

# Module 3: Using Cloud Manager to Deploy Cloud Volumes ONTAP

## Exercise 1: Deploy Cloud Manager for Cloud Volumes ONTAP

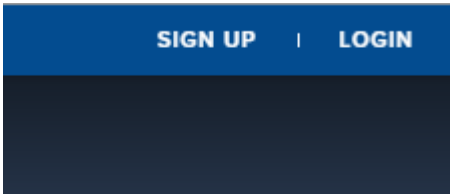
In this exercise, you use NetApp Cloud Central (cloud.netapp.com) to deploy and configure Cloud Manager.

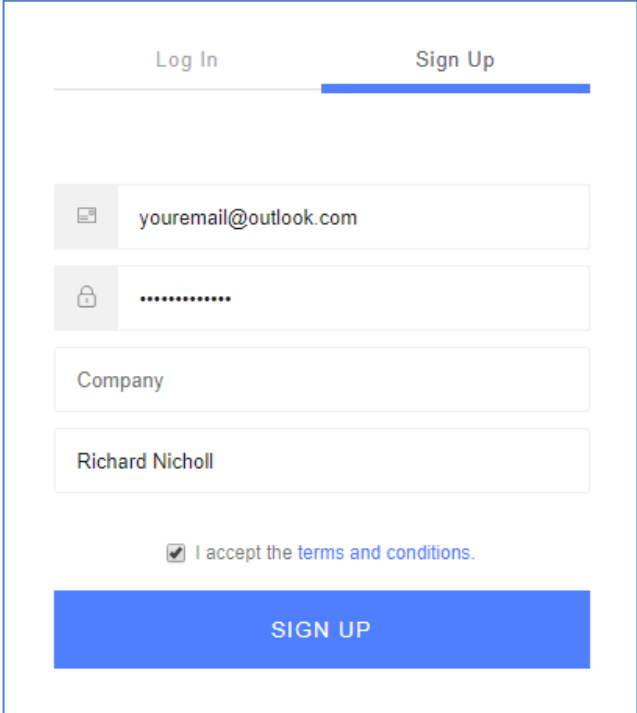

### Objectives

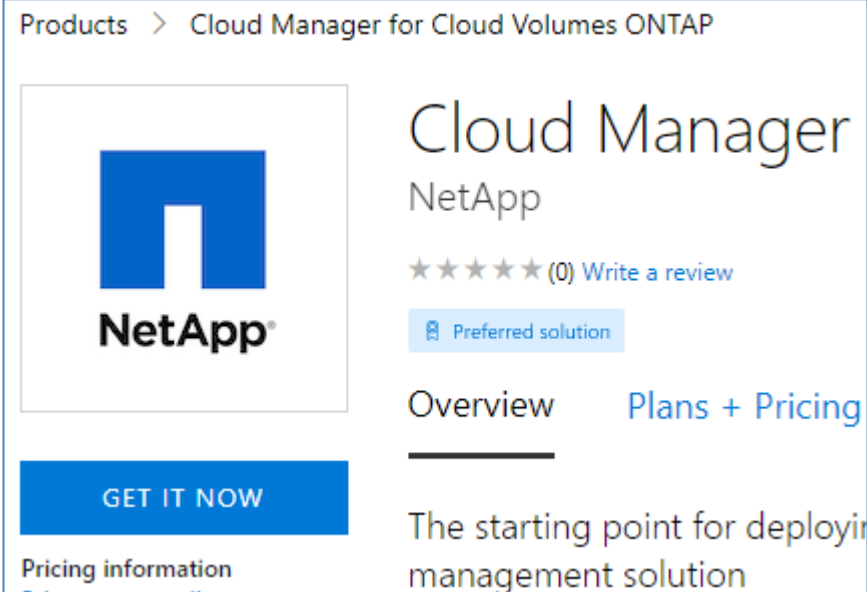
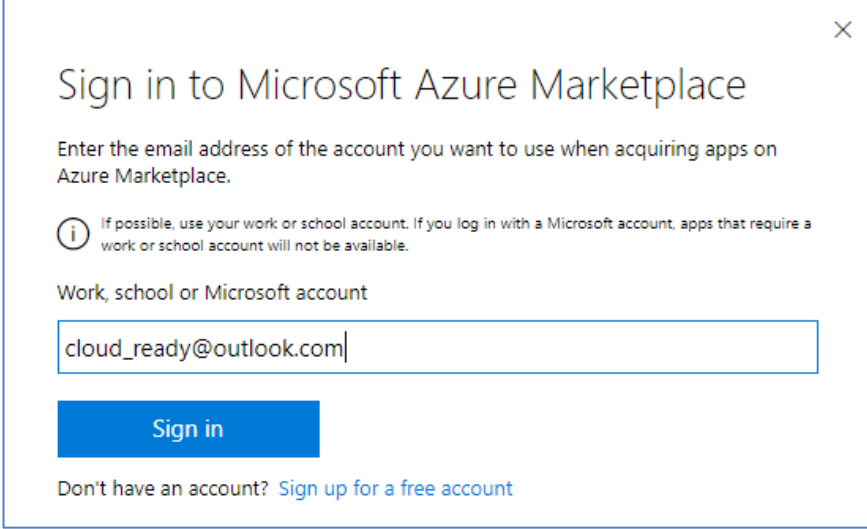
This exercise focuses on enabling you to do the following:

