

Базовые команды vlan, trunk

За этим портом – конечный абонент, кадры которого нужно теггировать:

```
conf t
int fa0/1
sw mode access
```

По умолчанию порт находится в vlan 1. Что бы изменить поведение конкретного порта:

```
sw access vlan 2
int fa0/2
sw mode access
sw access vlan 3
```

Также можно изменить vlan 2 на 5:

```
int fa0/1
sw access vlan 5
```

Смотрим:

```
sh vlan
sh vlan brief
```

По умолчанию все порты находятся в режиме access.

Назначить транковый порт:

```
Switch#conf t
Switch(config)#int fa0/24
Switch(config-if)#sw mode trunk
```

Смотрим состояние:

```
Switch#sh int fa0/24 status
```

```
Port Name Status Vlan Duplex Speed Type
Fa0/24 TRUNK connected trunk a-full a-100 10/100BaseTX
```

Посмотреть транковые порты:

```
Switch#sh int trunk
```

Port vlan	Mode	Encapsulation	Status	Native
Fa0/24	on	802.1q	trunking	1

Port	Vlans allowed on trunk
Fa0/24	1-4094

Port	Vlans allowed and active in management domain
Fa0/24	1,5,10,50,150

Port Vlans in spanning tree forwarding state and not pruned
Fa0/24 1,5,10,50,150

Информация по конкретному порту:

```
Switch#sh int fa0/1
```

```
FastEthernet0/1 is down, line protocol is down (notconnect)
  Hardware is Fast Ethernet, address is 000d.bd01.3bc1 (bia
000d.bd01.3bc1)
  MTU 1500 bytes, BW 10000 Kbit, DLY 1000 usec,
  reliability 255/255, txload 1/255, rxload 1/255
  Encapsulation ARPA, loopback not set
  Keepalive set (10 sec)
  Auto-duplex, Auto-speed
  input flow-control is off, output flow-control is off
  ARP type: ARPA, ARP Timeout 04:00:00
  Last input never, output 1d17h, output hang never
  Last clearing of "show interface" counters never
  Input queue: 0/75/0/0 (size/max/drops/flushes); Total output
drops: 0
  Queueing strategy: fifo
  Output queue :0/40 (size/max)
  5 minute input rate 0 bits/sec, 0 packets/sec
  5 minute ouxtput rate 0 bits/sec, 0 packets/sec
    1 packets input, 64 bytes, 0 no buffer
    Received 0 broadcasts, 0 runts, 0 giants, 0 throttles
    0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored
    0 watchdog, 0 multicast, 0 pause input
    0 input packets with dribble condition detected
    1 packets output, 64 bytes, 0 underruns
```

0 output errors, 0 collisions, 2 interface resets
0 babbles, 0 late collision, 0 deferred
0 lost carrier, 0 no carrier, 0 PAUSE output
0 output buffer failures, 0 output buffers swapped out

Вывод информации о порте с точки зрения vlan-ов:

```
Switch#sh int fa0/7 sw
Name: Fa0/7
Switchport: Enabled
Administrative Mode: static access
Operational Mode: down
Administrative Trunking Encapsulation: dot1q
Negotiation of Trunking: Off
Access Mode VLAN: 10 (VLAN0010)
Trunking Native Mode VLAN: 1 (default)
Voice VLAN: none
Administrative private-vlan host-association: none
Administrative private-vlan mapping: none
Operational private-vlan: none
Trunking VLANs Enabled: ALL
Pruning VLANs Enabled: 2-1001
Capture Mode Disabled
Capture VLANs Allowed: ALL
```

Protected: false

Voice VLAN: none (Inactive)
Appliance trust: none

Создать vlan но не вешать на порты:

```
conf t# vlan 2
conf t# vlan 3
```

Назначить портам с 4 по 8 одинаковое имя/описание:

```
(config)#interface range Fa0/4 - 8
(config-if-range)#description DEP_44
```