AZURE HANDS-ON LABS

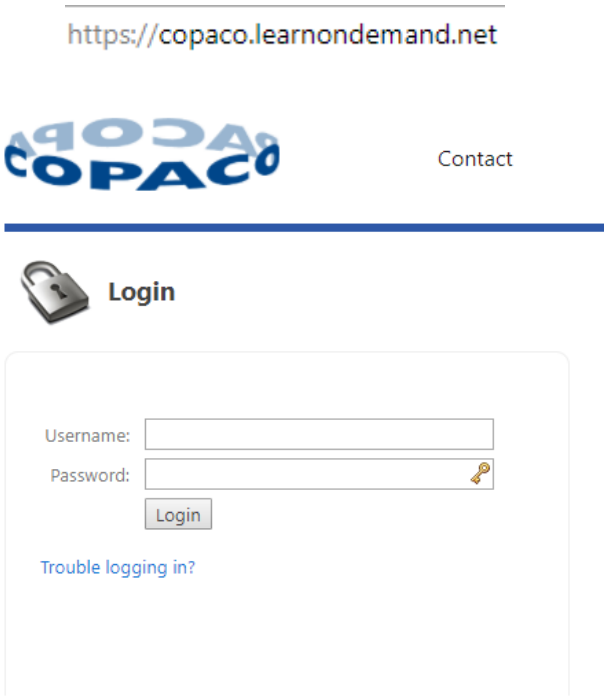
7 NOVEMBER 2017

COPACO

Hoevenweg 21, 5652 AW Eindhoven

Inhoudsopgave

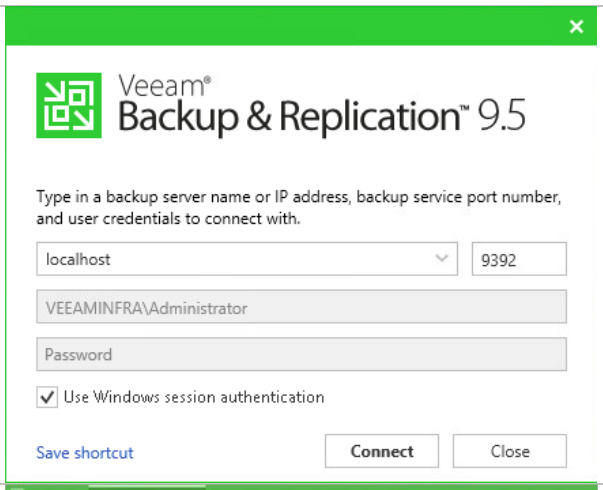
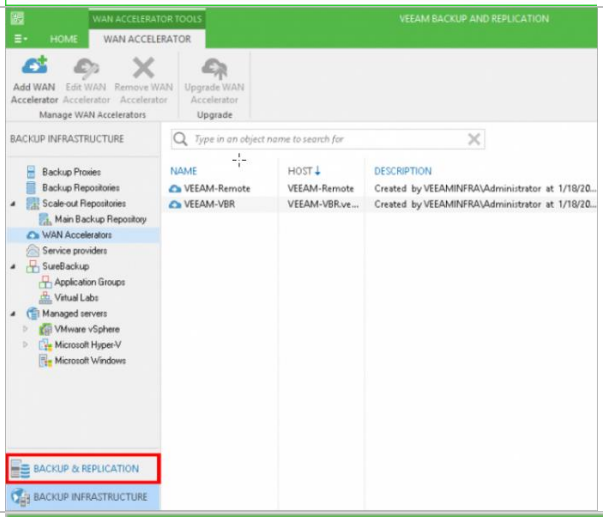
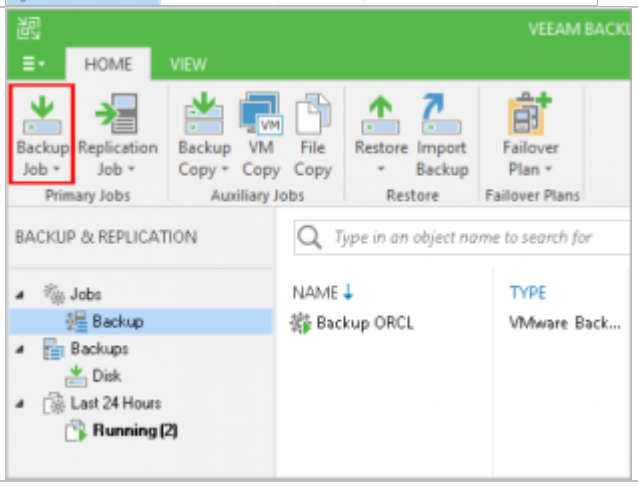
Start a Veeam Lab



AzureHOL01	Pa$$w0rd
AzureHOL02	
AzureHOL03	
AzureHOL04	
AzureHOL05	
AzureHOL06	
AzureHOL07	
AzureHOL08	
AzureHOL09	
AzureHOL10	
AzureHOL11	
AzureHOL12	
AzureHOL13	

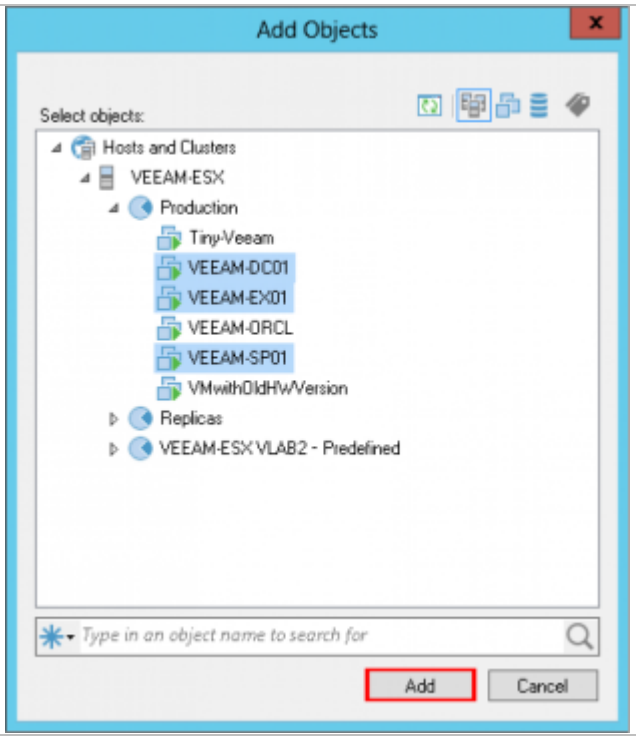
Launch Lab 5

Exercise 1: Create a Backup job

From the desktop, launch Veeam backup & replication. You can log in using Windows session authentication.	
Open the **Backup & Replication view**, select Jobs.	
In the Backup & Replication view, click the **Backup Job** button on the ribbon	
Select VMware from the drop-down list.	
At the first step of the wizard, enter a *Backup AD & Exchange & SharePoint* as the Name. Leave the Description initially provided for the job. Click **Next**.	
Click **Add**… to browse the VI infrastructure to have a look at the possible selection criteria	

Expand **VEEAM-ESX,** Expand the *Production* resource pool and Select **VEEAM-DC01, VEEAM-EX01** and **VEEAM-SP01**

Click **Add.**



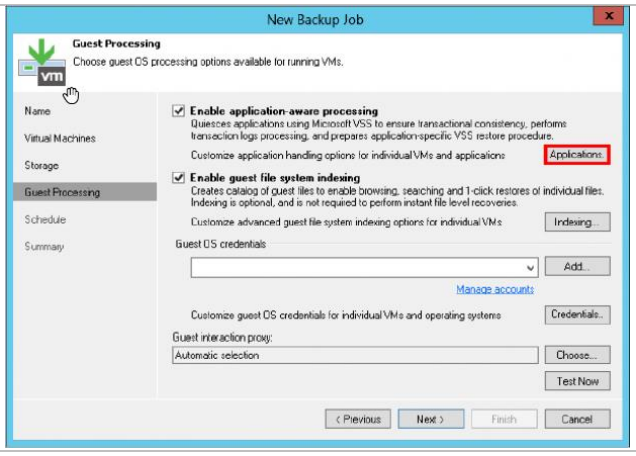
Leave **Automatic selection** for **Backup proxy**.
Confirm *Main Backup Repository* is selected in the **Backup repository** drop down menu.
Under **Retention policy**, change the Restore points to keep on disk to **2**.

Click Next to proceed to the Guest processing step

Enable application-aware image processing.
Enable application-aware image processing is used to "freeze" the VMs when the snapshot is created. This leads to the creation of a transactionally consistent backup that ensures successful recovery of VM applications without any data loss.

Click **Enable guest file system indexing** checkbox.
Note: Guest file indexing allows you to search faster for VM guest OS files inside VM backups using Veeam Backup Enterprise Manager.

Click **Applications** to customize application
handling options.



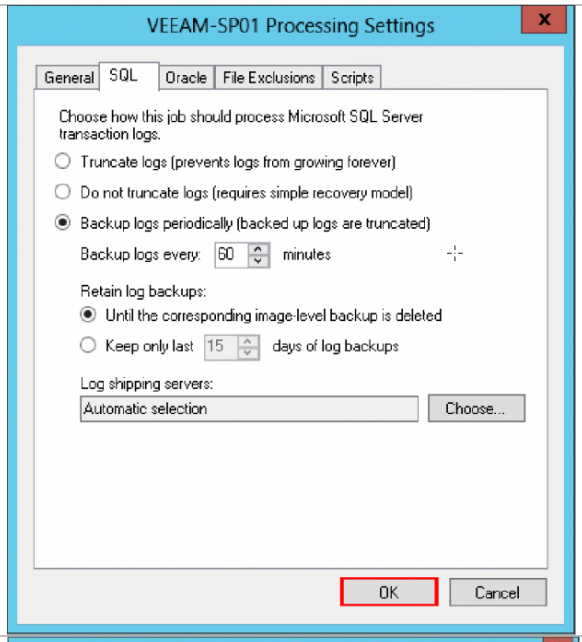
To set database transaction log processing, select **VEEAM-SP01** where the SQL server is located

Click **Edit**.