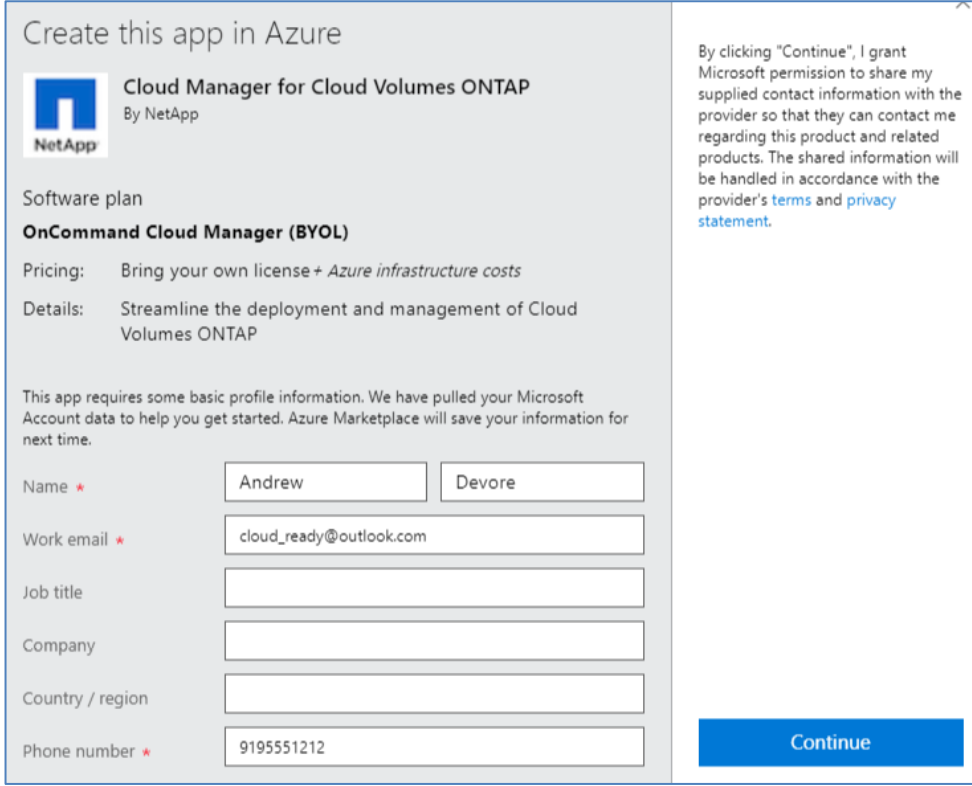
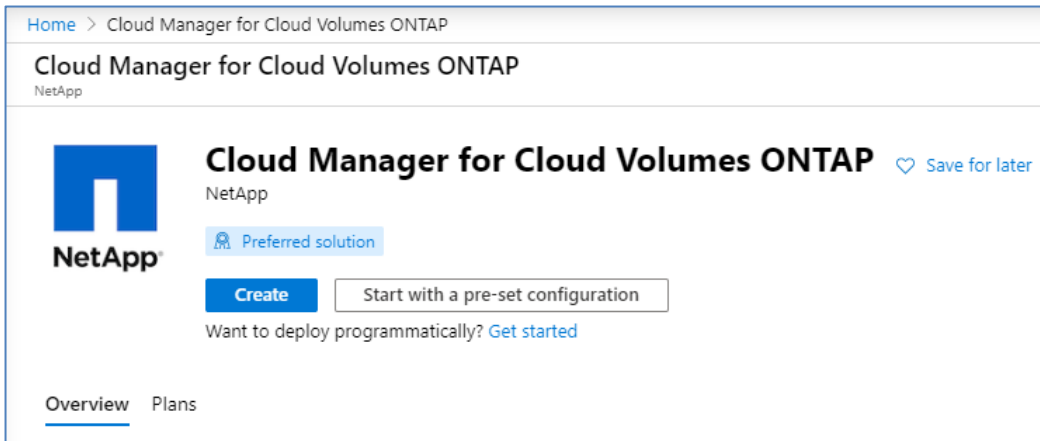
- Install and configure Cloud Manager

