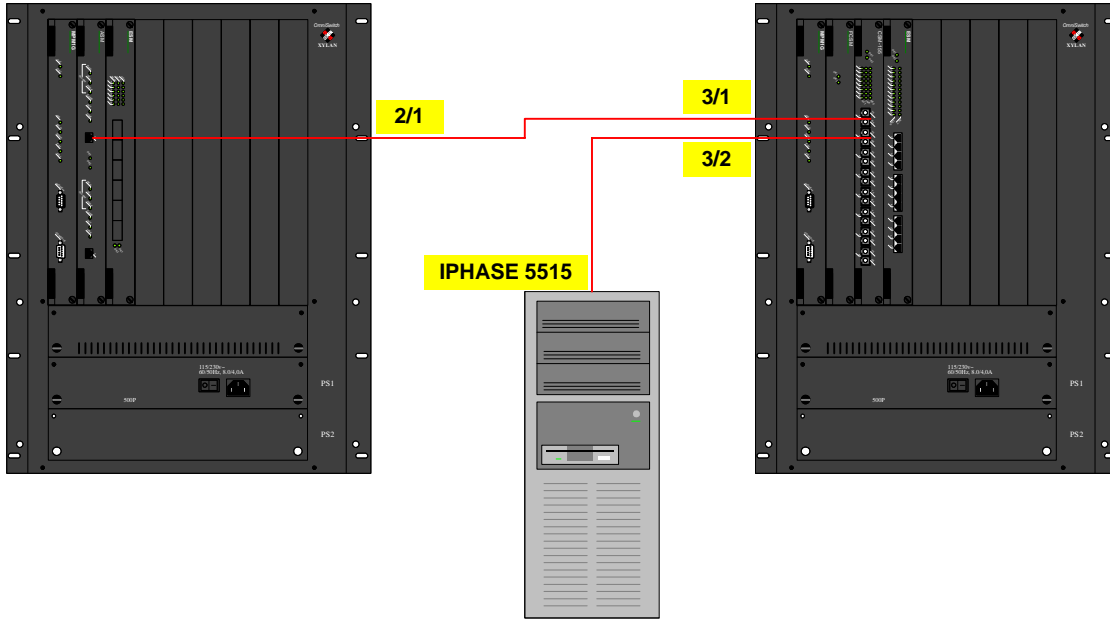


# Lan Emulation auf ASM Board (Xylan OmniSwitch)



Server  
200.1.1.2

Client  
200.1.1.1



3903488001BC9000010001000100007786CA02

Statistics ATM Adapter 1 - 00:00:77:86:ca:02

Signalling AAL5 LEC ... 1577

Signalling State	State Detail
ILMI:	ILMI: ILMI Registered
QSAAL:	QSAAL: Data transfer ready
Signalling:	Signalling: Signalling Ready

ATM End Station Address (AESA):

Network Prefix: 39:03:48:80:01:bc:90:00:01:00:01:00:01  
ESI/Selector: 00:00:77:86:ca:02:00

Signalling Statistics:

	VPI/VCI	Frames In	Frames Out
ILMI	0/ 16	41	41
Signalling	0/ 5	49	43

Statistics ATM Adapter 1 - 00:00:77:86:ca:02

Signalling AAL5 LEC ... 1577

DC3c MM	AAL5 Statistics
LOS:	Received Packets: 468
LOF:	Received Cells: 1241
FERF:	Transmitted Packets: 312
AIS:	Transmitted Cells: 889
LDP:	

AAL5 Errors:

Rx Dropped Packets: 0 Tx Dropped Packets: 0  
Rx Frame Errors: 0

ATM Layer Errors:

Invalid VPIs: 0 Receive Cell Errors: 0  
Invalid VCIs: 0

Clear Close



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**Statistics ATM Adapter 1 - 00:00:77:86:ca:02**

Signalling | AAL5 | LEC ... | 1577

1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16

LEC

State ELAN Name: eth1    MAC Address: 00:00:77:86:ca:02    ELAN Type: Ethernet    MTU: 1516

Network Prefix: 39:03:48:80:01:bc:90:00:01:00:01:00:01    ESI/Selector: 00:00:77:86:ca:02-00

	VPI/VCI	Tx Packets	Rx Packets	NetworkPrefix	ESI/Selector
Control Dir	0/ 33	2	2	39:03:48:80:01:bc:90:00:01:00:01:00:01	00:20:da:7e:e9:8d-c1
Control Dist	0/ 34	0	63	39:03:48:80:01:bc:90:00:01:00:01:00:01	00:20:da:7e:e9:8d-c1
Multicast Send	0/ 35	196	0	39:03:48:80:01:bc:90:00:01:00:01:00:01	00:20:da:7e:e9:8d-c1
Multicast Fwd	0/ 36	0	330	39:03:48:80:01:bc:90:00:01:00:01:00:01	00:20:da:7e:e9:8d-c1

SERVER / >vas

## ATM Services

Slot	Port	Serv Num	Service Description	Service Type
2	1	1	PTOP Bridging Service 1	PTOP Priv
2	1	2	LANE Service Module Service 2	LSM
2	1	3	LAN Emulation Service 3	802.3 LEC
2	2	1	PTOP Bridging Service 1	PTOP Priv
2	2	2	LAN Emulation Service 2	802.3 LEC