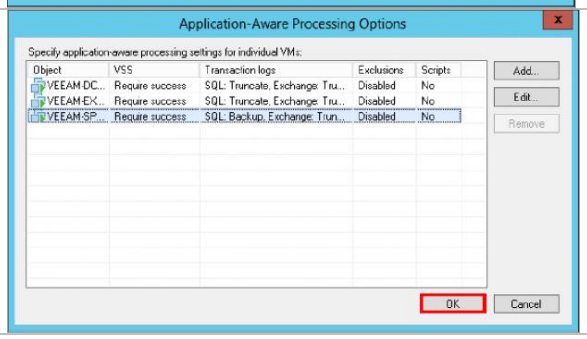
Click the **SQL** tab to specify an SQL-server specific option.

Select **Backup logs periodically.**

By default, the Backup logs every field will be
set to *15* minutes. Change *15* to *60*. Leave the **Automatic Selection for Log shipping servers** field intact and click **OK**.
Note: For this setting to take effect, you should ensure that Full or Bulk-logged recovery model is turned on for the required
databases on the SQL server VM. If the recovery model is set to Simple, Veeam Backup & Replication does not detect or process SQL server VM's logs. If Full model is enabled but neither the Backup nor Truncate logs option is selected, logs will increase in size and occupy disk space.



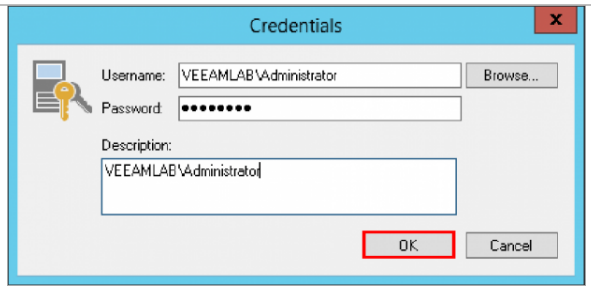
Confirm your selection by clicking **OK**

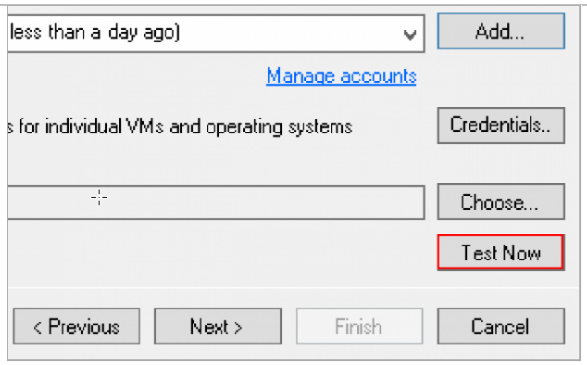
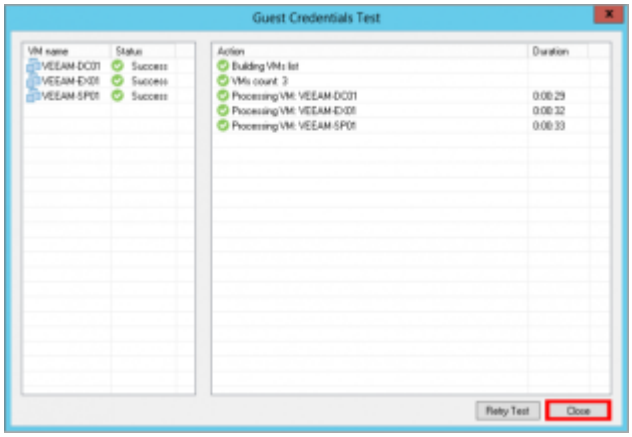
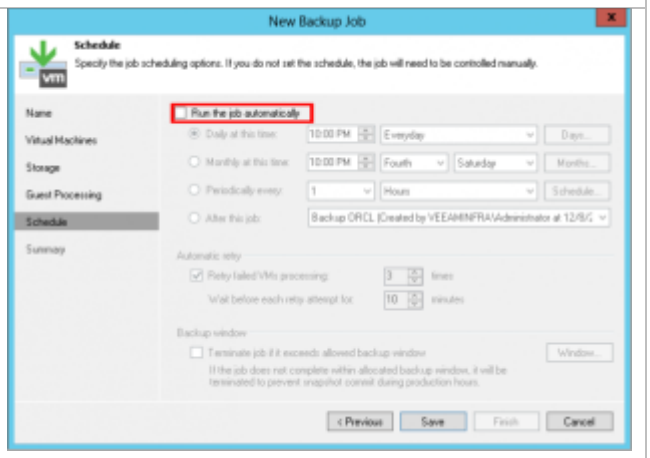
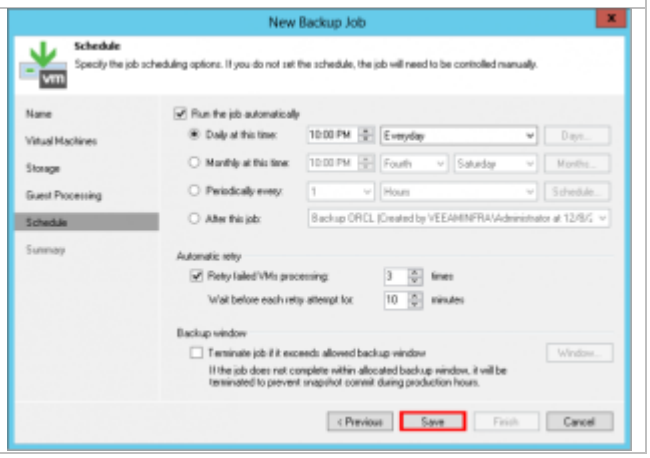


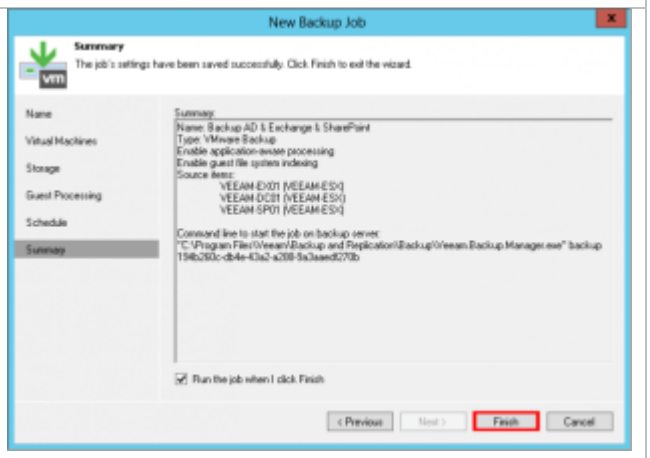
Click **Add**… to specify credentials.

Select **Standard account**… in the drop-down list

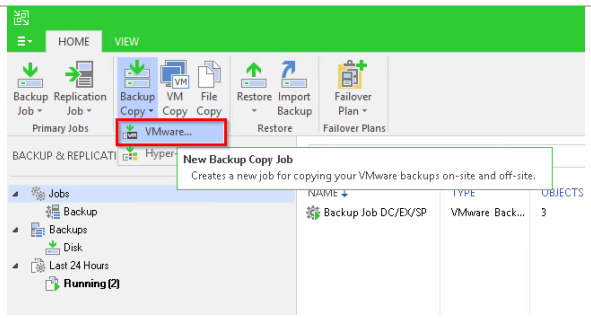
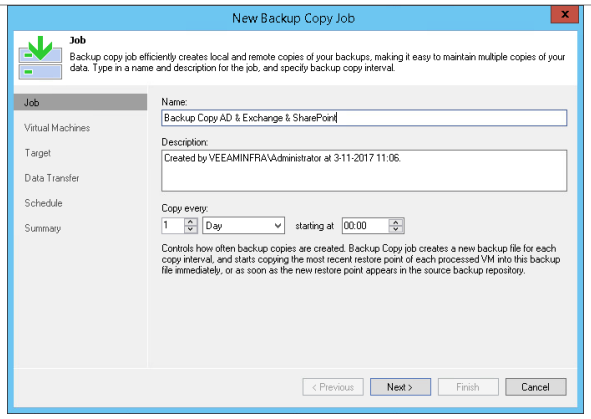
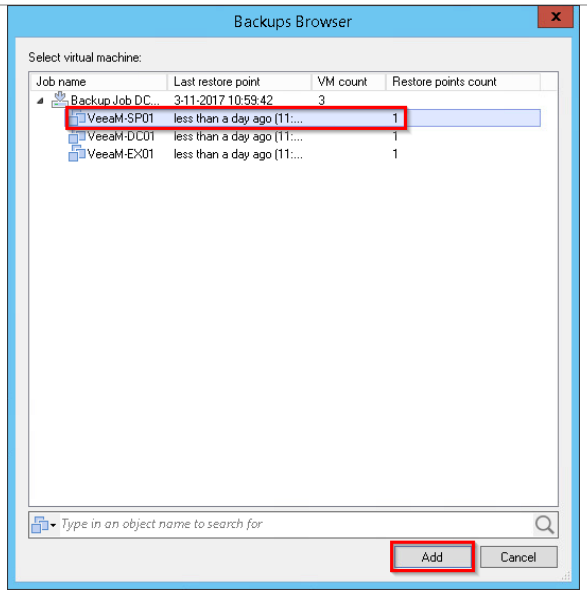
Specify *VEEAMLAB\Administrator* and *Pa$$w0rd* as **Username** and **Password**. Confirm by clicking **OK**.