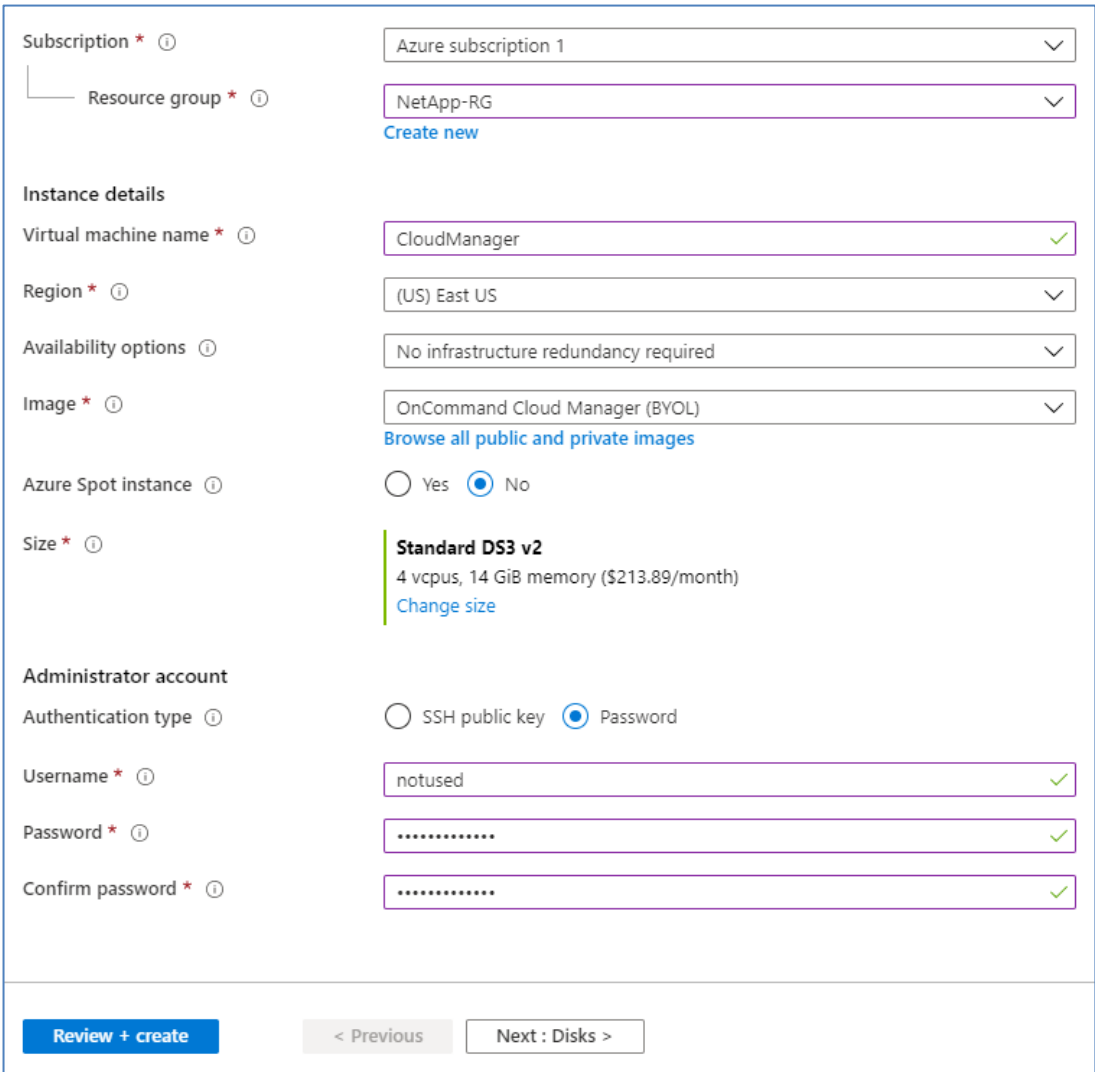
### Task 1: Install and Configure Cloud Manager

