# N Commands

This chapter describes the Cisco NX-OS Fibre Channel, virtual Fibre Channel, and Fibre Channel over Ethernet (FCoE) commands that begin with N.

# npv auto-load-balance disruptive

To enable N Port Virtualization (NPV) disruptive load balancing, use the **npv auto-load-balance disruptive** command. To disable this feature, use the **no** form of this command.

**npv auto-load-balance disruptive**

**no npv auto-load-balance disruptive**

## Syntax Description

This command has no arguments or keywords.

## Command Default

None

## Command Modes

Global configuration mode

## Command History

| Release | Modification |
|---|---|
| 6.0(2)N1(1) | This command was introduced. |

## Usage Guidelines

Disruptive load balancing can be configured only in NPV mode.

When disruptive load balancing is enabled, NPV redistributes the server interfaces across all available NP uplinks when a new NP uplink becomes operational. To move a server interface from one NP uplink to another NP uplink, NPV forces reinitialization of the server interface so that the server performs a new login to the core switch. This action causes traffic disruption on the attached end devices.

To avoid disruption of server traffic, enable this feature only after adding a new NP uplink, and then disable it again after the server interfaces have been redistributed.

## Examples

This example shows how to enable disruptive load balancing:

```
switch(config)# npv auto-load-balance disruptive
```

## Related Commands

| Command | Description |
|---|---|
| **feature npv** | Enables NPV mode. |
| **show npv status** | Displays the NPV current status. |

# npv traffic-map

To configure an N Port Virtualization (NPV) traffic map, use the **npv traffic-map** command. To disable this feature, use the **no** form of this command.

**npv traffic-map server-interface** {**fc** *slot*/*port* | **vfc** *vfc-id*} **external-interface fc** *slot*/*port*

**no npv traffic-map server-interface** {**fc** *slot*/*port* | **vfc** *vfc-id*} **external-interface fc** *slot*/*port*

## Syntax Description

| | |
|---|---|
| **server-interface** | Specifies the server interface or a range of server interfaces. |
| **fc** *slot*/*port* | Specifies the slot number and port number for a native Fibre Channel interface. |
| **vfc** *vfc-id* | Specifies a virtual Fibre Channel interface. |
| **external-interface** | Specifies the NP/TNP uplink interface or a range of NP/TNP uplink interfaces that can be selected by the server interface. |

## Command Default

No traffic map. The switch uses automatic uplink selection to select an NP uplink for the server interface.

## Command Modes

Global configuration mode

## Command History

| Release | Modification |
|---|---|
| 6.0(2)N1(1) | This command was introduced. |

## Usage Guidelines

This command is only available when the switch is operating in NPV mode.

NPV traffic maps can be configured only in NPV mode.

## Examples

This example shows how to create a mapping between server interface vfc1 and NP uplink fc 3/1:

```
switch(config)# npv traffic-map server-interface vfc 1 external-interface fc 3/1
```

## Related Commands

| Command | Description |
|---|---|
| **feature npv** | Enables NPV mode. |
| **show npv status** | Displays the NPV current status. |