Click **Test Now** to check if the specified credentials will work.	
Wait till the check is done. When the status changes to **Success**, click **Close.**	
Click **Next**	
Tick the **Run the job automatically checkbox**	
Check Run the job automatically and **Enable Daily** then select your time schedule. Let the job run at 20:00.	

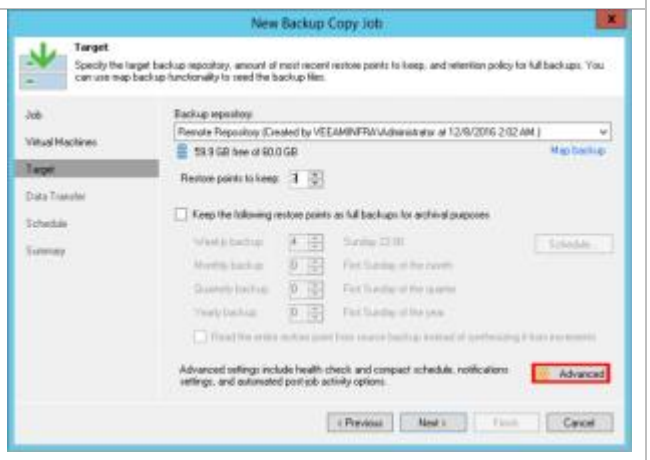
It is important this job runs now. Make sure Run the job when I click Finish is checked.	
Click **Finish**	
At this point an initial backup will be made. This backup, we can use to restore application items and perform a **Direct Restore to Azure** **To view how Veeam actually performs the backup, you can take a look at the Running Jobs and double click the Backup Job.**	

Exercise 2: Create a Backup Copy Job

In the Backup & Replication view, select **Backup Copy** and click **VMware**	
At the first step of the wizard, enter *SharePoint* as the Name. Keep the **default** Description and copy interval and click **Next**.	
On the **Virtual Machines** page, click **Add**…	
Select the **from backups...** option from the drop-down list.	
Expand backup job *Backup AD & Exchange & SharePoint*	
Choose **Veeam-SP01** and click **Add**	
Click **Next**.	
Click the **Backup repository** dropdown list.	

Choose *Remote Repository*

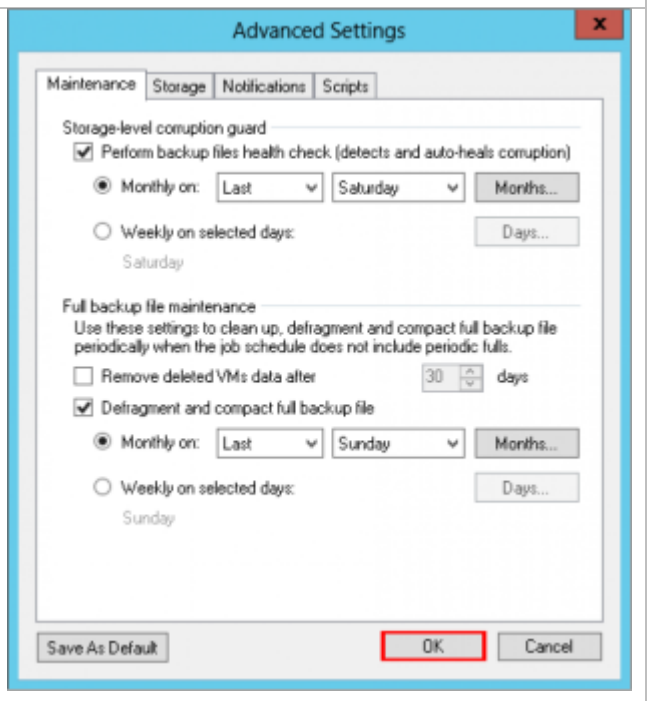
Set the Restore points to keep: at 3 and click **Advanced**.



In **the Advanced Settings** dialog, enable **the Health check**.
An automatic health check allows you to avoid a situation when a restore point gets corrupted, making all further increments corrupted, too.

To periodically compact a full backup, select **the Defragment and compact full backup file** check box. The compact option can be enabled only if you have not specified the GFS settings.

Click **OK**



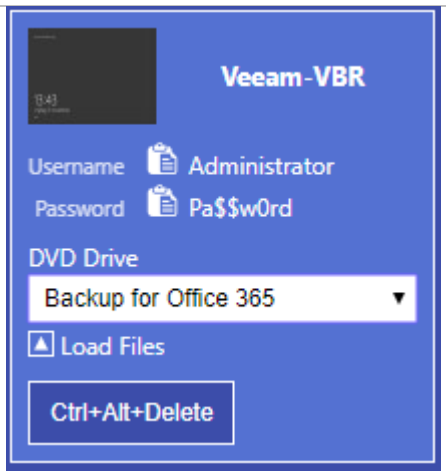
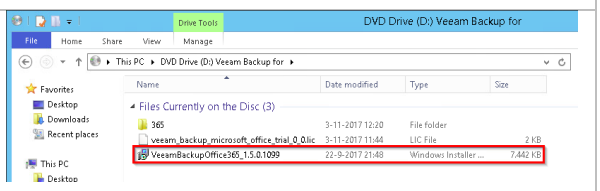
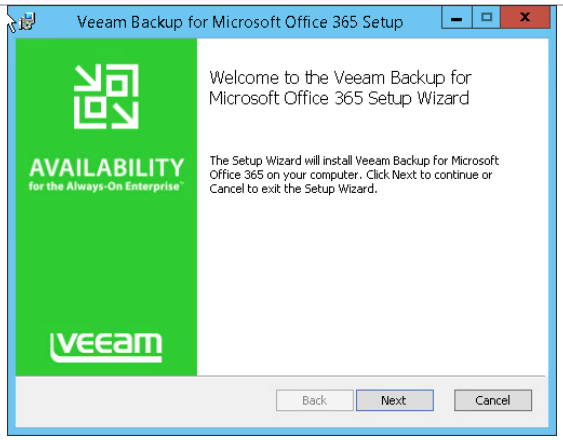
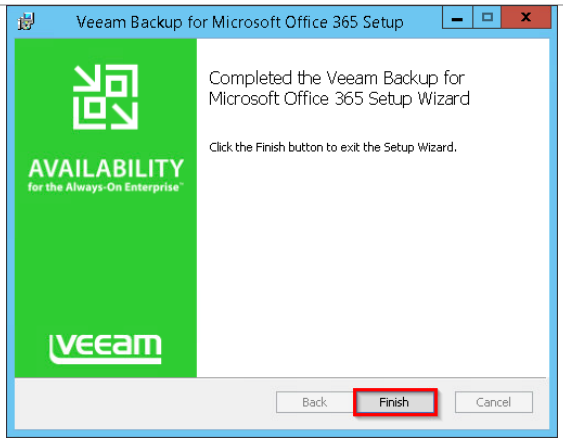
Click **Next**

On the Data Transfer page make sure that the **Direct** method is selected and click **Next**.

On the **Schedule** page, leave the radio button at **Any time (continuously)** and click **Save**.

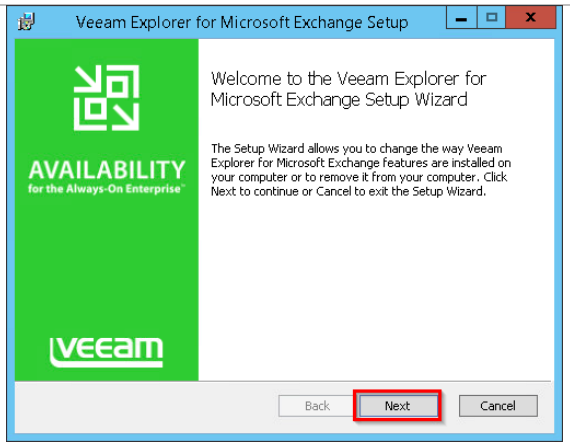
On the Summary page, make sure **Enable the job when I click Finish** is checked and click **Finish**.

Exercise 3: Veeam Backup from Office 365

From the bar on the right side of the screen. Select **Veeam-VBR.** Then select the drop down list of the DVD drive and select **Backup for Office 365.** *An iso file will be loaded as DVD drive in which the setup and license for Backup for Office 365 are included.*	
Open de **DVD drive** (D:) and double click **VeeamBackupOffice365_1.5.0.1099**	
The installation can easily be done by using the default configuration. **Accept the EULA** and proceed installation by clicking **Next**	
Once the installation is done, press **Finish**	

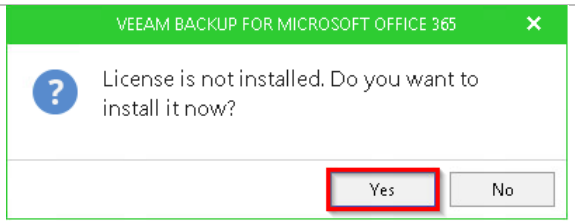
After Veeam Backup for Office 365 is installed, we need to make sure that we can also restore an email.