Step	Action
1-1	In a web browser, enter the URL <b>https://cloud.netapp.com/</b> .
1-2	<p>In the top-right corner of the page, click <b>SIGN UP</b>. (top right)</p> <p>Note: Even if you already have an account, it is best to create one for this training class by using your @outlook.com email.</p>  A screenshot of the NetApp Cloud Central web interface. It shows a dark blue header bar with the text "SIGN UP" and "LOGIN" separated by a vertical line. Below the header is a dark blue rectangular area, likely a placeholder for a logo or additional navigation links.

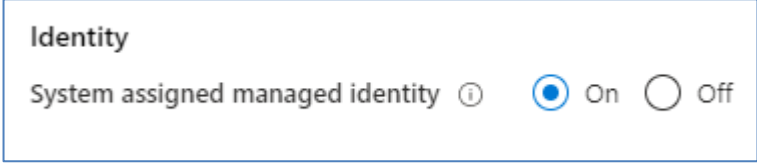
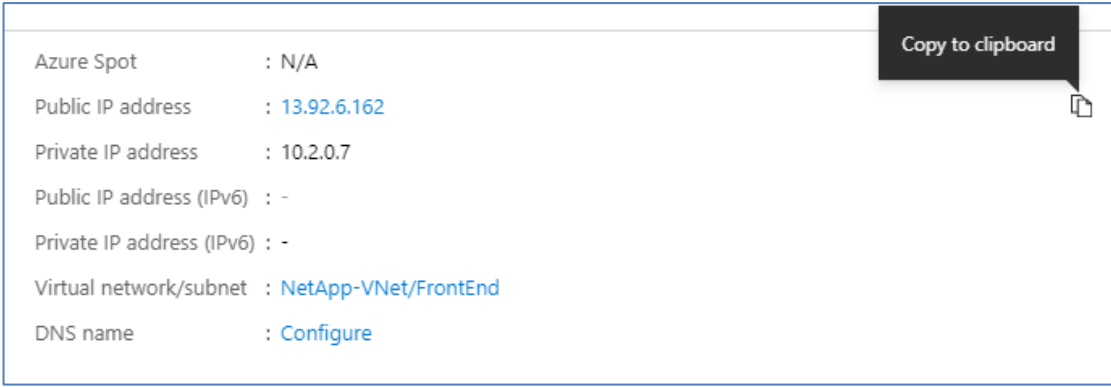
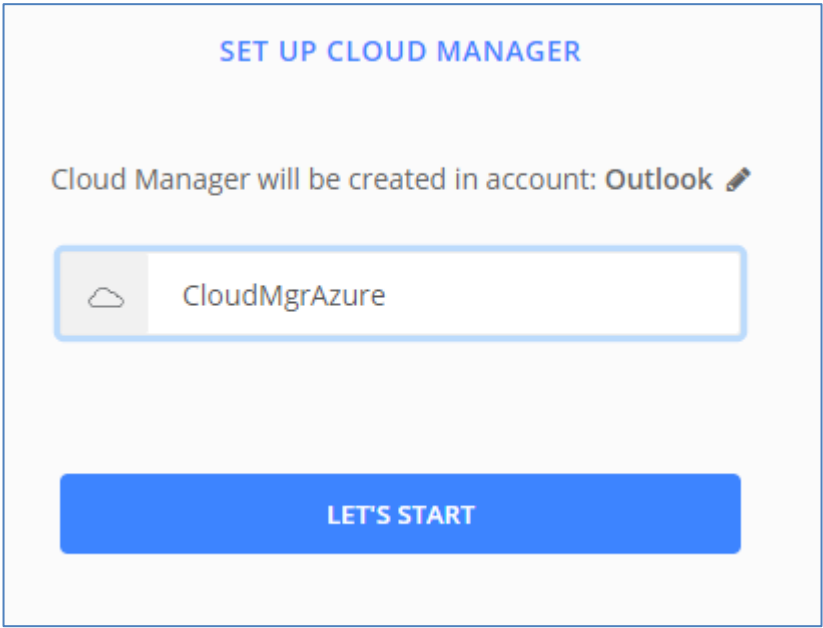
Step	Action
1-3	<p>Enter the email address that you used to create your Azure account, enter the password <b>HappyCloud123</b>, enter your company name and your name, and click <b>SIGN UP</b>.</p> <p>Note: You can create your own password, but you are responsible for remembering it.</p> 
1-4	Click <b>Fabric View</b> , unless already redirected.
1-5	 <p>Normally, you would deploy Cloud Manager from here, but currently with the NetApp Cloud Central method of launching Cloud Manager there are Azure limitations that prevent using personal Azure accounts to deploy from Cloud Central, therefore for this class you will deploy directly from the Azure Marketplace.</p>
1-6	Open a new browser tab and enter the following URL: <a href="http://azuremarketplace.microsoft.com">http://azuremarketplace.microsoft.com</a>
1-7	In the search bar, enter <b>Cloud Manager</b> then select <b>Cloud Manager for Cloud Volumes ONTAP</b> .

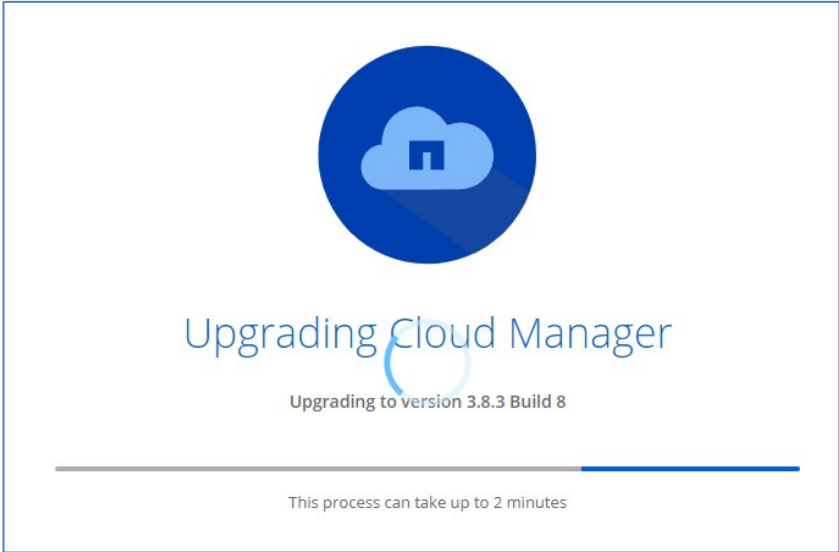
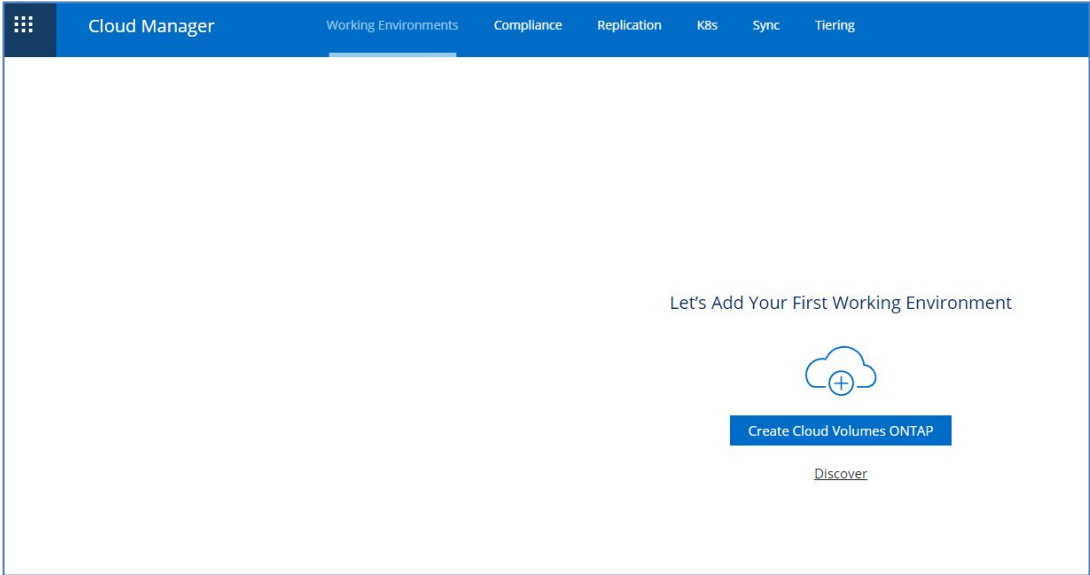
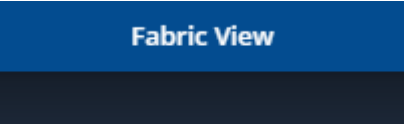
Step	Action
1-8	<p>On the Microsoft Azure Marketplace page, click <b>GET IT NOW</b>.</p> 
1-9	<p>In the Sign into Microsoft Azure Marketplace, enter your email address that you created for this course.</p> 

Step	Action
1-10	<p>In the Create this app in Azure, fill out the required information and click <b>Continue</b>.</p> 
1-11	<p>You are redirected to the Azure portal Cloud Manager page. Login and click <b>Create</b>.</p> 



