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# VLAN Traffic Processing



The `vlan group` data has been moved from UDR to SDR. Global rules for `vlan drop`, `vlan pass`, `vlan hide`, and `vlan permit`, defined via the legacy CLI command `vlan group`, have been converted and migrated from UDR to SDR with removal from UDR.

1. Drop traffic without analysis from a specific VLAN:

```
fdpi_cli vlan rule add <id> perm drop
```

1. Drop traffic with preliminary analysis but without exporting it to Netflow statistics from a specific VLAN (used for asymmetric traffic scenarios where duplicated traffic from another site is received; analysis is required before excluding it from statistics):

```
fdpi_cli vlan rule add <id> perm hide
```

1. Pass traffic without any analysis from a specific VLAN:

```
fdpi_cli vlan rule add <id> perm pass
```

1. Show current configuration in SDR:

```
fdpi_cli vlan rule dump
```

## VLAN Rule

VLAN Rule provides flexible traffic management at VLAN and QinQ levels, allowing policies to be applied to individual VLANs, VLAN ranges, or QinQ tunnels.

### Rule Types

The following rule types are supported:

- `dhcp` — controls DHCP request processing:
  - `dhcp enable` — allow DHCP processing in the given VLAN/QinQ
  - `dhcp disable` — block DHCP processing; all DHCP packets are dropped
- `perm` — basic traffic processing within VLAN/QinQ:
  - `drop` — completely drop packets; not included in Netflow
  - `pass` — forward without processing; included in Netflow
  - `accept` — full processing in the system; included in Netflow
  - `hide` — packets are processed internally and then dropped:
    - not included in Netflow
    - services 9, 12, 15, 18, NAT, and policing are not applied
    - not recorded via `ajb` (IPFIX, SIP, FTP, etc.)

- pppoe — PPPoE traffic processing:
  - enable — allow PPPoE processing
  - drop — drop PPPoE packets
  - pass — pass PPPoE traffic without processing
  - delay N — set PPPoE session with delay of N seconds ( $0 < N < 16$ )

## VLAN/QinQ Range Syntax

Rules are applied to ranges:

- single VLAN: 156
- VLAN range: 56-78
- any VLAN: \* or any
- QinQ:
  - 67.\* / 67.any — S-VLAN=67, any C-VLAN
  - \*.68 / any.68 — any S-VLAN, C-VLAN=68
  - \*.\* / any.any — any QinQ
  - 12-156.78-90 — S-VLAN and C-VLAN ranges
  - 609.1-199 — S-VLAN=609, C-VLAN range



Rules for VLAN (67) and QinQ (67.\*) are independent and do not overlap.

## Rule Priority

When ranges overlap:

1. more general rules are applied first (e.g., 1-4095, any.any)
2. more specific rules may override the behavior

### Example:

```
vlan rule add 300-700 dhcp disable
vlan rule add 645 dhcp enable
vlan rule add 430-439 dhcp enable
```

## Management

- vlan rule add — add a rule to SDR
- vlan rule modify — modify a rule in SDR
- vlan rule delete — delete a rule from SDR
- vlan rule show — show all rules for VLAN/QinQ
- vlan rule dump [type] — show rules from SDR with filtering by type (perm, dhcp, all)
- vlan rule purge vlan/qinq/all — clear SDR VLAN/QinQ rules or both
- vlan rule apply — force rule application (no more than once per minute)



When using \* in QinQ ranges, it is recommended to use quotes or any to prevent shell interpretation.

**Change application:** changes are stored in SDR and automatically applied after 5 minutes since the last modification.