Open de DVD drive (D:\) and double click **VeeamExplorerExchange_9.6.0.1099** to start the installation. This is a simple next, next, finish installation.

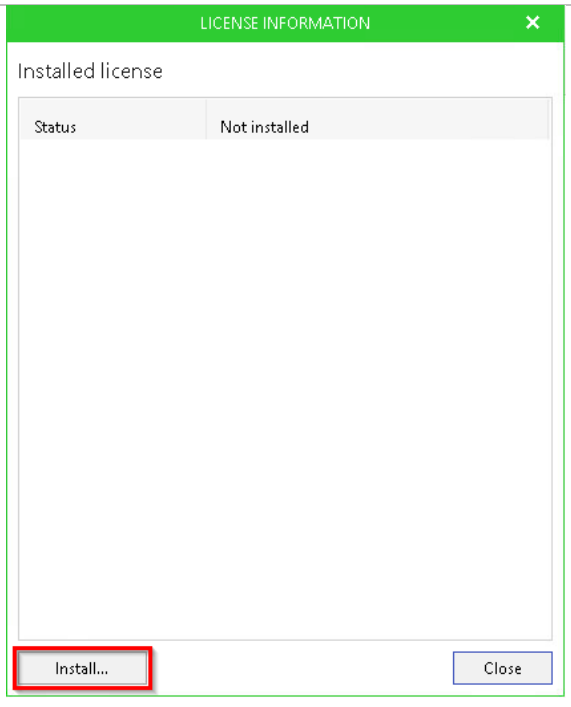


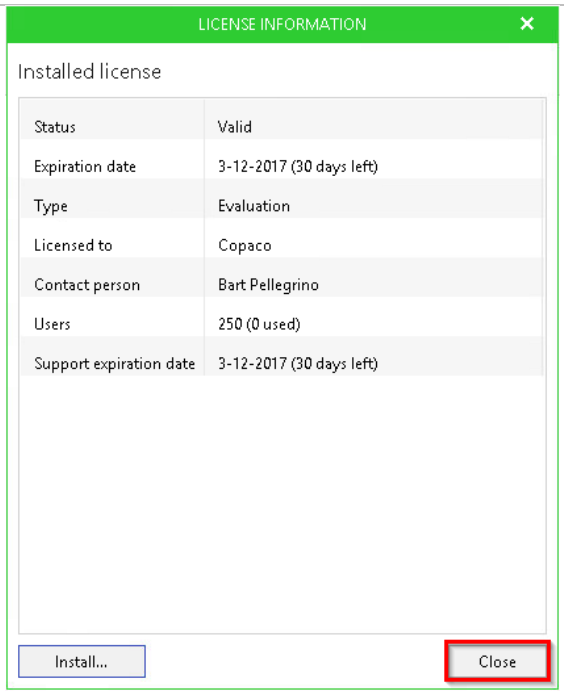
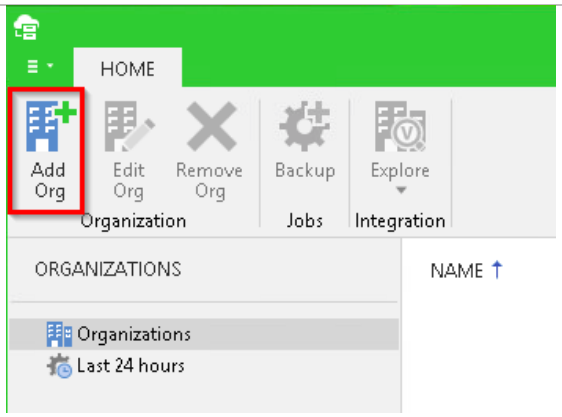
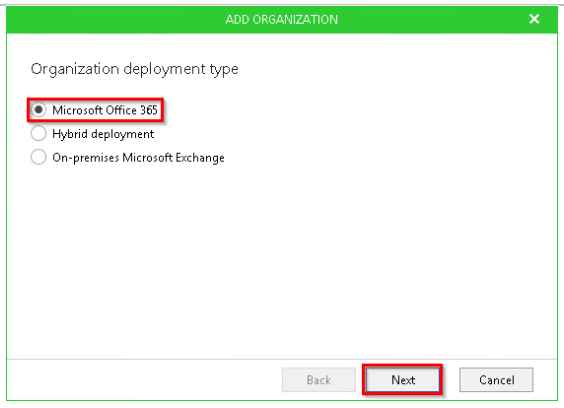
Once the Explorer installation is done, launch **Veeam Backup for Microsoft Office 365** from the Desktop.

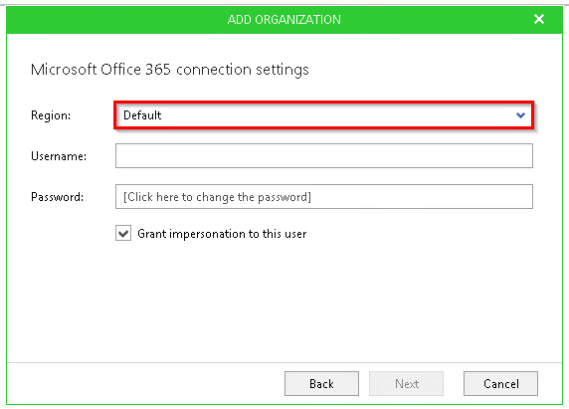
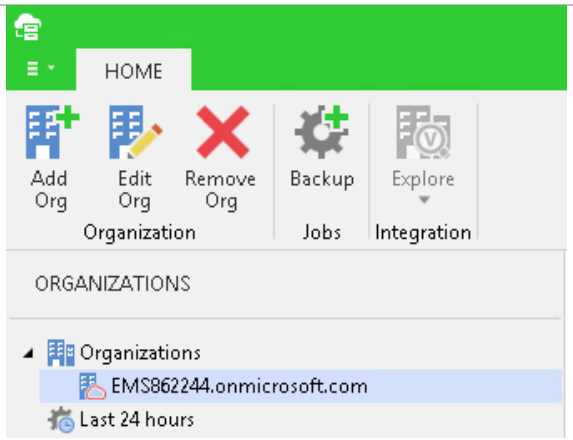
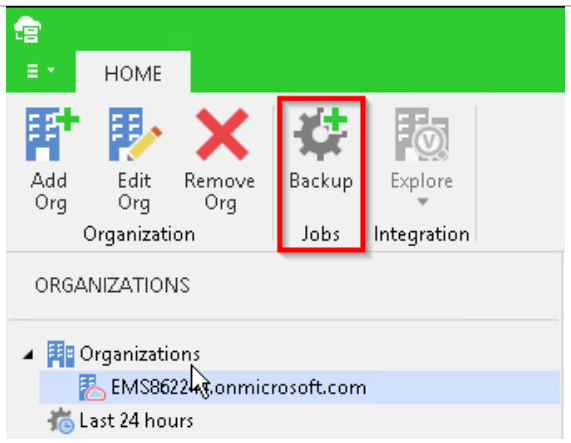
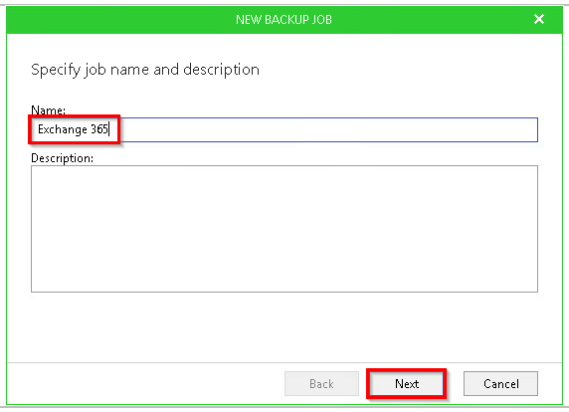
When Veeam Backup for Office 365 open, you immediately will the prompted to install a Licence. Press **Yes** to open The License Information screen.

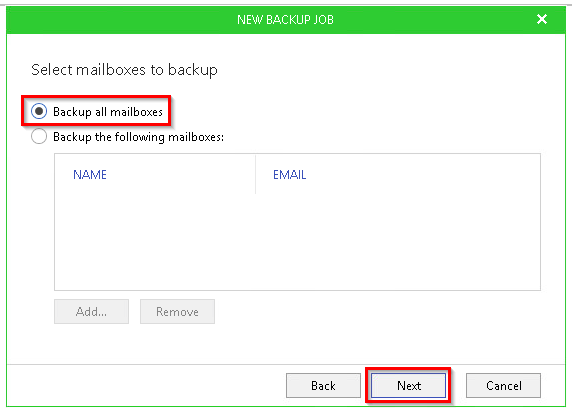
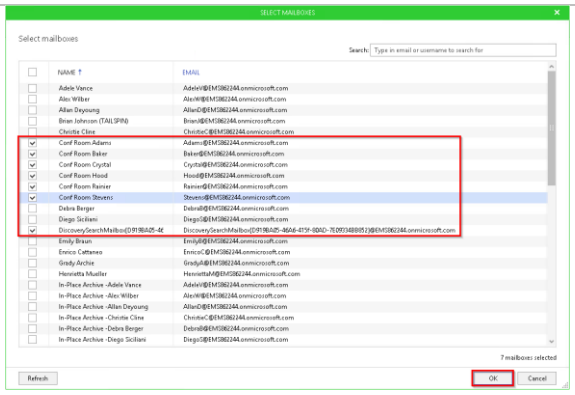
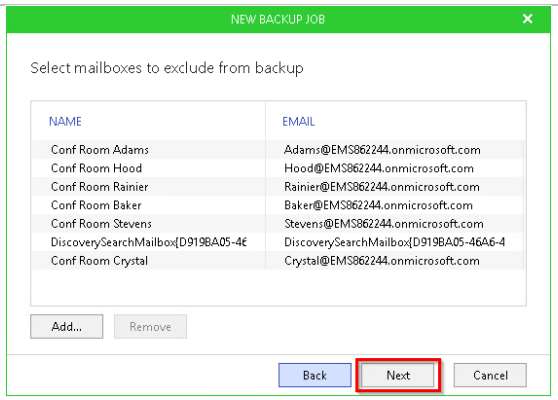
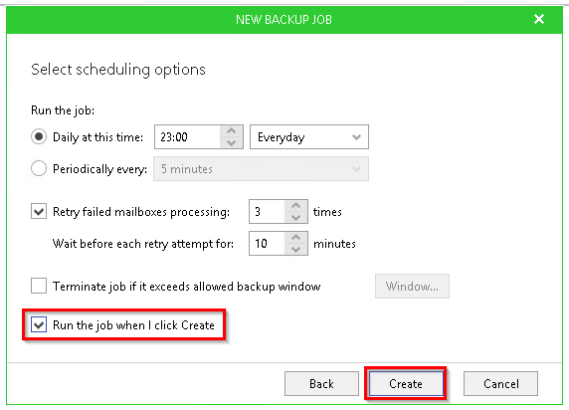