Step	Action
1-12	<p>Under the Basics blade (pane), do the following:</p> <ol style="list-style-type: none"> <li>For the Subscription, select your subscription.</li> <li>For the Resource group, click the drop-down and select <b>NetApp-RG</b>.</li> <li>For the Virtual Machine name, enter <b>CloudManager</b>.</li> <li>For the region, select <b>(US) East</b>.</li> <li>For the Image, the default should be <b>OnCommand Cloud Manager (BYOL)</b>.</li> <li>For the Size, click Change size and select <b>DS3_v2</b>.</li> <li>For the Authentication type, select <b>Password</b>.</li> <li>For the Username, enter <b>notused</b>.</li> <li>For the Password and Confirm password, enter <b>HappyCloud123</b>.</li> <li>Click <b>Next: Disks</b></li> </ol> 
1-13	<p>Under the Disks page under OS disk type, choose <b>Standard HDD</b>, then click <b>Next: Networking</b>.</p>

Step	Action
1-14	<p>Under Networking, do the following:</p> <ol style="list-style-type: none"> <li>For the Virtual network, select <b>NetApp-VNet</b>.</li> <li>For the Subnet, select <b>FrontEnd (10.2.0.0/24)</b>.</li> <li>For the Public IP, click <b>Create New</b>.</li> <li>Under the Create public IP address, leave the default name and SKU, for Assignment, select <b>Static</b>.</li> <li>Click <b>OK</b>.</li> <li>For the Configure network security group, click <b>(new) CloudManager-nsg</b>.</li> <li>Click <b>Next: Management</b>.</li> </ol> <div data-bbox="300 575 1352 1713"> <p><b>Network interface</b></p> <p>When creating a virtual machine, a network interface will be created for you.</p> <p>Virtual network * ⓘ <span>NetApp-VNet</span> <span>▼</span>  <a href="#">Create new</a></p> <p>Subnet * ⓘ <span>FrontEnd (10.2.0.0/24)</span> <span>▼</span>  <a href="#">Manage subnet configuration</a></p> <p>Public IP ⓘ <span>(new) CloudManager-ip</span> <span>▼</span>  <a href="#">Create new</a></p> <p>NIC network security group ⓘ <input type="radio"/> None <input type="radio"/> Basic <input checked="" type="radio"/> Advanced</p> <div> <p><b>i</b> This VM image has preconfigured NSG rules</p> <p><b>i</b> The selected subnet 'FrontEnd (10.2.0.0/24)' is already associated to a network security group 'FrontEnd_NSG'. We recommend managing connectivity to this virtual machine via the existing network security group instead of creating a new one here.</p> </div> <p>Configure network security group * <span>(new) CloudManager-nsg</span> <span>▼</span>  <a href="#">Create new</a></p> <p>Accelerated networking ⓘ <input type="radio"/> On <input checked="" type="radio"/> Off  The selected image does not support accelerated networking.</p> <p><b>Load balancing</b></p> <p>You can place this virtual machine in the backend pool of an existing Azure load balancing solution. <a href="#">Learn more</a></p> <p>Place this virtual machine behind an existing load balancing solution? <input type="radio"/> Yes <input checked="" type="radio"/> No</p> <div> <span>Review + create</span> <span>&lt; Previous</span> <span>Next : Management &gt;</span> </div> </div>

Step	Action
1-15	<p>Under Management, enable System assigned managed identity by selecting <b>On</b>.</p> 
1-16	Click <b>Review + create</b> .
1-17	After Validation passes, click <b>Create</b> .
1-18	In the top toolbar, click the <b>Notification</b> bell, wait for the deployment to finish (approximately five minutes), and then click <b>Go to resource</b> .
1-19	<p>In the Virtual Machine blade, copy the Public IP address</p> 
1-20	Open a new browser tab and enter <b>http://&lt;copied IP address&gt;</b> .
1-21	<p>In the Welcome to Cloud Manager page, enter <b>CloudMgrAzure</b>.</p> 

