

**№5**

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VLAN

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trunk ( . (fig:001?)).

```
mks-donskaya-sw-1>
mks-donskaya-sw-1>ena
mks-donskaya-sw-1>enable
mks-donskaya-sw-1#conf
mks-donskaya-sw-1#configure te
mks-donskaya-sw-1#configure terminal
Enter configuration commands, one per line.  End with CNTL/Z.
mks-donskaya-sw-1(config)#int
mks-donskaya-sw-1(config)#interface g
mks-donskaya-sw-1(config)#interface g0/
mks-donskaya-sw-1(config)#interface g0/1
mks-donskaya-sw-1(config-if)#switchport mode trunk
```

. 1:

- ( . (fig:002?)).

```
Setting device VLAN database password to cisco
msk-donskaya-sw-1(config)#vlan 2
msk-donskaya-sw-1(config-vlan)#
%LINK-5-CHANGED: Interface Vlan2, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface Vlan2, changed sta

msk-donskaya-sw-1(config-vlan)#name management
msk-donskaya-sw-1(config-vlan)##vlan 3
      ^
% Invalid input detected at '^' marker.

msk-donskaya-sw-1(config-vlan)#vlan 3
msk-donskaya-sw-1(config-vlan)#name servers
msk-donskaya-sw-1(config-vlan)#vlan 101
msk-donskaya-sw-1(config-vlan)#name dk
msk-donskaya-sw-1(config-vlan)#vlan 102
msk-donskaya-sw-1(config-vlan)#name departaments
msk-donskaya-sw-1(config-vlan)#vlan 103
msk-donskaya-sw-1(config-vlan)#name adm
msk-donskaya-sw-1(config-vlan)#vlan 104
msk-donskaya-sw-1(config-vlan)#name other
msk-donskaya-sw-1(config-vlan)#exi
msk-donskaya-sw-1(config-vlan)#exit
msk-donskaya-sw-1(config)#exi
msk-donskaya-sw-1(config)#exit
msk-donskaya-sw-1#
%SYS-5-CONFIG_I: Configured from console by console

msk-donskaya-sw-1#writ
msk-donskaya-sw-1#write mem
msk-donskaya-sw-1#write memory
Building configuration...
[OK]
msk-donskaya-sw-1#
```

( . (fig:003?)).

```
msk-donskaya-sw-1#  
%SYS-5-CONFIG_I: Configured from console by console
```

```
msk-donskaya-sw-1#wr  
msk-donskaya-sw-1#write m  
msk-donskaya-sw-1#write memory  
Building configuration...  
[OK]  
msk-donskaya-sw-1#sh  
msk-donskaya-sw-1#show vl  
msk-donskaya-sw-1#show vlan
```

VLAN	Name	Status	Ports
1	default	active	Fa0/2, Fa0/3, Fa0/6, Fa0/7, Fa0/10, Fa0/11, Fa0/14, Fa0/15, Fa0/18, Fa0/19, Fa0/22, Fa0/23, Fa
2	management	active	
3	servers	active	
101	dk	active	
102	departaments	I active	
103	adm	active	
104	other	active	
1002	fddi-default	active	
1003	token-ring-default	active	
1004	fddinet-default	active	
1005	trnet-default	active	

VLAN	Type	SAID	MTU	Parent	RingNo	BridgeNo	Stp	BrdgMode	T
------	------	------	-----	--------	--------	----------	-----	----------	---

( . (fig:004?)).

```
Device mode already VTP CLIENT.  
msk-donskaya-sw-2(config)#vtp domain donsкаya  
Domain name already set to donsкаya.  
msk-donskaya-sw-2(config)#vtp mode client  
Setting device to VTP CLIENT mode.  
msk-donskaya-sw-2(config)#vtp domain donsкаya  
Domain name already set to donsкаya.  
msk-donskaya-sw-2(config)#exi  
msk-donskaya-sw-2(config)#exit  
msk-donskaya-sw-2#  
%SYS-5-CONFIG_I: Configured from console by console  
ex  
msk-donskaya-sw-2#exit
```

. 4:

( . (fig:005?)).

```
msk-donskaya-sw-4#show vl
msk-donskaya-sw-4#show vlan
```

VLAN	Name	Status	Ports
1	default	active	Fa0/1, Fa0/2, Fa0/5, Fa0/6, Fa0/9, Fa0/10, Fa0/13, Fa0/14, Fa0/17, Fa0/18, Fa0/21, Fa0/22,
2	management	active	
3	servers	active	
101	dk	active	
102	departaments	active	
103	adm	active	
104	other r	active	
1002	fddi-default	active	
1003	token-ring-default	active	
1004	fddinet-default	active	
1005	trnet-default	active	

