# Control routing and use virtual appliances (classic) using PowerShell

This article covers the classic deployment model. You can also [ENTER ACTION FOR ARM HERE](/documentation/articles/armToken).

The sample Azure CLI commands below expect a simple environment already created based on the scenario above. If you want to run the commands as they are displayed in this document, create the environment shown in [create a VNet (classic) using PowerShell](/documentation/articles/virtual-networks-create-vnet-classic-ps).

## Create the UDR for the front end subnet

To create the route table and route needed for the front end subnet based on the scenario above, follow the steps below.

1. Run the **New-AzureRouteTable** cmdlet to create a route table for the front end subnet.

* ```powershell  
  New-AzureRouteTable -Name UDR-FrontEnd `  
   -Location uswest `  
   -Label "Route table for front end subnet"  
  ```
* Output:
* Name Location Label   
  ---- -------- -----   
  UDR-FrontEnd China North Route table for front end subnet

1. Run the **Set-AzureRoute** cmdlet to create a route in the route table created above to send all traffic destined to the back end subnet (192.168.2.0/24) to the **FW1** VM (192.168.0.4).

* ```powershell  
  Get-AzureRouteTable UDR-FrontEnd `  
   |Set-AzureRoute -RouteName RouteToBackEnd -AddressPrefix 192.168.2.0/24 `  
   -NextHopType VirtualAppliance `  
   -NextHopIpAddress 192.168.0.4  
  ```
* Output:
* Name : UDR-FrontEnd  
  Location : China North  
  Label : Route table for frontend subnet  
  Routes :   
   Name Address Prefix Next hop type Next hop IP address  
   ---- -------------- ------------- -------------------  
   RouteToBackEnd 192.168.2.0/24 VirtualAppliance 192.168.0.4

1. Run the **Set-AzureSubnetRouteTable** cmdlet to associate the route table created above with the **FrontEnd** subnet.

* ```powershell  
  Set-AzureSubnetRouteTable -VirtualNetworkName TestVNet `  
   -SubnetName FrontEnd `  
   -RouteTableName UDR-FrontEnd  
  ```

## Create the UDR for the back end subnet

To create the route table and route needed for the back end subnet based on the scenario above, follow the steps below.

1. Run the **New-AzureRouteTable** cmdlet to create a route table for the back end subnet.

* ```powershell  
  New-AzureRouteTable -Name UDR-BackEnd `  
   -Location uswest `  
   -Label "Route table for back end subnet"  
  ```

1. Run the **Set-AzureRoute** cmdlet to create a route in the route table created above to send all traffic destined to the front end subnet (192.168.1.0/24) to the **FW1** VM (192.168.0.4).

* ```powershell  
  Get-AzureRouteTable UDR-BackEnd `  
   |Set-AzureRoute -RouteName RouteToFrontEnd -AddressPrefix 192.168.1.0/24 `  
   -NextHopType VirtualAppliance `  
   -NextHopIpAddress 192.168.0.4  
  ```

1. Run the **Set-AzureSubnetRouteTable** cmdlet to associate the route table created above with the **BackEnd** subnet.

* ```powershell  
  Set-AzureSubnetRouteTable -VirtualNetworkName TestVNet `  
   -SubnetName FrontEnd `  
   -RouteTableName UDR-FrontEnd  
  ```

## Enable IP forwrding on the FW1 VM

* To enable IP forwarding in the FW1 VM, follow the steps below.

1. Run the **Get-AzureIPForwarding** cmdlet to chec the status of IP forwarding

* Get-AzureVM -Name FW1 -ServiceName TestRGFW `  
   | Get-AzureIPForwarding
* Output:
* Disabled

1. Run the **Set-AzureIPForwarding** command to enable IP forwarding for the *FW1* VM.

* Get-AzureVM -Name FW1 -ServiceName TestRGFW `  
   | Set-AzureIPForwarding -Enable