

Elastic Network Interface

Operation Instructions

Product Introduction



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Operation Instructions

View the ENI information

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View the ENI information

- 1) Log in to the [VPC Console](#).
- 2) Click **ENI** in the left sidebar to go to the ENI list page.
- 3) Click the **Instance ID** of an ENI to go to its details page to view its information.

Create an ENI

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- 1) Log in to the [VPC Console](#).
- 2) Click **ENI** in the left sidebar to go to the ENI list page.
- 3) Click **Create** in the upper left corner, and then select the VPC and subnet of the ENI in the pop-up window.
- 4) Select the private IP assigned to the ENI. It can be generated automatically or specified manually.
- 5) Click **OK** to complete the creation.

Bind and configure an ENI (important)

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Step 1: Log in to the [VPC Console](#).

Step 2: Click ENI in the left sidebar to go to the ENI list page.

Step 3: Locate the line of the ENI, and click Bind to CVM in the operation column (only CVMs in the same availability zone as the ENI are supported).

Step 4: Select the CVM to bind to and click OK to complete the binding.

Step 5: Configure the bound ENI in the CVM (important)

Note: After being bound on the console, the ENI needs to be configured in the CVM before it can be used normally. The following is the operation procedure for centos 7.2:

a. Log in to the CVM as an administrator, and execute the following command:

```
cd /etc/sysconfig/network-scripts/
```

b. Create the configuration file ifcfg-eth1 for the new ENI:

Enter the command:

```
cp ifcfg-eth0 ifcfg-eth1
```

Enter the command to modify the configuration file:

```
vim ifcfg-eth1
```

Modify the configuration file as follows:

```
DEVICE='eth1'
```

```
NM_CONTROLLED='yes'
```

```
ONBOOT='yes'
```

```
IPADDR='192.168.1.62' #Enter the actual address of the ENI
```

```
NETMASK='255.255.255.192' #Enter the actual subnet mask
```

```
GATEWAY='192.168.1.1' #Enter the actual gateway
```

Save the modified configuration file and exit (enter "wq!" in the last line of vim and press Enter).

Step 6: Disable rp_filter check

Disable reverse path filtering in `etc/sysctl.conf`.

Note: Reverse path filter means that when receiving an IP packet from an IP, the system checks whether the source IP is valid and discards the IP packet if the source IP is invalid. For example, an IP packet from IP B is received on ENI A. If ENI A is not the ENI intended for sending data to IP B, this IP packet is discarded. Because the route uses the primary ENI by default, after the reverse path filtering is enabled, the Ping test of the IP on the secondary ENI will fail.

Open the configuration file:

```
vim /etc/sysctl.conf
```

Modify

```
net.ipv4.conf.default.rp_filter = 1
```

to:

```
net.ipv4.conf.default.rp_filter = 0
```

```
net.ipv4.conf.all.rp_filter = 0
```

```
net.ipv4.conf.eth0.rp_filter = 0
```

```
net.ipv4.conf.eth1.rp_filter = 0
```

Step 7: Restart network service

Enter the following command:

```
systemctl restart network
```

Step 8: Check and verify

Enter the following command to check the IP

```
ip addr
```

Verify whether the secondary ENI and the IP on it are visible. Refer to the figure below:

```
[root@VM_1_5_centos ~]# ip addr
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN qlen 1
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
    inet 127.0.0.1/8 scope host lo
        valid_lft forever preferred_lft forever
2: eth0: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc pfifo_fast state UP qlen 1000
    link/ether 52:54:00:ef:70:1a brd ff:ff:ff:ff:ff:ff
    inet 192.168.1.5/26 brd 192.168.1.63 scope global eth0
        valid_lft forever preferred_lft forever
4: eth1: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc pfifo_fast state UP qlen 1000
    link/ether 20:90:6f:da:44:88 brd ff:ff:ff:ff:ff:ff
    inet 192.168.1.62/26 brd 192.168.1.63 scope global eth1
        valid_lft forever preferred_lft forever
```


Delete ENI

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- 1) Log in to the [VPC Console](#).
- 2) Click **ENI** in the left sidebar to go to the ENI list page.
- 3) Locate the line of the ENI and click **Delete** in the operation column.
- 4) Click **OK** to complete the deletion.

Note 1: When the ENI is deleted, its associated private IPs, EIPs and security groups are automatically disassociated.

Note 2: You can only delete ENIs that are not associated with CVMs.

Note 3: The primary ENI is deleted as the CVM is deleted.

Unbind from CVM

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- 1) Log in to the [VPC Console](#).
- 2) Click **ENI** in the left sidebar to go to the ENI list page.
- 3) Locate the line of the ENI and click **Unbind from CVM** in the operation column.
- 4) Click **OK** to unbind the ENI from the CVM.

Tips: After the ENI is unbound, its associated private IPs, EIPs, security groups and other information are retained.

Release private IP

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- 1) Log in to the [VPC Console](#).
- 2) Click **ENI** in the left sidebar to go to the ENI list page.
- 3) Click the **Instance ID** of an ENI to go to its details page to view its information.
- 4) Click **IP Management** tab to check the private IPs and EIPs already bound to the ENI.
- 5) Click **Release** button in the operation column for the line of the private IP.
- 6) Click **OK** to complete the operation.

Note 1: The primary IP of an ENI cannot be released. Only secondary IPs can be released.

Note 2: When the private IP is unbound, the EIP is automatically disassociated.

Unbind an EIP

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- 1) Log in to the [VPC Console](#).
- 2) Click **ENI** in the left sidebar to go to the ENI list page.
- 3) Click the **Instance ID** of an ENI to go to its details page to view its information.
- 4) Click **IP Management** tab to check the private IPs already bound to the ENI.
- 5) Click **Bind** button in the "Bound EIPs" column for the line of the private IP.
- 6) Select to bind an EIP from the **Existing EIPs** list or **New EIP** in the pop-up window.
- 7) Click **OK** to complete the binding.

Unbind an EIP

Last updated : 2018-09-28 11:31:47

- 1) Log in to the [VPC Console](#).
- 2) Click **ENI** in the left sidebar to go to the ENI list page.
- 3) Click the **Instance ID** of an ENI to go to its details page to view its information.
- 4) Click **IP Management** tab to check the private IPs and EIPs already bound to the ENI.
- 5) Click **Unbind** button in the "Bound EIPs" column for the line of the private IP.
- 6) Click **OK** to complete the unbinding.

Modify primary private IP

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- 1) Log in to the [VPC Console](#).
- 2) Click **ENI** in the left sidebar to go to the ENI list page.
- 3) Click the **Instance ID** of an ENI to go to its details page to view its information.
- 4) Click **IP Management** tab to view the primary private IPs already bound to the ENI.
- 5) Click **Modify Primary IP** button in the operation column for the line of the primary private IP.
- 6) Enter the new primary private IP in the pop-up window and click **OK**.

Modify the subnet of ENI

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- 1) Log in to the [VPC Console](#).
- 2) Click **ENI** in the left sidebar to go to the ENI list page.
- 3) Click the **Instance ID** of the ENI to go to its details page.
- 4) In the basic information page of the details page, click **Change** button for the subnet.
- 5) Select the subnet to change to for the ENI and specify a new primary IP.
- 6) Click **Save** to finish the change of subnet.

Note 1: You can only change the subnet of primary ENI.

Note 2: You must unbind all secondary IPs before you can change the subnet of an ENI.

Note 3: The subnet of an ENI can only be changed to another one under the same availability zone.