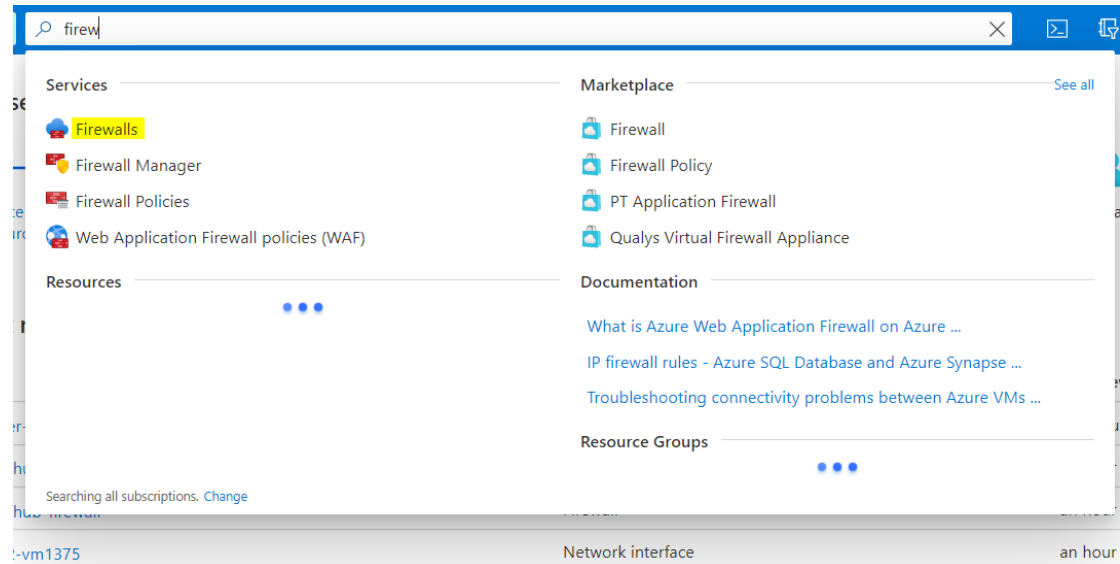


CREATING FIREWALL

Goto -> Search -> Firewall -> Create

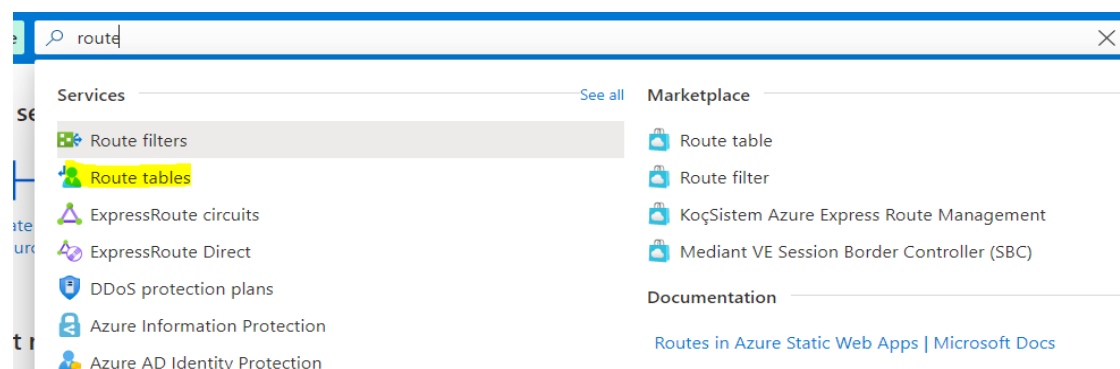


- Resource group : Rg1
- Name : rg1-firewall
- Region : East US
- Virtual network name : Vnet-firewall
- Address space : 10.1.0.0/16
- Subnet address space : AzureFirewallSubnet
- Subnet address space : 10.1.1.0/24
- Public IP address : Create new

REST ALL LEAVE AS DEFAULTS AND CLICK REVIEW & CREATE.

CONFIGURING ROUTE TABLE

Goto -> Search -> Route Table -> Add



- Resource group : Rg1
- Region : East US
- Name : rg1-routetable

REST ALL LEAVE AS DEFAULTS AND CLICK REVIEW & CREATE.

