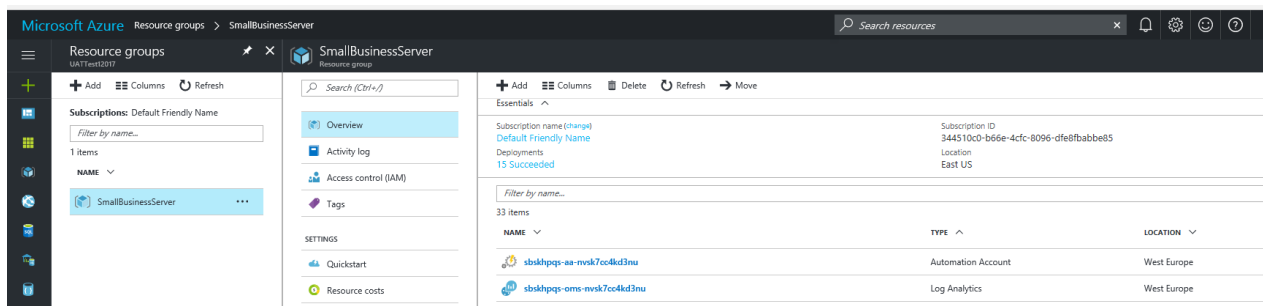


- The blade will expand to show you the storage information for the SRA-01 VHD.
 - The other storage group not selected would show you the information for SRA-02
- Once you are finished you can close the blade by choosing the X in the right corner.

