

# Static Routing

- [ip routing](#)
- [ip route allow](#)
- [ip route reject](#)
- [show ip route](#)
- [show running-config ip route](#)

## ip routing

This command enables the L3 routing mode on 4X. The device will only use route information to transfer DHCP towards Relay Server, full L3 routing is not available in this version.

The negative form of the command sets the default value of the parameter.

### Syntax

```
[no] ip routing
```

### Parameters

The command contains no arguments.

### Command mode

CONFIG

### Example

```
ma4000(config)# ip routing
```

## ip route allow

This command adds a new entry to the RR4X routing table: the route to transfer traffic to the specified subnet.

The negative form of the command removes the entry from the table.

### Syntax

```
ip route allow <NETWORK> <GATEWAY> <METRIC>  
no ip route allow <NETWORK> <GATEWAY>
```

### Parameters

<NETWORK> – network address/mask in format of A.B.C.D/F.G.H.I;

<GATEWAY> – gateway address;

<METRIC> – route metrics.

### Command mode

CONFIG

### Example

```
ma4000(config)# ip route allow 192.168.1.1 192.168.199.2
```

## ip route reject

This command adds a new entry to the RR4X routing table: prohibition to transfer traffic from the specified subnet.

The negative form of the command removes the entry from the table.

### Syntax

```
ip route reject <NETWORK>
no ip route reject <NETWORK>
```

### Parameters

<NETWORK> – network address/mask in format of A.B.C.D/F.G.H.I.

### Command mode

CONFIG

### Example

```
ma4000(config)# ip route reject 192.168.22.0/32
```

## show ip route

This command allows to view the static routing table on PP4X.

### Syntax

```
show ip route
```

### Parameters

The command contains no arguments.

### Command mode

ROOT

### Example

```
ma4000# show ip route
IP Forwarding: enabled

Codes: C - connected, S - static

S 192.168.22.0/32          rejected route
S 192.168.32.0/24          via 192.168.33.1 metric 10    vlan 333
C 192.168.33.0/24          is directly connected      vlan 333
C 192.168.34.0/24          is directly connected      vlan 334
C 192.155.155.0/24         is directly connected      vlan 1234
```

## show running-config ip route

This command allows to view the static routing configuration on PP4X.

### Syntax

```
show running-config ip route
```

### Parameters

The command contains no arguments.

### Command mode

ROOT

### Example

```
ma4000# show running-config ip route
route all
ma4000# show running-config ip route
configure terminal
ip routing
ip route allow 192.168.1.0/24 192.168.199.2
ip route reject 192.168.22.0/32
exit
```