After creating route table,

Goto -> Routes -> Add

- Route name : Rg1-firewall-routetable
- Address prefix : 0.0.0.0/0
- Next hop type : Virtual network appliance
- Next hop address : Firewall public IP address

Home > Route tables > rg1-route1

rg1-route1 | Routes

Route table

+ Add

Search routes	
Name	Address prefix
rg1-firewall1	0.0.0.0/0

Overview

Activity log

Access control (IAM)

Tags

Diagnose and solve problems

Settings

Configuration

Routes

Subnets

Home > Route tables > rg1-route1 >

Add route

rg1-route1

Route name *

Address prefix * ⓘ

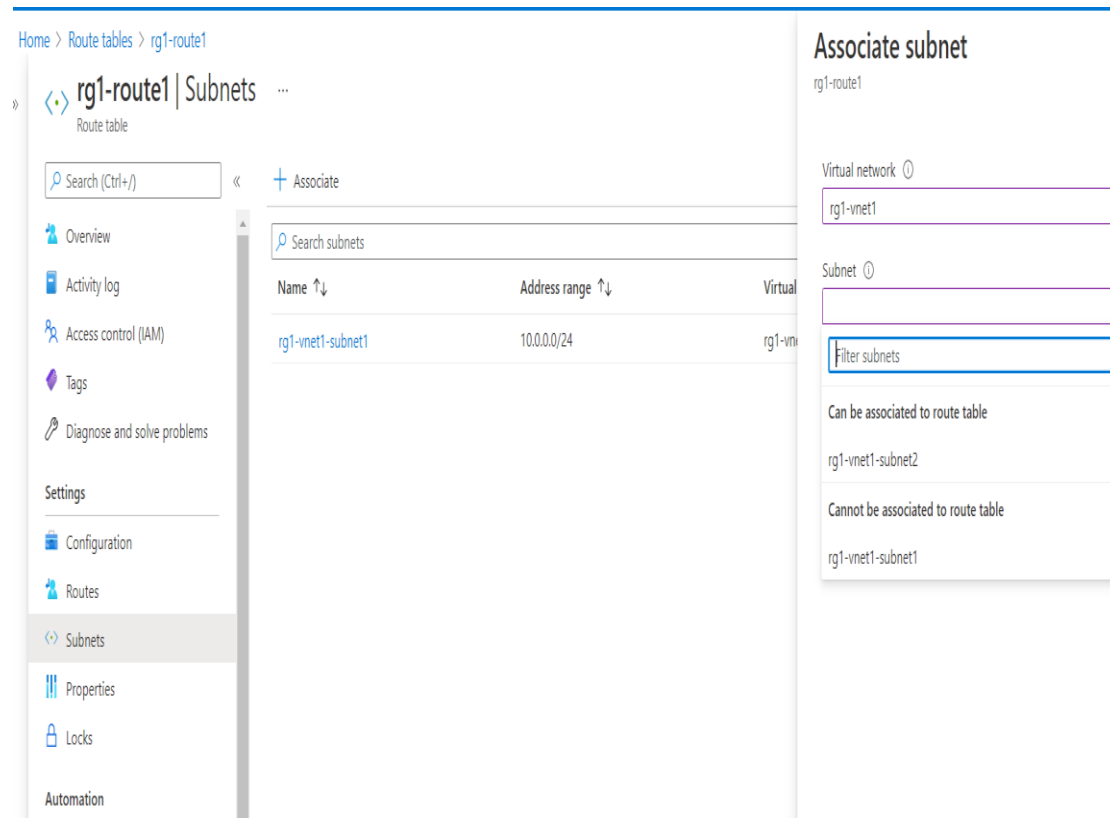
Next hop type ⓘ

Virtual appliance

Next hop address * ⓘ

i Ensure you have IP forwarding enabled on your virtual appliance. You can enable this by navigating to the respective network interface's IP address settings.

Goto -> Subnets -> Associate -> Rg1-vnet1 -> Rg1-vnet1-subnet1 -> Save



CONFIGURING FIREWALL

Goto -> Rules in Firewall Pane -> + Add NAT Rules Collection

Name : natrule

Priority : 100

➤ RULE 1

Name : allowssh

Protocol : TCP

Source type : IP address

Source : *

Destination Address : 52.191.216.245 (Firewall public IP address)

Destination Ports : 22

Translated address : 10.0.0.4 (VM private IP address)

Translated port : 22

➤ RULE 2

Name : allowrdp

Protocol : TCP

Source type : IP address

Source : *

Destination Address : 52.191.216.245 (Firewall public IP address)

Destination Ports : 3389

Translated address : 10.0.0.4 (VM private IP address)

Translated port : 3389

[Home](#) > [Firewalls](#) > [vnet-hub-firewall](#) >

Edit NAT rule collection ...