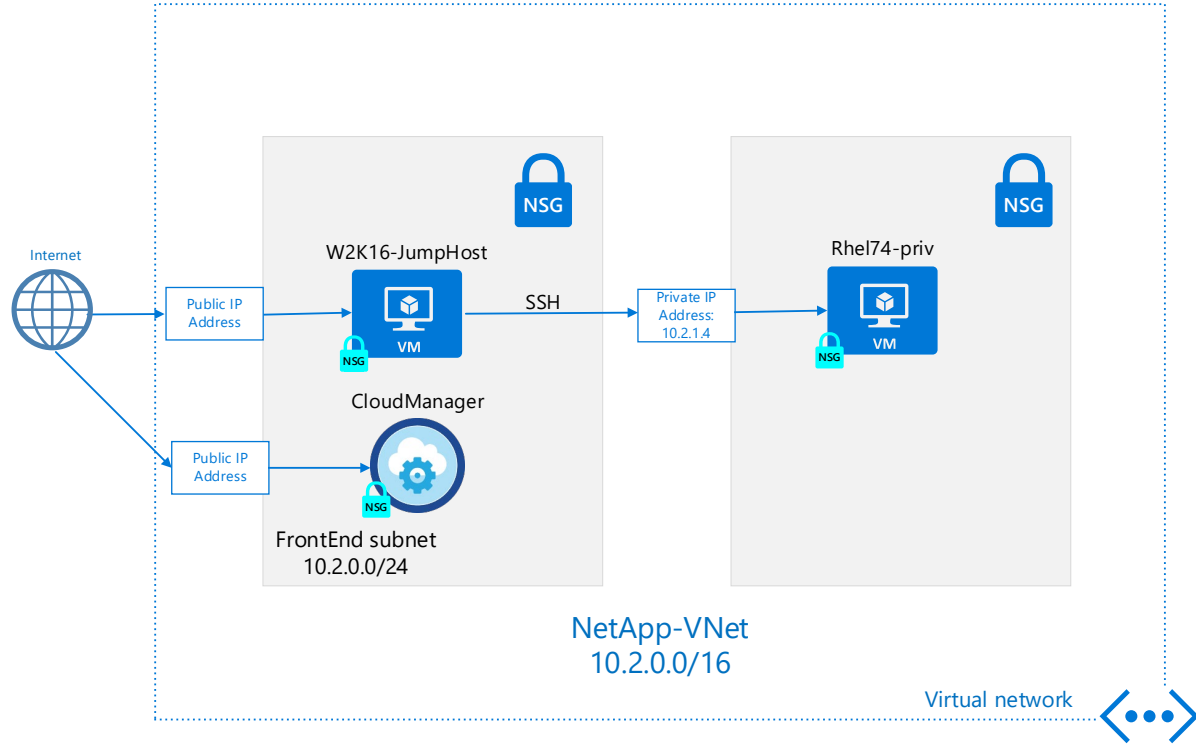
Step	Action
1-22	Click <b>LET'S START</b> .
1-23	<p>If you receive an Upgrading Cloud Manager message, wait for the upgrade to finish.</p> 
1-24	<p>Verify that you see the Working Environments page.</p> 
1-25	<p>Return to the cloud.netapp.com page, click <b>Fabric View</b>. (top right of the page)</p> 



Step	Action				
1-26	<p>Click <b>View Cloud Managers</b>.</p> <div data-bbox="300 197 1050 378">  <div> <p><b>Cloud Volumes ONTAP</b></p> <p><a href="#">View Cloud Managers</a></p> </div> </div>				
1-27	<p>Verify you see CloudMgrAzure in the list.</p> <div data-bbox="300 462 1175 768"> <p><b>Account Name: Outlook</b></p> <div>  <table> <tr> <td><b>Name:</b></td><td><b>Address:</b></td></tr> <tr> <td>CloudMgrAzure</td><td>http://13.92.94.159</td></tr> </table> </div> </div>	<b>Name:</b>	<b>Address:</b>	CloudMgrAzure	http://13.92.94.159
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CloudMgrAzure	http://13.92.94.159				

# Azure Diagram

The figure shows the configuration of the Azure network after you complete Task 1: Install and Configure Cloud Manager.



**End of Exercise**