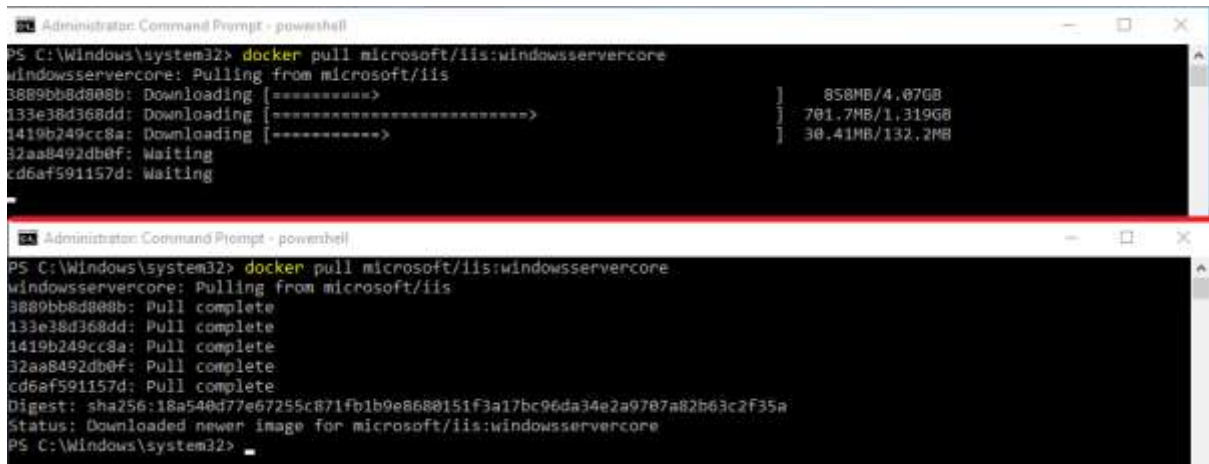


Containers

• Create and Prepare Containers

1. [Create a VM that supports Containers](#)
2. Connect to the VM.
3. Open a command prompt with admin permissions
4. Run this command on Command Prompt

docker pull microsoft/iis:windowsservercore



```
Administrator: Command Prompt - powershell
PS C:\Windows\system32> docker pull microsoft/iis:windowsservercore
windowsservercore: Pulling from microsoft/iis
3889bb8d808b: Downloading [----->] 858MB/4.07GB
133e38d368dd: Downloading [----->] 701.7MB/1.319GB
1419b249cc8a: Downloading [----->] 30.41MB/132.2MB
32aa8492db0f: Waiting
cd6af591157d: Waiting

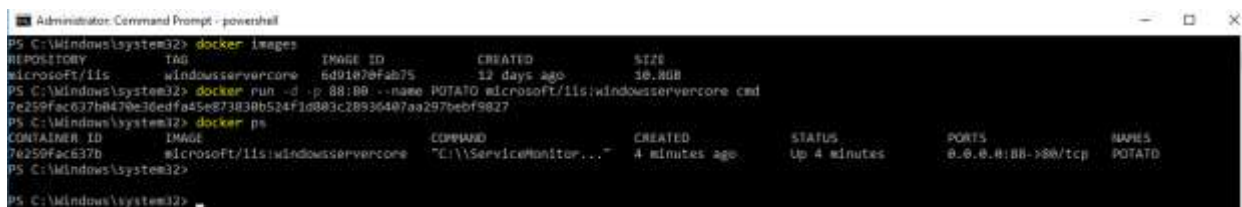
Administrator: Command Prompt - powershell
PS C:\Windows\system32> docker pull microsoft/iis:windowsservercore
windowsservercore: Pulling from microsoft/iis
3889bb8d808b: Pull complete
133e38d368dd: Pull complete
1419b249cc8a: Pull complete
32aa8492db0f: Pull complete
cd6af591157d: Pull complete
Digest: sha256:18a540d77e67255c871fb1b9e8680151f3a17bc96da34e2a9707a82b63c2f35a
Status: Downloaded newer image for microsoft/iis:windowsservercore
PS C:\Windows\system32>
```

