# Практическая работа №3

#### 1)Добавляем switch



## 2) команда ?: показывает все доступные команды на данный момент

```
Switch>?
Exec commands:
 connect Open a terminal connection
            Turn off privileged commands
 disconnect Disconnect an existing network connection
  enable Turn on privileged commands
             Exit from the EXEC
  exit
           Exit from the EXEC
 logout
           Send echo messages
 ping
           Resume an active network connection
 resume
           Show running system information
 telnet
           Open a telnet connection
 terminal
            Set terminal line parameters
  traceroute Trace route to destination
Switch>
```

## 3) show? показывает все доступные команды параметра к show

```
Switch>show ?
                      Arp table
  arp
  cdp
                      CDP information
  clock
                     Display the system clock
                     Encryption module
  crypto
                     DTP information
  dtp
  etherchannel
                     EtherChannel information
  flash:
                     display information about flash: file system
  history
                    Display the session command history
                     Interface status and configuration 
IP information
  interfaces
  ip
  11dp
                     LLDP information
                      MAC configuration
  mac-address-table MAC forwarding table
  mls
                     Show MultiLayer Switching information
                     Show current privilege level
Information about Telnet connections
  privilege
  sessions
  ssh
                     Status of SSH server connections
                     Status of TCP connections
Display terminal configuration parameters
  tcp
  terminal
  users
                    Display information about terminal lines
                     System hardware and software status
  version
                      VTP VLAN status
  vlan
```

```
show показывает параметры соединения на выбор "vlan" "ip" и т.д
```

4) enable даёт доступ к базовым командам

```
Switch>enable
Switch#
```

5)conf t даёт доступ к расширенным правам администратора

```
Switch#conf t
Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)#
```

6)enable pass \* ставим крутой пароль

```
Switch(config) #enable password *
```

7) enable secret секретный пароль стоит выше по приоритету обычного, используется для более глобальных целей

```
Switch(config) #enable secret *
The enable secret you have chosen is the same as your enable password.
This is not recommended. Re-enter the enable secret.
Switch(config) #enable secret 1
```

write memory сохраняет текущую конфигурацию устройства во флеш памяти

```
Switch#write memory
Building configuration...
```

9) reload перезагружает систему, останавливая её работу

```
Proceed with reload? [confirm]
PT3000 Boot Loader (PT3000-HBOOT-M) Version 12.1(11r)EA1, RELEASE SOFTWARE (fc1)
Compiled Mon 22-Jul-02 18:57 by miwang
Cisco WS-CSwitch-PT (RC32300) processor (revision C0) with 21039K bytes of memory.
Switch-PT starting..
Base ethernet MAC Address: 00D0.BA93.5691
Xmodem file system is available.
Initializing Flash...
flashfs[0]: 2 files, 0 directories
flashfs[0]: 0 orphaned files, 0 orphaned directories
flashfs[0]: Total bytes: 64016384
flashfs[0]: Bytes used: 3117956
flashfs[0]: Bytes available: 60898428
flashfs[0]: flashfs fsck took 1 seconds.
...done Initializing Flash.
Boot Sector Filesystem (bs:) installed, fsid: 3
Parameter Block Filesystem (pb:) installed, fsid: 4
Loading "flash:/pt3000-i6q412-mz.121-22.EA4.bin"...
Restricted Rights Legend
Use, duplication, or disclosure by the Government is
subject to restrictions as set forth in subparagraph
(c) of the Commercial Computer Software - Restricted
Rights clause at FAR sec. 52.227-19 and subparagraph
(c) (l) (ii) of the Rights in Technical Data and Computer
Software clause at DFARS sec. 252.227-7013.
```

## 10) show interface отображает состояние интерфейсов маршрутизаторов

```
Switch>show interface
FastEthernet0/1 is down, line protocol is down (disabled)
 Hardware is Lance, address is 0001.97b0.5e43 (bia 0001.97b0.5e43)
 BW 100000 Kbit, DLY 1000 usec,
    reliability 255/255, txload 1/255, rxload 1/255
 Encapsulation ARPA, loopback not set
 Keepalive set (10 sec)
 Half-duplex, 100Mb/s
 input flow-control is off, output flow-control is off
 ARP type: ARPA, ARP Timeout 04:00:00
 Last input 00:00:08, output 00:00:05, output hang never
 Last clearing of "show interface" counters never
 Input queue: 0/75/0/0 (size/max/drops/flushes); Total output drops:
 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
     956 packets input, 193351 bytes, 0 no buffer
    Received 956 broadcasts, 0 runts, 0 giants, 0 throttles
    0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored, 0 abort
    0 watchdog, 0 multicast, 0 pause input
    0 input packets with dribble condition detected
    2357 packets output, 263570 bytes, 0 underruns
    0 output errors, 0 collisions, 10 interface resets
    0 babbles, 0 late collision, 0 deferred
 --More--
```

#### 11)show flash показывает размер свободное место и содержимое энергонезависимой памяти

```
Switch>show flash
Directory of flash:/

1 -rw- 3117390 <no date> pt3000-i6q412-mz.121-22.EA4.bin
64016384 bytes total (60898994 bytes free)
Switch>
```