Press **Install…** and browse to D:\
Select the Veeam Trial Lisence and click **Open.**



Licence information will be loaded. Once you have verified that the license is correct, press **Close.** *Note: You will get a prompt you that the Licence will expire soon. Acknowledge the prompt.*	
From the **Organizations** view, click **Add Org**	
Make sure that the **Microsoft Office 365** radio button is selected and press **Next**	

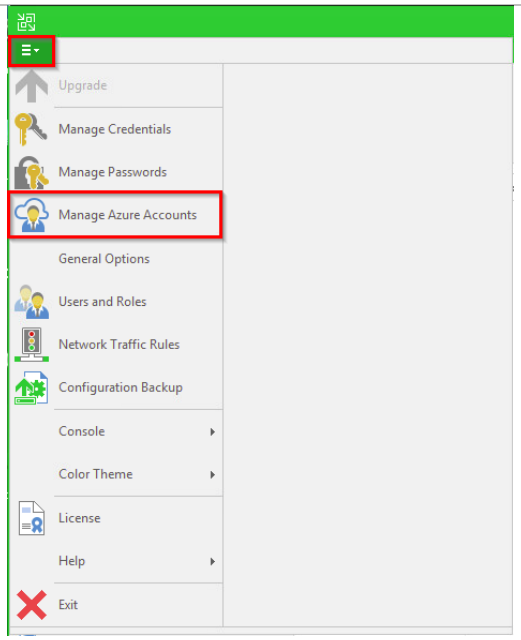
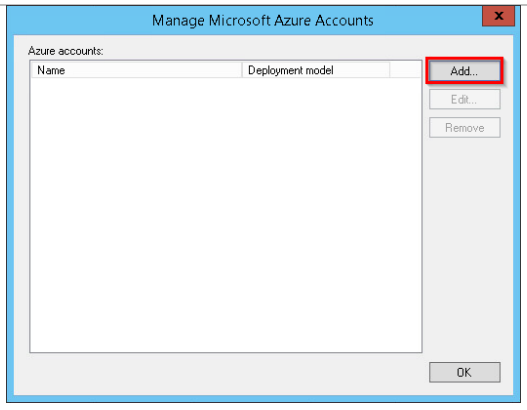
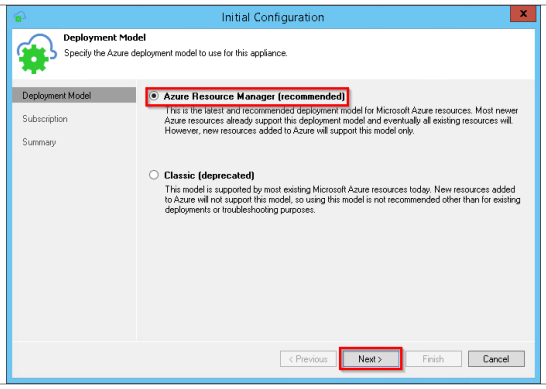
Add connection details of the Office 365 tenant. Region: **Default** ***Username & Password are provided by Copaco***	
Veeam Backup for Office 365 will finalize the setup by checking the connection and parameters.	
	
	

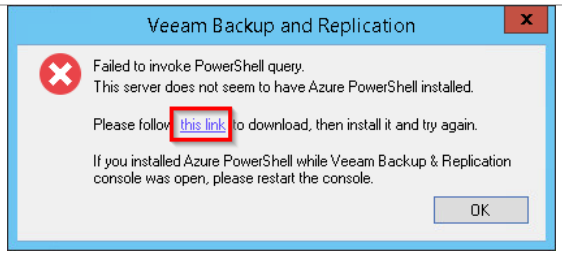
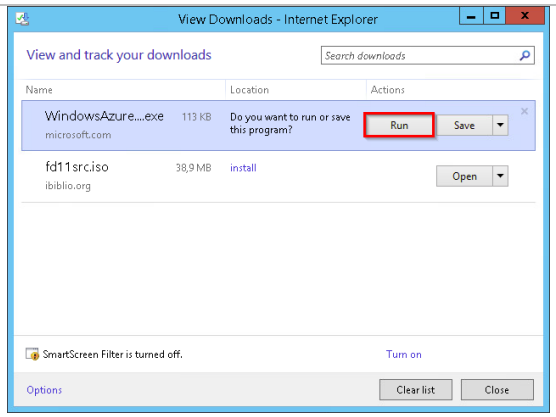
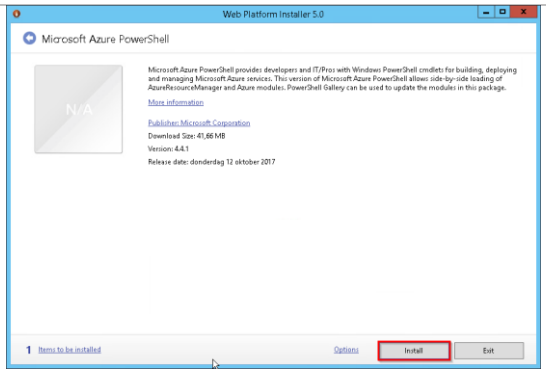
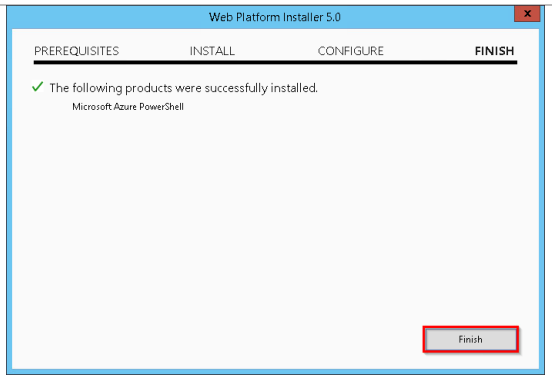
	
DiscoverySearchMailbox All Conf Rooms	
	
Click **Next**	
	

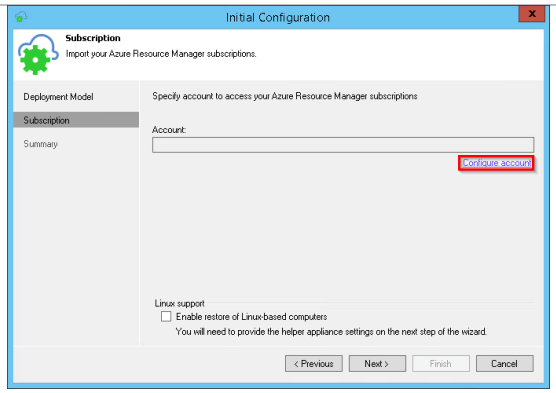
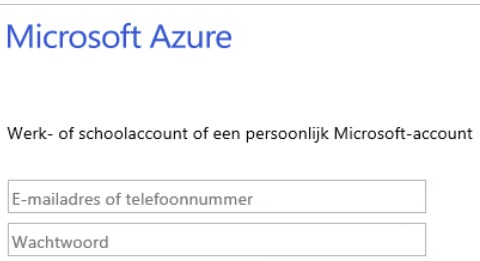
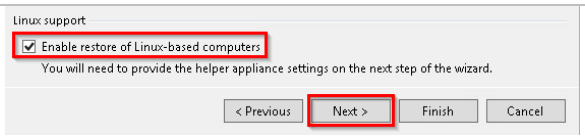
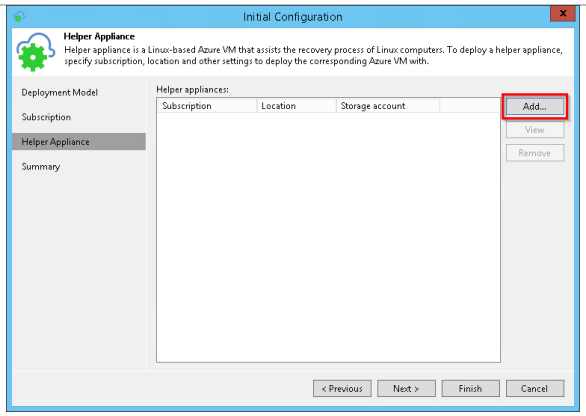
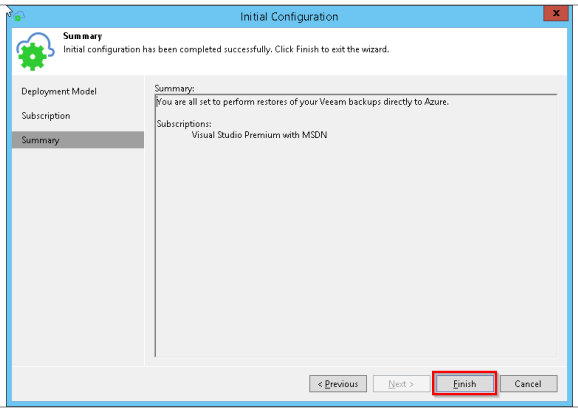
The Backup Job for Exchange 365 will now backup all Mailboxes to the Local Repository.
Do note that Veeam will detect if a User Mailbox has a proper License installed and will give a warning when you backup a User Mailbox without License.

