

# 1 DoS Protection Commands

Command	Function
<a href="#"><b>ip deny invalid-l4port</b></a>	Enable the function of denying invalid L4 ports.
<a href="#"><b>ip deny invalid-tcp</b></a>	Enable the function of denying invalid TCP packets.
<a href="#"><b>ip deny land</b></a>	Enable the function of denying land attacks.
<a href="#"><b>show ip deny</b></a>	Display the status of an anti-denial-of-service (DoS) attack function.

## 1.1 ip deny invalid-l4port

### Function

Run the **ip deny invalid-l4port** command to enable the function of denying invalid L4 ports.

Run the **no** form of this command to disable this feature.

The function of denying invalid L4 ports is disabled by default.

### Syntax

```
ip deny invalid-l4port  
no ip deny invalid-l4port
```

### Parameter Description

N/A

### Command Modes

Global configuration mode

### Default Level

14

### Usage Guidelines

N/A

### Examples

The following example enables the function of denying invalid L4 ports.

```
Hostname> enable  
Hostname# configure terminal  
Hostname(config)# ip deny invalid-l4port
```

### Notifications

N/A

### Common Errors

N/A

### Platform Description

N/A

### Related Commands

N/A

## 1.2 ip deny invalid-tcp

### Function

Run the **ip deny invalid-tcp** command to enable the function of denying invalid TCP packets.

Run the **no** form of this command to disable this feature.

The function of denying invalid TCP packets is disabled by default.

## Syntax

```
ip deny invalid-tcp  
no ip deny invalid-tcp
```

## Parameter Description

N/A

## Command Modes

Global configuration mode

## Default Level

14

## Usage Guidelines

N/A

## Examples

The following example enables the function of denying invalid TCP packets.

```
Hostname> enable  
Hostname# configure terminal  
Hostname(config)# ip deny invalid-tcp
```

## Notifications

N/A

## Common Errors

N/A

## Platform Description

N/A

## Related Commands

N/A

# 1.3 ip deny land

## Function

Run the **ip deny land** command to enable the function of denying land attacks.

Run the **no** form of this command to disable this feature.

The function of denying land attacks is disabled by default.

## Syntax

```
ip deny land
```

**no ip deny land****Parameter Description**

N/A

**Command Modes**

Global configuration mode

**Default Level**

14

**Usage Guidelines**

N/A

**Examples**

The following example enables the function of denying land attacks.

```
Hostname> enable
Hostname# configure terminal
Hostname(config)# ip deny land
```

**Notifications**

N/A

**Common Errors**

N/A

**Platform Description**

N/A

**Related Commands**

N/A

## 1.4 show ip deny

**Function**

Run the **show ip deny** command to display the status of an anti-denial-of-service (DoS) attack function.

**Syntax**

```
show ip deny [ invalid-l4port | invalid-tcp | land ]
```

**Parameter Description**

**invalid-l4port:** Displays the status of the function of denying invalid L4 ports.

**invalid-tcp:** Displays the status of the function of denying invalid TCP packets.

**land:** Displays the status of the function of denying land attacks.

**Command Modes**

All modes except the user EXEC mode

**Default Level**

14

**Usage Guidelines**

N/A

**Examples**

The following example displays the statuses of all anti-DoS attack functions.

```
Hostname> enable
Hostname# show ip deny
DoS Protection Mode          State
-----
Protect against Land attack   On
Protect against invalid L4port attack   Off
Protect against invalid TCP attack   Off
Protect against null-scan attack   Off
```

**Table 1-1Output Fields of the show ip deny Command**

Field	Description
Protect against Land attack	Status of the function of denying land attacks: <ul style="list-style-type: none"> <li>● <b>On:</b> The function is enabled.</li> <li>● <b>Off:</b> The function is disabled.</li> </ul>
Protect against invalid L4port attack	Status of the function of denying invalid L4 ports: <ul style="list-style-type: none"> <li>● <b>On:</b> The function is enabled.</li> <li>● <b>Off:</b> The function is disabled.</li> </ul>
Protect against invalid TCP attack	Status of the function of denying invalid TCP packets: <ul style="list-style-type: none"> <li>● <b>On:</b> The function is enabled.</li> <li>● <b>Off:</b> The function is disabled.</li> </ul>
Protect against null-scan attack	Status of the function of denying null scan attacks: <ul style="list-style-type: none"> <li>● <b>On:</b> The function is enabled.</li> <li>● <b>Off:</b> The function is disabled.</li> </ul>

**Notifications**

N/A

**Platform Description**

N/A

**Related Commands**

- [ip deny invalid-l4port](#)

- [\*\*ip deny invalid-tcp\*\*](#)
- [\*\*ip deny land\*\*](#)