

# Laborbericht - NVS - 5CHIF

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Datum: 2017-01-09

Ziel: Erfüllung der Aufgabenstellung

## Monitroing (RSPAN) Configuration

### Switch RSPAN\_SRC

```
Switch#show monitor
Session 1
-----
Type                : Local Session
Description          : -
Source Ports        :
    Both             : Fa0/10
Destination Ports    : Fa0/5
    Encapsulation     : Native
    Ingress           : Disabled

Session 3
-----
Type                : Remote Destination Session
Description          : -
Source Ports        :
    RX Only           : Fa0/10
Dest RSPAN VLAN      : 5

Switch#show run | include monitor
monitor session 1 source interface Fa0/10
monitor session 1 destination interface Fa0/5
monitor session 3 source interface Fa0/10 rx
monitor session 3 destination remote vlan 5 reflector-port Fa0/6
Switch#
```

### Switch RSPAN\_DEST

```
Switch>en
Switch#show monitor
Session 5
-----
Type                : Remote Source Session
Description          : -
Source RSPAN VLAN    : 5
Destination Ports    : Fa0/1
    Encapsulation     : Native
    Ingress           : Disabled

Session 7
-----
Type                : Remote Source Session
Description          : -
Source RSPAN VLAN    : 5
Destination Ports    : Fa0/2
    Encapsulation     : Native
    Ingress           : Disabled

Switch#show run | include monitor
monitor session 5 destination interface Fa0/1
monitor session 5 source remote vlan 5
monitor session 7 destination interface Fa0/2
monitor session 7 source remote vlan 5
Switch#
```

# Monitoring Simulieren

Network Notes:

RSPAN SRC: Configured with both SPAN and RSPAN sessions.  
RSPAN DEST: Configured with RSPAN session.  
Sniffer2: receives traffic from SPAN session on RSPAN SRC switch.  
Sniffers 0, 1: receive traffic from RSPAN on switch RSPAN DEST.

To investigate either switch configurations for SPAN and/or RSPAN use CLI:  
enable  
show monitor  
You can also use:  
enable  
show run | include monitor  
In order to observe the actual commands used for [RSPAN configuration].  
Additionally,  
enable  
show vlan  
will also reflect relevant [RSPAN] configuration properties.

In order to observe packets capture, switch to Simulation mode and ping PC1 from PC2 using Command Prompt desktop applet. Use "capture" controls in the simulation panel to control packet propagation.

Vis.	Time(sec)	Last Device	At Device	Type	Info
	0.000	PC0		ICMP	

## Ping Kommando testen

```
Packet Tracer PC Command Line 1.0
C:\>ping 1.1.10.20

Pinging 1.1.10.20 with 32 bytes of data:
Reply from 1.1.10.20: bytes=32 time=0ms TTL=128
```

## Sniffer 2

Service
☒ On
☐ Off

Incoming Packets
☒ Port0
☐ Port1

Buffer Size
 256

ICMP
ICMP
ICMP
ICMP
ICMP
ICMP
ICMP

### Ethernet II

0	4	8	14	19 Bytes
PREAMBLE:		DEST MAC:		SRC MAC:
101010...1011		0050.0F5A.31C7		0002.173B.97C4
TYPE:	DATA (VARIABLE LENGTH)			FCS:
0x800				0x0

### IP

0	4	8	16	19	31 Bits
4	IHL	DSCP: 0x0	TL: 28		
ID: 0x1		0x0	0x0		
TTL: 255	PRO: 0x1	CHKSUM			
SRC IP: 1.1.10.10					
DST IP: 1.1.10.20					
OPT: 0x0				0x0	
DATA (VARIABLE LENGTH)					

### ICMP

0	8	16	31 Bits
TYPE: 0x8	CODE: 0x0	CHECKSUM	
ID: 0x2	SEQ NUMBER: 1		

Clear

## Sniffer 1

Sniffer1

Physical
Config
GUI
Attributes

Service
☒ On
☐ Off

Incoming Packets
☒ Port0
☐ Port1

Buffer Size

256

ICMP

ICMP

ICMP

ICMP

Ethernet II

0 4 8 14 19 Bytes

PREAMBLE:	DEST MAC:	SRC MAC:
101010...1011	0050.0F5A.31C7	0002.173B.97C4
TYPE:	DATA (VARIABLE LENGTH)	FCS:
0x800		0x0

IP

0 4 8 16 19 31 Bits

4	IHL	DSCP: 0x0	TL: 28
ID: 0x1	0x0	0x0	
TTL: 255	PRO: 0x1	CHKSUM	
SRC IP: 1.1.10.10			
DST IP: 1.1.10.20			
OPT: 0x0			0x0
DATA (VARIABLE LENGTH)			

ICMP

0 8 16 31 Bits

TYPE: 0x8	CODE: 0x0	CHECKSUM
ID: 0x2	SEQ NUMBER: 1	

Clear

Event List Filters - Visible Events

ICMP, LLDP

Edit Filters

Show All/None

☐ Top

## Sniffer 0

Sniffer0

Physical

Config

GUI

Attributes

Service

☒ On

☐ Off

Incoming Packets

☒ Port0

☐ Port1

Buffer Size

512

ICMP

ICMP

ICMP

ICMP

### Ethernet II

0 4 8 14 19 Bytes

PREAMBLE:	DEST MAC:	SRC MAC:
101010...1011	0050.0F5A.31C7	0002.173B.97C4
TYPE:	DATA (VARIABLE LENGTH)	FCS:
0x800		0x0

### IP

0 4 8 16 19 31 Bits

4	IHL	DSCP: 0x0	TL: 28
ID: 0x1	0x0	0x0	
TTL: 255	PRO: 0x1	CHKSUM	
SRC IP: 1.1.10.10			
DST IP: 1.1.10.20			
OPT: 0x0		0x0	
DATA (VARIABLE LENGTH)			

### ICMP

0 8 16 31 Bits

TYPE: 0x8	CODE: 0x0	CHECKSUM
ID: 0x2	SEQ NUMBER: 1	

Clear

Event List Filters - Visible Events

ICMP, LLDP

Edit Filters

Show All/None

☐ Top

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Die Übertragenen Pakete wurden von allen Sniffern empfangen

[http://nvs.schreib.at/NVS/5CHIF\\_20170109\\_Schreib/](http://nvs.schreib.at/NVS/5CHIF_20170109_Schreib/)