X

Name natrule

Priority * 100

Action Destination Network Address Translation (DNAT)

Rules

name	Protocol	Source type	Source	Destination Addresses	Destination Ports	Translated address	Translated port	
allowssh	TCP	IP address	*	52.191.216.245	22	10.0.0.4	22	**
allowrdp	TCP	IP address	*	52.191.216.245	3389	10.0.0.4	3389	**
<input type="text"/>	0 selected	IP address	*, 192.168.10.1, 192.168.1...	192.168.10.0	8080	192.168.10.0	8080	

Goto -> Application Rule Collection -> + Add Application Rule Collection

Name : apprule

Priority : 100

Action : Allow

Target FQDNs

➤ RULE 1

Name : allow1

Source type : IP address

Source : *

Protocol:Port : 80,443

Target FQDNs : www.facebook.com

➤ RULE 2

Name : allow1

Source type : IP address

Source : *

Protocol:Port : 80,443

Target FQDNs : www.google.com

[Home](#) > [Firewalls](#) > [vnet-hub-firewall](#) >

Edit application rule collection ...

Name

Priority *

Action *

Rules

FQDN tags

name	Source type	Source	FQDN tags
<input type="text"/>	<input type="text" value="IP address"/>	<input type="text" value="*, 192.168.10.1, 192.168.10.0/24, 192.168.10.2 - 192.168.10.254"/>	<input type="text" value="0 selected"/>

i FQDN tags may require additional configuration. [Learn more.](#)

Target FQDNs

name	Source type	Source	Protocol:Port	Target FQDNs
allow	IP address	*	Http80,Https443	www.facebook.com
allow2	IP address	*	Http80,Https443	www.google.com
<input type="text"/>	<input type="text" value="IP address"/>	<input type="text" value="*, 192.168.10.1, 192.168.10.0/24, 192.168.10.254"/>	<input type="text" value="http, http8080, https, mssql:1433"/>	<input type="text" value="www.microsoft.com, *.microsoft.com"/>

TESTING FIREWALL

Log into azuser-mgmt1 (VM) using firewall public IP address.

ssh <Username>@52.191.216.245 (firewall public IP address)

wget www.facebook.com

wget www.google.com

wget www.amazon.com

Websites allowed through firewall will show as connected saving to : 'index.html'. Websites not allowed through firewall will throw error code as ERROR 470: status code 470.

```
azureuser-mgmt1@az-user-mgmt1: ~
```

```
azureuser-mgmt1@az-user-mgmt1: $ azureuser-mgmt1@az-user-mgmt1: $ wget www.facebook.com
```

```
URL transformed to HTTPS due to an HSTS policy
```

```
--2021-02-02 13:18:03-- https://www.facebook.com/
```

```
Resolving www.facebook.com (www.facebook.com)... 157.240.18.35, 2a03:2880:f127:283:face:b00c:0:25de
```

```
Connecting to www.facebook.com (www.facebook.com)|157.240.18.35|:443... connected.
```

```
HTTP request sent, awaiting response... 302 Found
```

```
Location: https://www.facebook.com/unsupportedbrowser [following]
```

```
--2021-02-02 13:18:03-- https://www.facebook.com/unsupportedbrowser
```

```
Reusing existing connection to www.facebook.com:443.
```

```
HTTP request sent, awaiting response... 200 OK
```

```
Length: unspecified [text/html]
```

```
Saving to: 'index.html.4'
```

```
index.html.4 [ <=> ] 211.62K --.-KB/s in 0.09s
```

```
2021-02-02 13:18:03 (2.39 MB/s) - 'index.html.4' saved [216700]
```

```
azureuser-mgmt1@az-user-mgmt1: $ wget www.google.com
```

```
--2021-02-02 13:18:21-- http://www.google.com/
```

```
Resolving www.google.com (www.google.com)... 142.250.31.103, 142.250.31.105, 142.250.31.99, ...
```

```
Connecting to www.google.com (www.google.com)|142.250.31.103|:80... connected.
```

```
HTTP request sent, awaiting response... 200 OK
```

```
Length: unspecified [text/html]
```

```
Saving to: 'index.html.5'
```

```
index.html.5 [ <=> ] 13.47K --.-KB/s in 0s
```

```
2021-02-02 13:18:21 (90.4 MB/s) - 'index.html.5' saved [13796]
```

```
azureuser-mgmt1@az-user-mgmt1: $ wget www.amazon.com
```

```
--2021-02-02 13:18:47-- http://www.amazon.com/
```

```
Resolving www.amazon.com (www.amazon.com)... 13.32.149.10
```

```
Connecting to www.amazon.com (www.amazon.com)|13.32.149.10|:80... connected.
```

```
HTTP request sent, awaiting response... 470 status code 470
```

```
2021-02-02 13:18:47 ERROR 470: status code 470.
```

```
azureuser-mgmt1@az-user-mgmt1: $
```