VLAN	Type	SAID	MTU	Parent	RingNo	BridgeNo	Stp	BrdgMode
------	------	------	-----	--------	--------	----------	-----	----------

. 5:

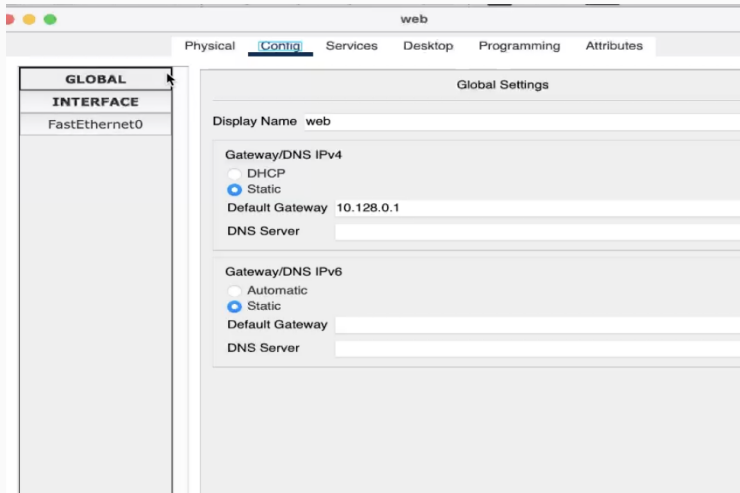


( . (fig:006?)).

```
msk-donskaya-sw-4#configure terminal
Enter configuration commands, one per line.  End with CNTL/Z.
msk-donskaya-sw-4 (config)#int
msk-donskaya-sw-4 (config)#interface ran
msk-donskaya-sw-4 (config)#interface range f0/1 - 5
msk-donskaya-sw-4 (config-if-range)#sw
msk-donskaya-sw-4 (config-if-range)#switchport mo
msk-donskaya-sw-4 (config-if-range)#switchport mode ac
msk-donskaya-sw-4 (config-if-range)#switchport mode access v
msk-donskaya-sw-4 (config-if-range)#switchport mode access
msk-donskaya-sw-4 (config-if-range)#sw
msk-donskaya-sw-4 (config-if-range)#switchport ac
msk-donskaya-sw-4 (config-if-range)#switchport access vl
msk-donskaya-sw-4 (config-if-range)#switchport access vlan 101
msk-donskaya-sw-4 (config-if-range)#in
msk-donskaya-sw-4 (config-if-range)#inte
msk-donskaya-sw-4 (config-if-range)#ex
msk-donskaya-sw-4 (config-if-range)#exit
msk-donskaya-sw-4 (config)#inter
msk-donskaya-sw-4 (config)#interface ran
msk-donskaya-sw-4 (config)#interface range f0/6 - 10
msk-donskaya-sw-4 (config-if-range)#sw
msk-donskaya-sw-4 (config-if-range)#switchport mo
msk-donskaya-sw-4 (config-if-range)#switchport mode acc
msk-donskaya-sw-4 (config-if-range)#switchport mode access
msk-donskaya-sw-4 (config-if-range)#sw
msk-donskaya-sw-4 (config-if-range)#switchport acc
msk-donskaya-sw-4 (config-if-range)#switchport access vl
msk-donskaya-sw-4 (config-if-range)#switchport access vlan 102
msk-donskaya-sw-4 (config-if-range)#inter
msk-donskaya-sw-4 (config-if-range)#interface
```

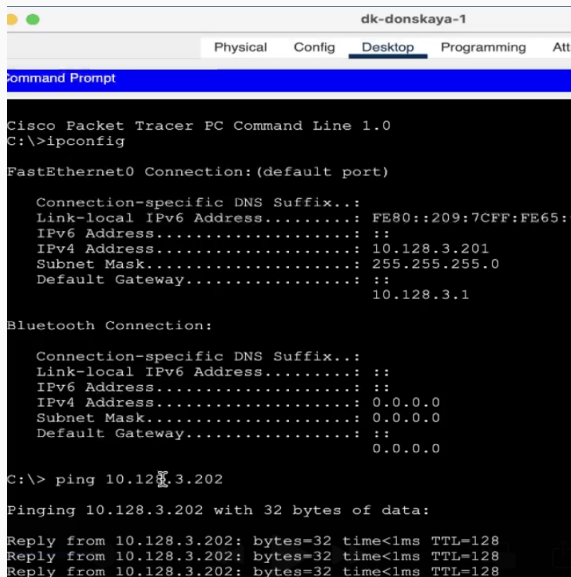
# IP

( . (fig:007?)).