• Start Images

1. Run the following command to see docker images
2. To create a docker app run the following command

Docker images

***docker run -d -p 88:80 --name <AnyName>
microsoft/iis:windowsservercore***



```
Administrator: Command Prompt - powershell
PS C:\Windows\system32> docker images
REPOSITORY          TAG                 IMAGE ID            CREATED             SIZE
microsoft/iis       windowsservercore  6d91070fab75       12 days ago        30.8GB
PS C:\Windows\system32> docker run -d -p 88:80 --name POTATO microsoft/iis:windowsservercore cmd
7e259fac637b0470e30edfa45e873030b524f1d803c28936407aa2970e0f9827
PS C:\Windows\system32> docker ps
CONTAINER ID        IMAGE               COMMAND             CREATED             STATUS             PORTS              NAMES
7e259fac637b       microsoft/iis:windowsservercore  "C:\Windows\Serv...  4 minutes ago      Up 4 minutes      0.0.0.0:80->80/tcp  POTATO
PS C:\Windows\system32>
```

• Manage Content

1. For accessing Potato command line type
2. To create an index html file with a simple content, type

docker exec -it Potato powershell

***echo "<html><body><h1>88 POTATO POTATO POTATO
88</h1></body></html>" > "c:\inetpub\wwwroot\index.html"***



```
Administrator: Command Prompt - powershell
PS C:\> hostname
7e259fac637b
PS C:\> ipconfig

Windows IP Configuration

Ethernet adapter vEthernet (Container NIC 5aebf462):

   Connection-specific DNS Suffix  . : m2vy2fh3z52ennpdx24b5yr22d.ix.internal.cloudapp.net
   Link-local IPv6 Address . . . . . : fe80::d1b7:75ad:1657:862b%41
   IPv4 Address. . . . . : 172.24.97.244
   Subnet Mask . . . . . : 255.255.240.0
   Default Gateway . . . . . : 172.24.96.1
PS C:\> echo "<html><body><h1>88 POTATO POTATO POTATO 88</h1></body></html>" > "c:\inetpub\wwwroot\index.html"
PS C:\>
```

3. Check for the web page content



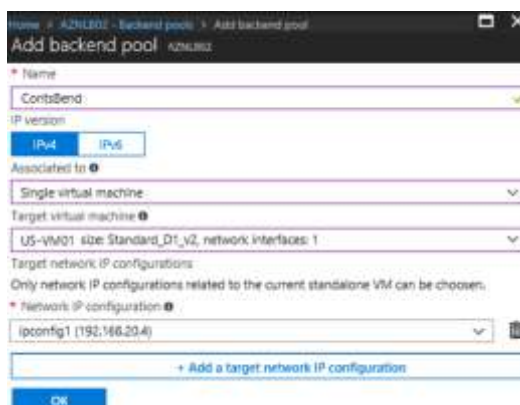
• Create an NLB with a public Ip to share the app

1. New > Networking > Load Balancer>
 - a. Name **AZNLB02**
 - b. Type **Public**
 - c. Public Ip static, **AZNLB02-Pip**
 - d. Resource Group, Existing **EUSVMs**
 - e. Location **East US**



• Configure NLB

1. Navigate to Back End Pools
2. Click Add
 - a. Name **ContsBEnd**
 - b. Associate to **Single Virtual Machine**
 - c. Choose the EUS-VM01
 - d. Choose the ip address



- **Add inbound NAT Rule**

- Name **88-80**
- FrontEnd Ip Address **LoadBalancer Frontend**
- Service **HTTP**
- Protocol **TCP**
- Port **80**
- Associated to *Single Virtual Machine*
- Target Virtual Machine **EUS-VM01**
- Network IP Configuration *Private ip address of EUS-VM01*
- Port Mapping **Custom**
- Floating IP **Disabled**
- Target Port **88**

Home > AZURE - Inbound NAT rules > Add inbound NAT rule

Add inbound NAT rule

AZURE

* Name
80-80 ✓

Frontend IP address
LoadBalancerFrontEnd (20.168.111.7) ✓

IP Version
IPv4

Service
HTTP

Protocol
TCP UDP

* Port
80 ✓

Associated to
Single virtual machine

Target virtual machine
US-VM01
size: Standard_D1_v2, network interfaces: 1

Network IP configuration
ipconfig1 (192.168.20.4)

Port mapping
Default **Custom**

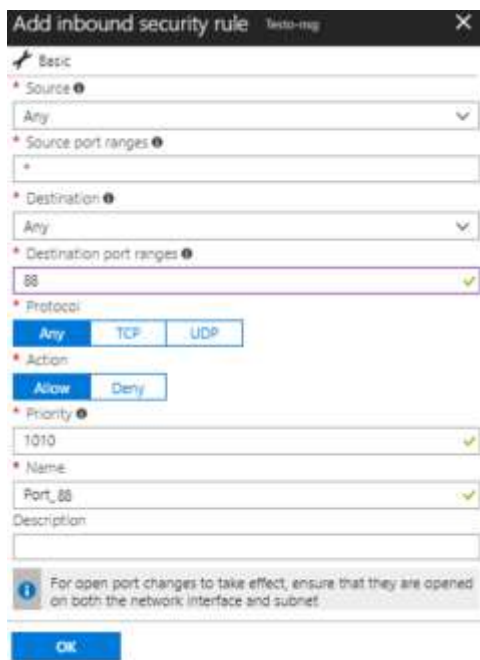
Floating IP (direct server return)
Disabled Enabled

* Target port
88 ✓

OK

- **Open an inbound port from outside**

- Source **Any**
- Source Port Ranges *
- Destination **Any**
- Destination Port Ranges **88**
- Protocol **Any**
- Action **Allow**
- Priority **1010**



- Access via IIS Manager

1. Open a command prompt with admin permissions
2. Run **PowerShell** to turn that window into a *PowerShell prompt*
3. Run the following command to access to Docker image PowerShell command line
docker exec -it Potato powershell
4. Run the following command to install Web Service Management tools
Install-WindowsFeature -Name Web-Mgmt-Service
5. Run the following command to configure registry settings of the Docker image
New-ItemProperty -Path HKLM:\SOFTWARE\Microsoft\WebManagement\Server -Name EnableRemoteManagement -Value 1 -Force
6. Run the following command to start the service
Get-Service -Name WMSVC | Start-Service
7. Run the following command to add a user and assign a password to that user
net user <your UserName Here> <Password here> /ADD
8. Run the following command to assign admin permissions to the user you created
net localgroup administrators <user on the previous line> / ADD
9. Run ipconfig to get the Docker image ip Address. Copy ip address
10. Open IIS manager. Right click and connect to another server
11. Paste the container ip address and click Next
12. Provide the user name and password you created on step 7 and click Next
13. Click YES for the Certificate prompt
14. Confirm the ip address and click Next

C:\> Administrator: Command Prompt - powershell

```
Microsoft Windows [Version 10.0.14393]
(c) 2016 Microsoft Corporation. All rights reserved.

C:\Windows\system32>powershell
Windows PowerShell
Copyright (C) 2016 Microsoft Corporation. All rights reserved.

PS C:\Windows\system32> docker exec -it POTATO powershell_
```

```

Administrator Command Prompt - powershell
PS C:\> Install-WindowsFeature -Name Web-Mgmt-Service

Success Restart Needed Exit Code      Feature Result
-----
True     No             Success      {ASP.NET 4.6, Management Service, Manageme...

PS C:\> hostname
7e259fac637b
PS C:\> New-ItemProperty -Path HKLM:\SOFTWARE\Microsoft\WebManagement\Server -Name EnableRemoteManagement -Value 1 -Force
EnableRemoteManagement : 1
PSPath                  : Microsoft.PowerShell.Core\Registry::HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\WebManagement\Server
PSChildName              : Server
PSDrive                  : HKLM
PS C:\> Get-Service -Name WMSVC | Start-Service
PS C:\> net user cem 1q2w3e4r5t6y* /ADD
The command completed successfully.
PS C:\> net localgroup administrators cem /add
The command completed successfully.
PS C:\> ipconfig
Windows IP Configuration

Ethernet adapter vEthernet (Container NIC Saebf462):

    Connection-specific DNS Suffix  . : m2vy2fh3z52ennpdx24b5yr22d.ix.internal.cloudapp.net
    Link-local IPv6 Address . . . . . : fe80::d1b7:75ad:1657:862b%41
    IPv4 Address. . . . . : 172.24.97.244
    Subnet Mask . . . . . : 255.255.240.0
    Default Gateway . . . . . : 172.24.96.1
PS C:\>

```

Internet Information Services (IIS) Manager