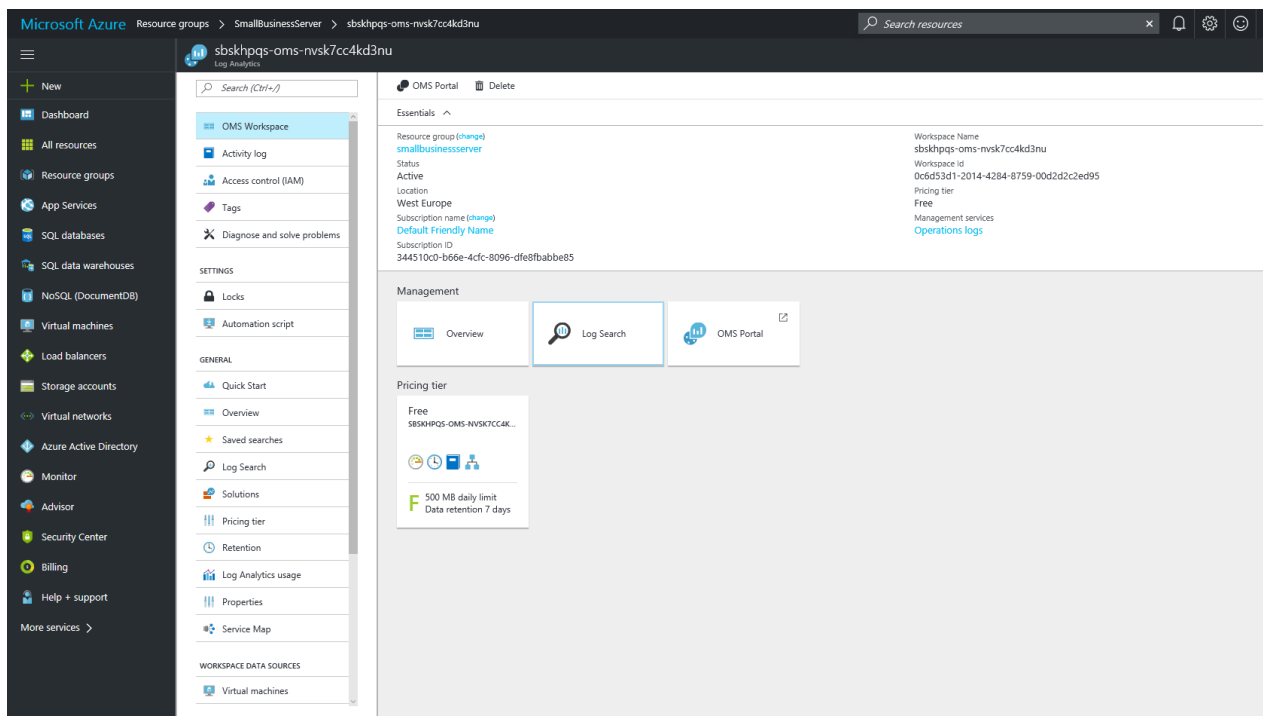


Operations Management Suite (OMS) Log Analytics

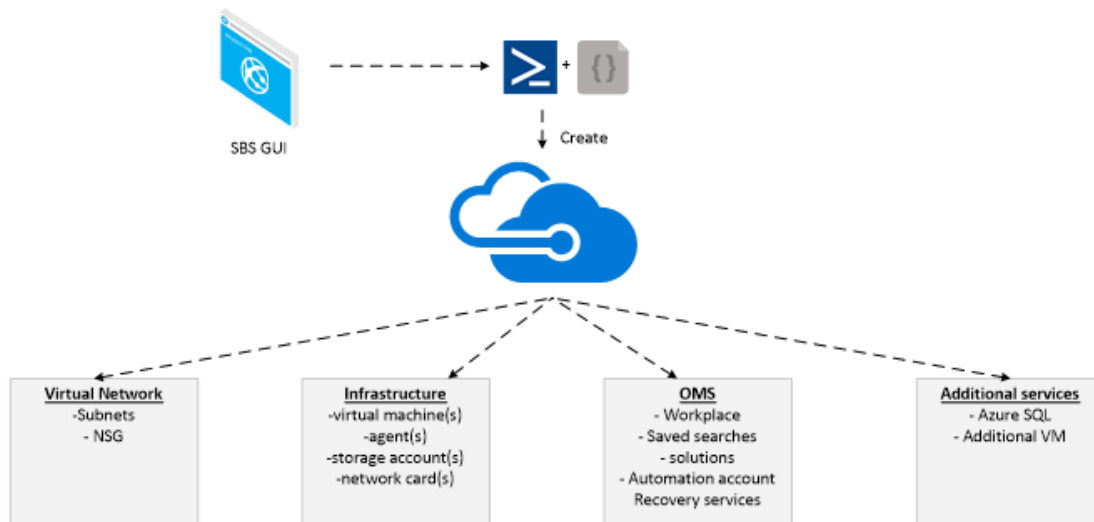
- With Log Analytics you can gain deeper insights into your customer's environment using Azure.
 - [Learn More Here on OMS](#)
- This agent can be installed either on an Azure VM or an on premises VM or physical machine. It will allow you to tie all this together.
- The agent can look inside of the actual VM and tell you what is going on.
 - You can install the agent on Windows and Linux Servers.
- You can access the Operations Management Suite (OMS) workspace thru the Resource Group and looking at Type then Log Analytics.



- Once you have chosen the Log Analytics the blade will expand.
- As you can see from the screen shot you have the ability to see different items.
- Overview, will give you a snapshot of how the Azure IaaS VM's are doing
- Log Search will allow you to search the logs that are gathered
- OMS Portal is a separate Portal that you will need to login using the same credentials you logged into the Azure Portal with
- Pricing, for this is free.
 - It allows you only 500mb of logs to be ingested into OMS for day.
 - And the logs are only kept for 7 days.
 - There are other tiers you can have
 - <https://www.microsoft.com/en-us/cloud-platform/operations-management-suite-pricing>



SBCS blueprint deployment



SBCS Blueprint also provides possibilities to deploy a set of azure resources.

The resources can be deployed using the graphical user interface or directly using PowerShell. The different resources are grouped together in different templates. A mean template will then call out to those templates. Below you can see how the different resources are grouped to logical components as:

- Virtual Network
- Infrastructure
- OMS
- additional services

SBCS categorization

The categorization allows to differentiate on the number of the resources as well on the size of those resources.

Example: 1 or more servers in the deployment model depending on the company size

Example: A Standard_DS1_v2 (basic VM) or a more powerful VM size like Standard_DS3_V2

The deployment serves as a starting point and is by no means limited to the set of resources deployed by the SMB blueprint solution below you can find an overview of the different sizes.

table: categorization

Size	# users	# of servers	server type
Small	=< 5 users	1	Standard_DS1_v2 (1 CPU - 3.5 GB RAM)
Medium	=< 20 users	1	Standard_DS2_v2 (2 CPU - 7 GB RAM)

Size	# users	# of servers	server type
Large	=< 50 users	3	Standard_DS4_v2 (8 CPU - 28 GB RAM)

Note that there is no increase in the number of servers between a small and medium deployment.

In the following topics we will elaborate on the resources deployed per category. But independent of the categorization a standard set of resources are deployed.

For example; a virtual machine always needs a storage account and a network card. The following resources will be deployed regardless of the type of deployment.

Common resources

Network resources

table: General network resources

Resource Category	Description
Network	The virtual network. The virtual network has a fixed ip range set to 10.3.0.0/16.
NSG	Network security groups (ACL) to protect the different subnets in the virtual network
Network Card	Per virtual machine a network card is deployed to enable communication
public IP	A public ip address is created and assigned to each network card. A public ip enables external communication

Infrastructure resources

table: General infrastructure resources

Resource Category	Description
storage account	A storage account per VM. the storage account will hold the vhd file(s) that hold the OS and the extra data disks

Resource Category	Description
Primary VM	The virtual machine that will host the ADDS, DNS and RDS roles

Operations Management resources

table: General Operations management resources

Resource Category	Description
OMS workspace	a storage account per VM. the storage account will hold the vhd file(s) that hold the OS and possible extra data disks
Automation Account	the virtual machine that will host the ADDS, DNS and RDS roles

Size specific resources

Small and medium

The small and medium deployments only differ in compute sizes and not in resources. The default resources deployed are:

table: small and medium deployment resources

Resource Category	Description
virtual machine	The primary virtual machine. (sra-01)
storage account	the storage account containing the vm vhd's
network card	The network card attached to the virtual machine (nic-sra-01)
public ip	the public ip attached to the network card to enable communications (pip-sra-01)
virtual network	The virtual network with a default addressprefix 10.3.0.0/16. (customername-vnet-default)