. 7:

( . (fig:008?)).



The screenshot shows a Cisco Packet Tracer PC Command Line interface for a device named "dk-donskaya-1". The interface has tabs for "Physical", "Config", "Desktop", "Programming", and "Att". The "Desktop" tab is selected, and the "Command Prompt" window is open. The command prompt shows the following text:

```
Cisco Packet Tracer PC Command Line 1.0
C:\>ipconfig

FastEthernet0 Connection:(default port)

    Connection-specific DNS Suffix...:
    Link-local IPv6 Address.....: FE80::209:7CFF:FE65:
    IPv6 Address.....: ::
    IPv4 Address.....: 10.128.3.201
    Subnet Mask.....: 255.255.255.0
    Default Gateway.....: ::
                                10.128.3.1

Bluetooth Connection:

    Connection-specific DNS Suffix...:
    Link-local IPv6 Address.....: ::
    IPv6 Address.....: ::
    IPv4 Address.....: 0.0.0.0
    Subnet Mask.....: 0.0.0.0
    Default Gateway.....: ::
                                0.0.0.0

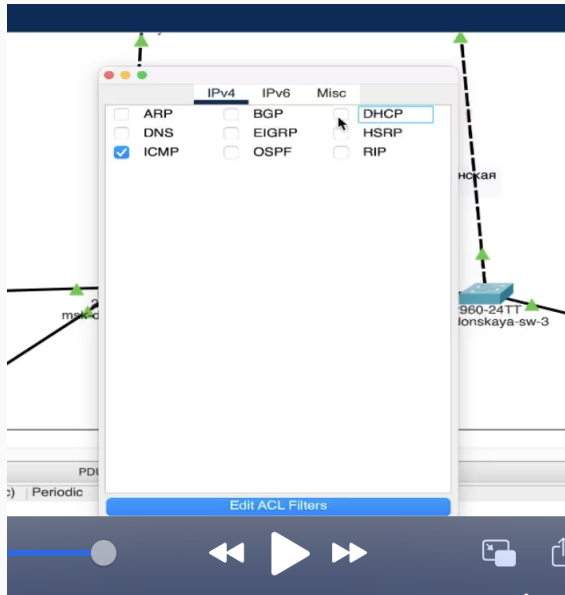
C:\> ping 10.128.3.202

Pinging 10.128.3.202 with 32 bytes of data:

Reply from 10.128.3.202: bytes=32 time<1ms TTL=128
Reply from 10.128.3.202: bytes=32 time<1ms TTL=128
Reply from 10.128.3.202: bytes=32 time<1ms TTL=128
```

# ICMP

( . (fig:009?)).



( . (fig:010?)).



( . (fig:011?)).



( . (fig:012?)).

PDU Information at Device: dk-pavlovskaya-1

OSI Model | Inbound PDU Details | Outbound PDU Details

At Device: dk-pavlovskaya-1  
Source: dk-donskaya-1  
Destination: dk-pavlovskaya-1

**In Layers**

Layer7
Layer6
Layer5
Layer4
Layer 3: IP Header Src. IP: 10.128.3.201, Dest. IP: 10.128.3.202 ICMP Message Type: 8
Layer 2: Ethernet II Header 0009.7C65.61DA >> 0009.7CE8.0089
Layer 1: Port FastEthernet0

**Out Layers**

Layer7
Layer6
Layer5
Layer4
Layer 3: IP Header Src. IP: 10.128.3.202, Dest. IP: 10.128.3.201 ICMP Message Type: 0
Layer 2: Ethernet II Header 0009.7CE8.0089 >> 0009.7C65.61DA
Layer 1: Port(s): FastEthernet0

1. FastEthernet0 receives the frame.

Simulation Panel

Device	At Device	Type
dk-don...	dk-don...	ICMP
nsk...	msk-do...	ICMP
ions...	msk-do...	ICMP
ions...	msk-pa...	ICMP
pavl...	dk-pavl...	ICMP
vlov...	msk-pa...	ICMP

stant Delay

. 12:

