

# 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		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 output 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
```