Resource Category	Description
network security group	the acl linked to the vnet subnet (nsg-management)
oms workspace	the oms workspace (customername-oms-uniqueid)
automation account	the automation account containing the sample script to start\stop vms (customername-aa-uniqueid)

NAME



inovativbe125-aa-xwm25kl6ejbhm



sra-01



nic-sra-01



nsg-management



pip-sra-01



inovativbe125-vnet-default



inovativbe125-oms-xwm25kl6ejbhm



AgentHealthAssessment(inovativbe125-oms-xwm25kl6ejbhm)



AntiMalware(inovativbe125-oms-xwm25kl6ejbhm)



ChangeTracking(inovativbe125-oms-xwm25kl6ejbhm)



Office365(inovativbe125-oms-xwm25kl6ejbhm)



Security(inovativbe125-oms-xwm25kl6ejbhm)



Updates(inovativbe125-oms-xwm25kl6ejbhm)



sta2ao4lqqcab6m

Large

In a large deployment additional virtual machines are deployed to host the possible load of users connecting.

Resource Category	Description
virtual machine 1	The primary virtual machine. (sra-01)
storage account 1	The storage account containing the vm vhd's (stauniqueid)
network card 1	The network card attached to the virtual machine (nic-sra-01)
public ip 1	The public ip attached to the network card to enable communications (pip-sra-01)
virtual machine 2	The second virtual machine. (sra-02)
storage account 2	The storage account containing the vm vhd's
network card 2	The network card attached to the virtual machine (nic-sra-02)
public ip 2	The public ip attached to the network card to enable communications (pip-sra-02)
virtual machine 3	The third virtual machine. (sra-03)
storage account 3	The storage account containing the vm vhd's
network card 3	The network card attached to the virtual machine (nic-sra-03)
public ip 3	the public ip attached to the network card to enable communications (pip-sra-03)
virtual machine jumpbox	a jumpbox virtual machine. (sra-jumpbox))
storage account jumpbox	The storage account containing the vm vhd's (stauniqueid)
network card jumpbox	The network card attached to the virtual machine (nic-sra-jumpbox)

Resource Category	Description
public ip jumpbox	The public ip attached to the network card to enable communications (pip-sra-jumpbox)
virtual network	The virtual network with a default addressprefix 10.3.0.0/16. (customername-vnet-default)
network security group	The acl linked to the vnet subnet (nsg-management)
oms workspace	The oms workspace (customername-oms-uniqueid)
automation account	The automation account containing the sample script to start\stop vms (customername-aa-uniqueid)

NAME



inovativbe136-aa-qoxba7ccbr4ha



sra-01

Additional resources

Azure recovery services

The foremost important additional service provides native backup capabilities. If opted in for the recovery services all Virtual machines in the default deployment and any additional VM's deployed using the SMBblueprint fast track solution are onboarded.

In addition a default policy is created and assigned to the VM's.

NAME	RESOURCE GROUP
 test	testdwawfrerefr

VPN gateway

If a hybrid scenario is needed (onpremise and Azure resources connected) a VPN connection needs to be established.

The VPN will be deployed in a reserved subnet. The reserved subnet is named Gateway subnet.

The default deployment already foresees the subnet and provides an ip range.

A VPN gateway exists in different SKU's, but only the sku's below are deployed using the SBCSblueprint solution


NAME	VIRTUAL NETWORK	GATEWAY TYPE	RESOU
 [REDACTED]	[REDACTED]	VPN	[REDACTED]

table: Additional virtual machine deployment options

deployment option	characteristics
none	N/A
basic	Basic edition (100 Mbps)

After deployment additional configuration is needed

Local networks and establishing the VPN connection is a manual configuration after deployment. A guide on the configuration can be found on the [Microsoft Azure documentation center](#)

Note: A VPN gateway deployment takes around 45min.

Additional virtual machine

In addition to the default infrastructure being deployed you also have the option to deploy an

additional virtual machine.

This enables organizations to deviate from the deployment characteristics determined by the size of the company.

If you opted in on Azure recovery services to provide backup capabilities the virtual machine will also be on boarded.


NAME	STATUS	RESOURCE GROUP
 sra-04	Running	smb_rg_inovativbe13

table: Additional virtual machine deployment options

deployment option	characteristics
none	N/A
small	Standard_DS1_v2 (1 CPU - 3.5 GB RAM)
medium	Standard_DS2_v2 (2 CPU - 7 GB RAM)

Azure SQL database

The deployment foresees the possibility to deploy an Azure SQL database in addition of the default infrastructure deployment.


NAME	STATUS	REPLICATION ROLE	SERVER
 inovativ136-sql01	Online	None	inovativ136-sql01

table: Azure SQL deployment options

deployment option	characteristics
none	N/A
small	Basic edition

Storage type

The storage type for the virtual machines is configurable: | deployment option | characteristics | |
-----|-----| | Standard_LRS (default)| | Standard_ZRS| | Standard_GRS| |

Standard_RAGRS | Premium_LRS |

Note: in the large deployment, the jumpbox VM is always configured with Standard_LRS storage