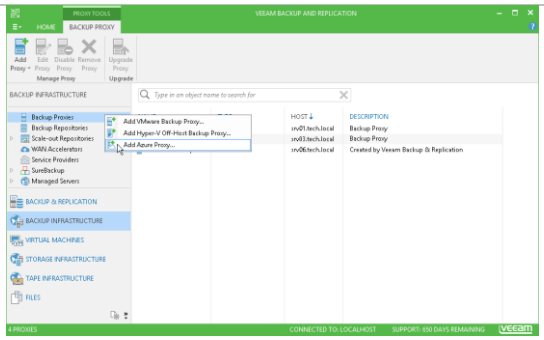
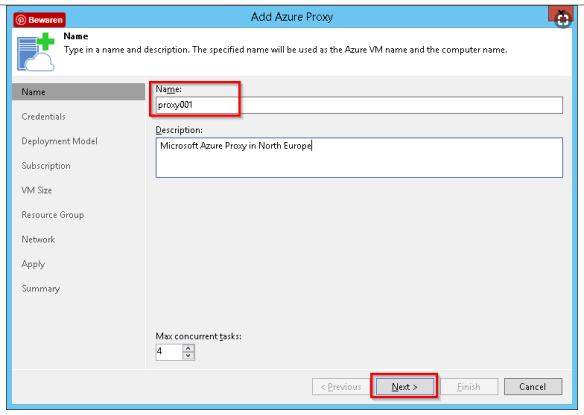
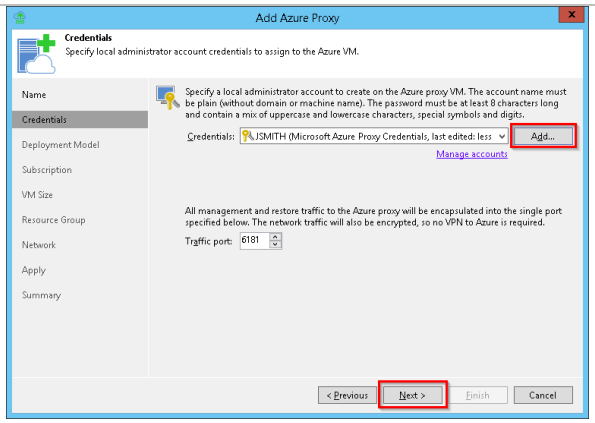
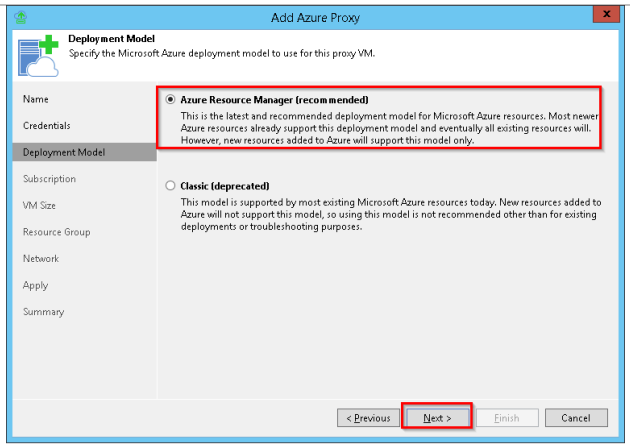
While the Backup runs, feel free to continue to the next Exercise

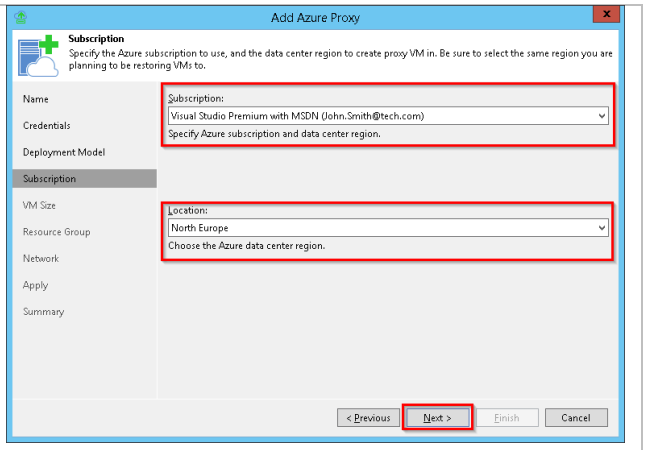
Exercise 4: Prepare Azure

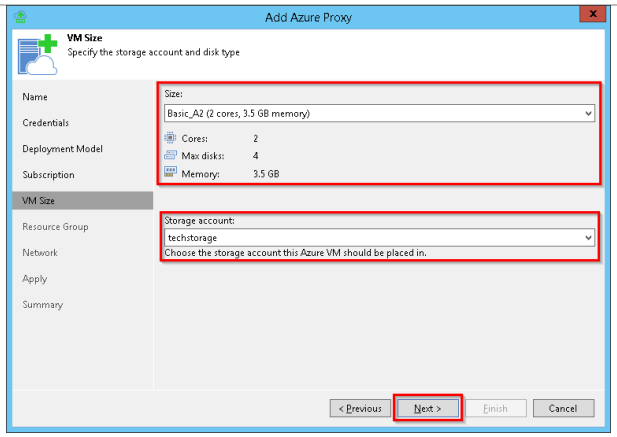
Log into https://portal.azure.com using the credentials you have made with the Azure Pass, provided by Copaco.	
Create a **Resource group, storage account** and **virtual network** to use with Veeam.	
From the **desktop**, launch Veeam Backup & Recovery	
Click on the **Menu** in the **top left** corner	
Click **Add…**	
Choose **Recourse Manager** and click **Next**	

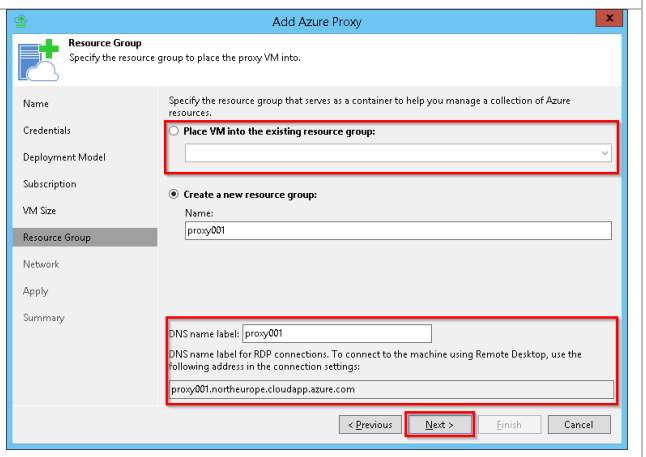
Veeam will now check for the **Azure Powershell** and will detect is it not installed. Click on the **Link** provided to download and start the installer	
Click **run** to start the Installer.	
Web Platform Installer 5.0 Press **Next** and accept the EULA when prompted.	
Click **Finish**	
Restart Veeam-VBR console and repeat the first steps	

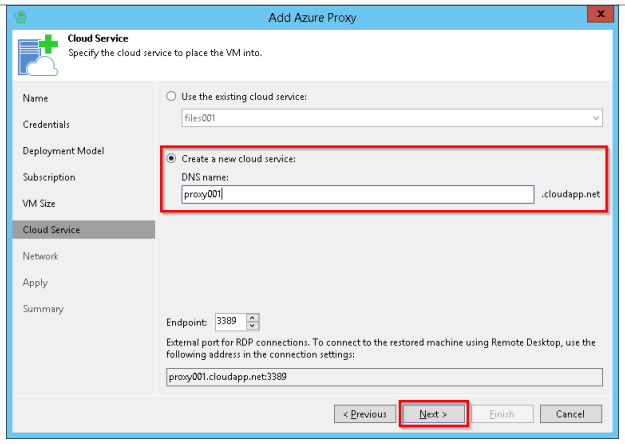
Configure Account	
Enter Azure Subscription Credentials as created earlier today with your Azure Pass provided by Copaco	
To make sure that we can restore Linux VMs enable the option *Enable restore of Linux-based computers* and click **Next**	
Click **Add…**	
Select your **Subscription**, **storage account** and **Virtual Network** to use with **the Veeam Helper Appliance**	
Click FInish	

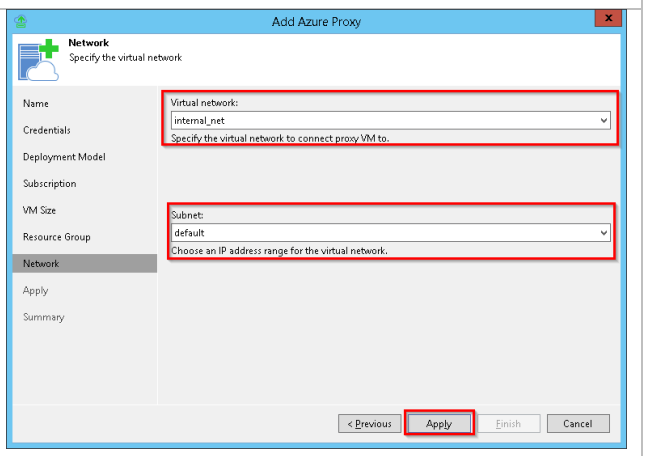
Change to the **Backup Infrastructure** View **Right click** on the **Backup Proxy** and select **Add Azure Proxy …**	
	
Click **Add…** to Create a **Local administrator account** and **password** for the Azure Proxy You cannot use reserved names such as *'administrator', 'admin', 'user', 'abc@123', 'P@$$w0rd' and so on as a user name and password of the local administrator account.*	
	


Add Azure Proxy
Subscription
Specify the Azure subscription to use, and the data center region to create proxy VM in. Be sure to select the same region you are planning to be restoring VMs to.
Name
Credentials
Deployment Model
Subscription
VM Size
Resource Group
Network
Apply
Summary
Subscription:
Visual Studio Premium with MSDN (John.Smith@tech.com)
Specify Azure subscription and data center region.
Location:
North Europe
Choose the Azure data center region.
< Previous
Next >
Finish
Cancel


Add Azure Proxy
VM Size
Specify the storage account and disk type
Name
Credentials
Deployment Model
Subscription
VM Size
Resource Group
Network
Apply
Summary
Size:
Basic_A2 (2 cores, 3.5 GB memory)
Cores: 2
Max disks: 4
Memory: 3.5 GB
Storage account:
techstorage
Choose the storage account this Azure VM should be placed in.
< Previous
Next >
Finish
Cancel

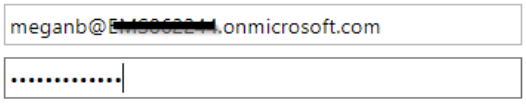
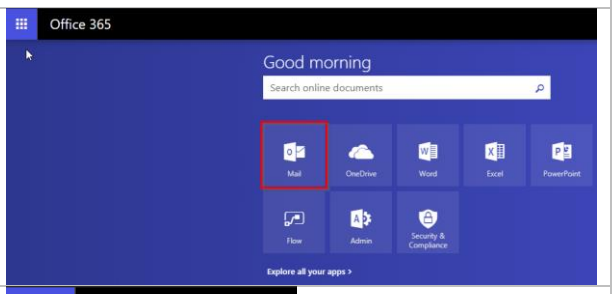
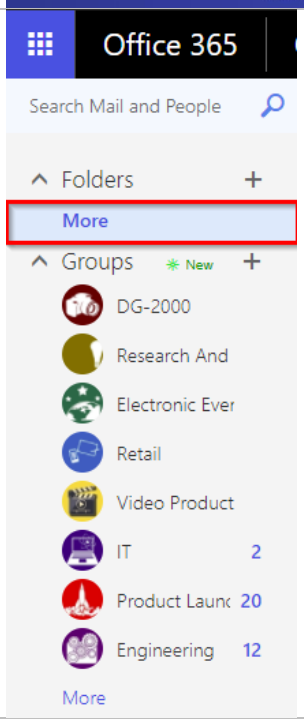

Add Azure Proxy
Resource Group
Specify the resource group to place the proxy VM into.
Name
Credentials
Deployment Model
Subscription
VM Size
Resource Group
Network
Apply
Summary
Specify the resource group that serves as a container to help you manage a collection of Azure resources.
Place VM into the existing resource group:
Create a new resource group:
Name:
proxy001
DNS name label: proxy001
DNS name label for RDP connections. To connect to the machine using Remote Desktop, use the following address in the connection settings:
proxy001.northeurope.cloudapp.azure.com
< Previous
Next >
Finish
Cancel

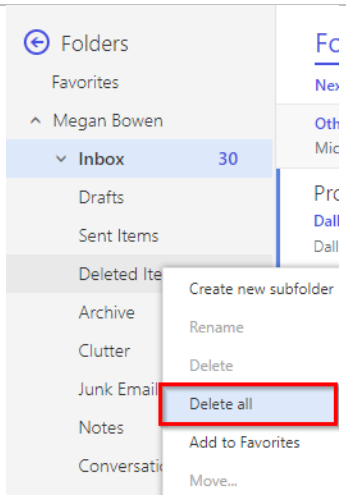
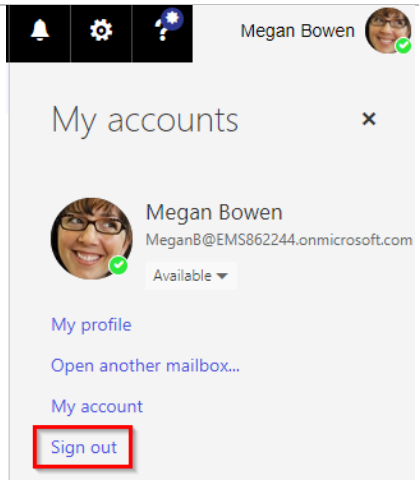


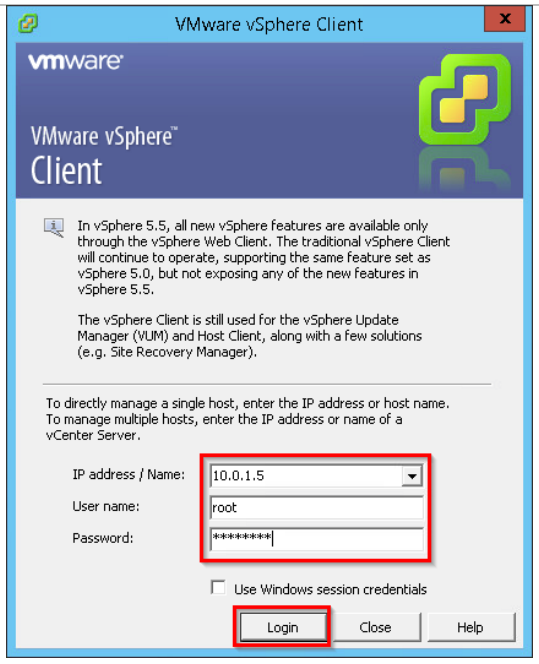


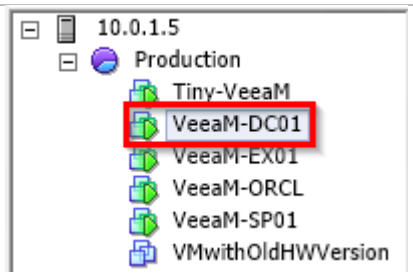
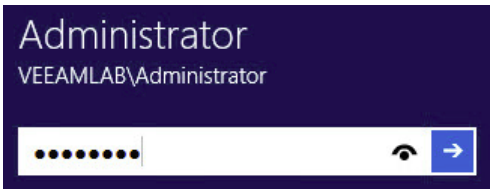
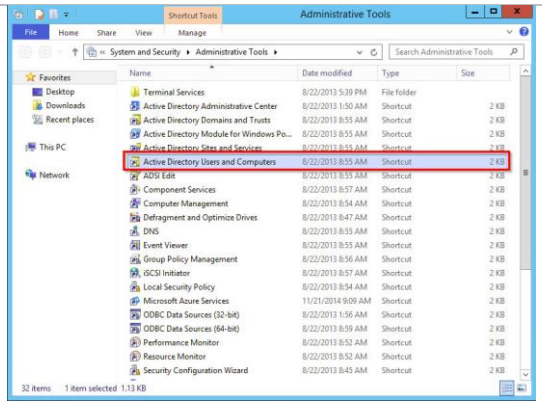
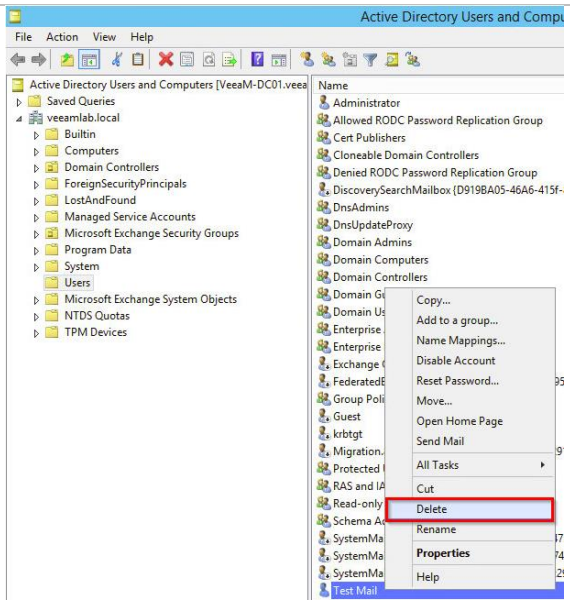
Click **Finish**

Exercise 5: Delete Information

Open a **browser window** and open https://portal.office.com. Log into your **Office 365** environment with the credentials. Username: MeganB@XXXXX.onmicrosoft.com Password: *See Documentation*	
Click on **Mail**	
The **Outlook Web Application** will be opened in your browser. Click on **More,** this will display the Folder structure.	

Delete 1 or more random Emails from the **Inbox** and **empty the Deleted Items folder**	
Logout by navigating to the upper right corner, click on **Megan Bowen** and then **Sign out.**	

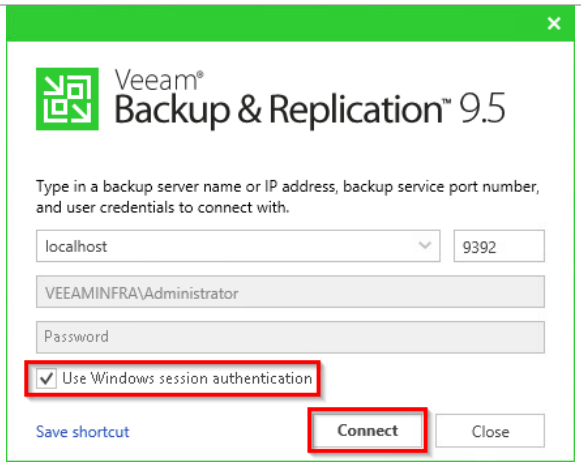
From the **Desktop** launch the **VMware vSphere Client.** Login into the ESXi Host with the following credentials: IP Adress: **10.0.1.5** Username: **root** Password: **Pa$$w0rd**	

Inside the vSphere Client, expand the *Production* resource pool, select the **Veeam-DC01** and open a console session	
Log into the **Veeam-DC01** with the following credentials: Username: **veeamlab\administrator** Password: **Pa$$w0rd** *If you get any messages, acknowledge those*	
Select the **Administrative Tools** from the **Start Menu** and open **Active Directory Users and computers**	
From **Active Directory Users and computers** scroll down. **Select** the user **Test Mail** and **delete** this user	
Close the **Active Directory Users and computers** window. The Console session to Veeam-DC01 does not have to be closed.	

Exercise 6: Restore

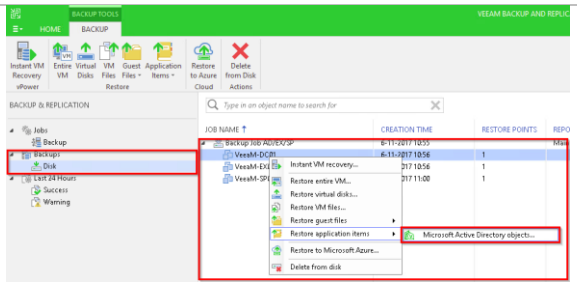
User Account Item restore into AD

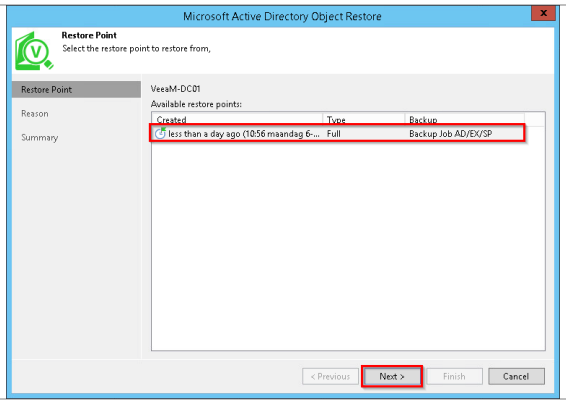
From the Desktop launch the **Veeam Backup & Replication Console. Enable** the option to **Use windows session authentication** and click **Connect**.



In the **Backup & Replication** view; expand **Backups** and then expand **Disk.**

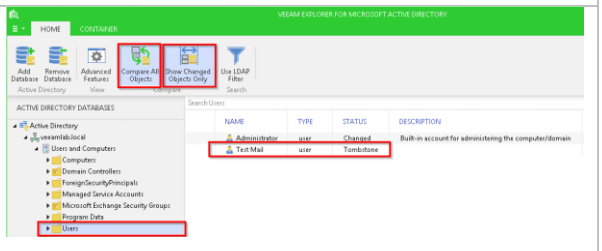
The Backup Jobs which we have in a repositoryand restore points

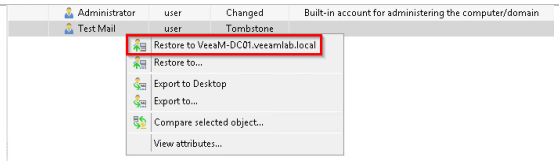
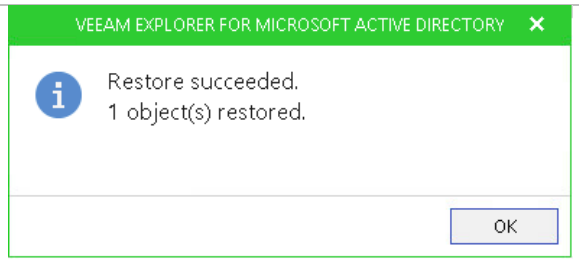




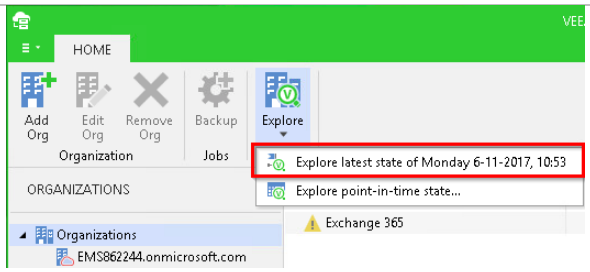
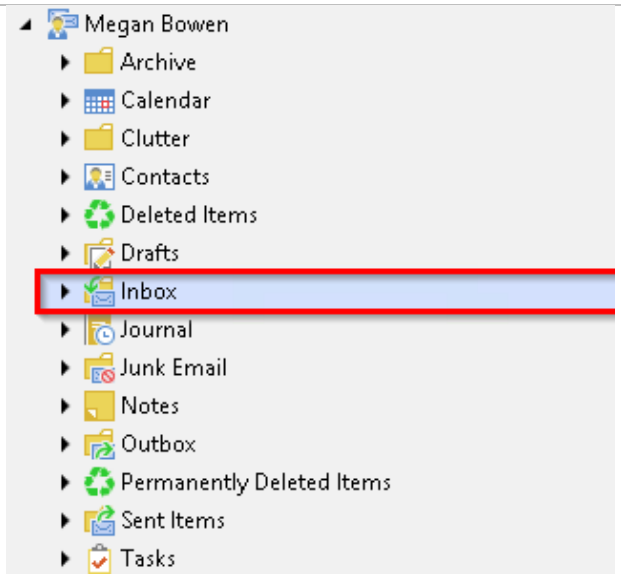
Click **Next,** then **finish**
The **Veeam Explorer for Active Directory** will now open the Restore Point and mount the AD Database

In the top **Ribbon** of the **Veeam Explorer for Active Directory** select both **Compare all Objects** and **Show Changed Objects only**. Then browse to the **Users** container within the **Veeamlab.local** Active Directory and **select** the **Test Mail** user account.

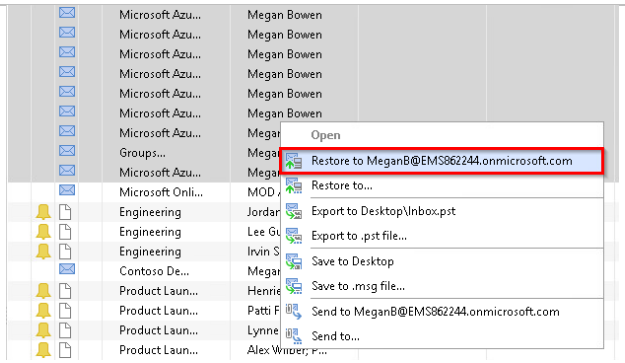


Right click the **Test User** and select ***Restore to Veeam-DC01.veeamlab.local***	
When the **restore** is **completed successfully**, **verify** the restore inside the **Veeam-DC01**. *Verification of the restore can be done using the steps on page 19 and 20 of this manual*	

Email to Office 365

Launch **Veeam Backup for Microsoft Office 365** from the Desktop.	
Click on **Explore** and then **Explore latest state …**	
The **backup Mail database** will now be mounted.	
Expand the Exchange Datastore and browse to the user **Megan Bowen** or use **search** to locate the user. **Select Megan Bowen** and open her **inbox** folder.	

Select the email which you would like to **restore.** Right click and select *Restore to MeganB@XXX.onmicrosoft.com*



Since this is a test environment and we have not set specific right to the Admin Account we are using, we need to enter the username and password of the corresponding user.

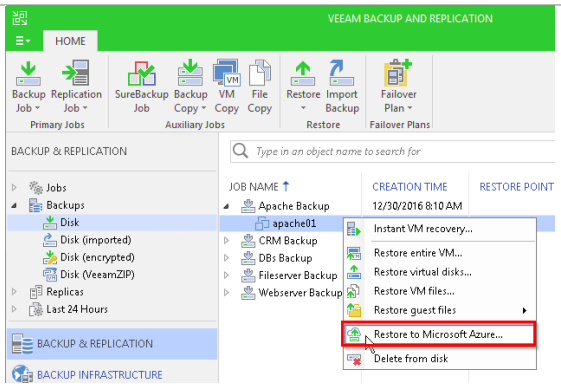
Username: *MeganB@XXX.onmicrosoft.com*
Password: `b-sivand@5625`

Once the restore is completed, verify the restore by logging into Office 365 as described on page 18 and 19

Notice that only lost emails are restored into Exchange. Emails which are still inside the mailbox will be skipped.

Direct Restore to Azure

Restoring a Virtual Machine into Azure



Here I could create a lot more screenshots and guide you through the restore process of a VM into Azure. To experience the ease of a restoring using **Veeam Backup & Replication** and **Microsoft Azure**