## ATM Services

Slot	Serv Port	VC Num	Typ	Oper Status	SEL	Groups	Conn VCI's/Addresses
2	1	1	PVC	Enabled	N/A	1	100
2	1	2	SVC	Enabled	02	N/A	N/A
2	1	3	SVC	LANE Op.	03	1	37 39 42 44 48 49
2	2	1	PVC	Disabled	N/A	1	100
2	2	2	SVC	Initial	02	1	



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CLIENT / >vas

### ATM Services

Slot	Port	Serv Num	Service Description	Service Type
2	1	1	PTOP Bridging Service 1	PTOP Priv
2	1	2	LAN Emulation Service 2	802.3 LEC

### ATM Services

Slot	Port Num	Serv Typ	VC Status	Oper SEL	Groups	Conn VCI's/Addresses
2	1	1	PVC	Enabled	N/A	100
2	1	2	SVC	LANE Op.	02	33 34 35 36 37

SERVER / >vlat 2/1 3

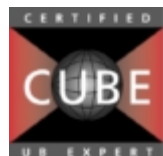
### ATM LANE LE\_ARP Table

MAC Address	ATM Network Prefix	ESI	SEL	VPI/VCI	Age	Remote
00007786ca02	3903488001bc9000010001000100007786ca0200			0/ 49	54	False
0020da6f7360	3903488001bc900001000100010020da8156fd02			0/ 48	92	True

CLIENT / >vlat 2/1 2

### ATM LANE LE\_ARP Table

MAC Address	ATM Network Prefix	ESI	SEL	VPI/VCI	Age	Remote
0020da6e1a30	3903488001bc900001000100010020da7ee98d03			0/ 37	34	True



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SERVER / >vss 2/1 3

Status/Statistic for slot 2 interface 1 Service 3

```

Service          : LAN Emulation Service 3

LEC status       : Operational
ELAN Name        : eth1
ELAN Type        : 802.3
LEC ID           : 2
LES address      : 3903488001bc900001000100010020da7ee98dc1 (learned)
BUS address      : 3903488001bc900001000100010020da7ee98dc1
LECS address     : 470079000000000000000000000000a03e00000100 (ILMI/well-known LECS addr)

BUS
MC Forward VPC/VCC      : 0/ 44          MC Send VPC/VCC          : 0/ 42
Echo suppress           : 0

LES
Control Direct VPC/VCC  : 0/ 37          Cntl Distribute VPC/VCC  : 0/ 39
Control Frames Sent     : 156           Control Frames Rcvd      : 229
LE arps Sent            : 3              LE arps Received         : 36

LECS
Configuration VPC/VCC   : 0/ 0
Packets Sent            : 0              Packet Received          : 0

```

CLIENT / >vss 2/1 2

Status/Statistic for slot 2 interface 1 Service 2

```

Service          : LAN Emulation Service 2

LEC status       : Operational
ELAN Name        : eth1
ELAN Type        : 802.3
LEC ID           : 1
LES address      : 3903488001bc900001000100010020da7ee98dc1 (learned)
BUS address      : 3903488001bc900001000100010020da7ee98dc1
LECS address     : 470079000000000000000000000000a03e00000100 (ILMI/well-known LECS addr)

BUS
MC Forward VPC/VCC      : 0/ 36          MC Send VPC/VCC          : 0/ 35
Echo suppress           : 0

LES
Control Direct VPC/VCC  : 0/ 33          Cntl Distribute VPC/VCC  : 0/ 34
Control Frames Sent     : 9              Control Frames Rcvd      : 332
LE arps Sent            : 3              LE arps Received         : 67

LECS
Configuration VPC/VCC   : 0/ 0
Packets Sent            : 0              Packet Received          : 0

```



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Folgende Schritte auf der Basis der Software Version 3.1.9 wurden durchgeführt um die beiden Switche zu konfigurieren

- Unbedingt die physikalische Verbindung von ASM (SERVER) zu CSM (CLIENT) herstellen, da ansonsten bei der LANE Konfiguration keine ATM Adresse vorhanden ist und die Konfiguration unter schwierigen Voraussetzungen erstellt wird. Nachfolgenden Hinweis erhalten Sie, wenn keine physikalische Verbindung besteht.

```
SERVER / >lsmcfg 2/1
*****
*
* WARNING:
*
* Link is DOWN for this physical port!
*
* Configuration will be more difficult
* than when link is UP. In some cases,
* you might have to type in the FULL
* ATM address instead of the system
* detecting for you when the link is
* UP.
*
*****
Continue configuration [y/n] (y) :
```

- ATM Ports von PVC auf SVC umstellen
- Signalisierung von 3.0 auf 3.1 umstellen
- ILMI enabled
- Vor der eigentlichen LANE Konfiguration die Switche rebooten
- Erstellen von LES/BUS auf SERVER
- Erstellen von LECS auf SERVER
- Erstellen von LEC auf SERVER
- Erstellen von LEC auf CLIENT
- Konfigurieren der InterPhase 5155 ATM Netzwerkkarte unter NT 4.0

## SERVER

```
SERVER / >map 2/1

Slot 2 Port 1 Configuration

1) Description (30 chars max)           : ATM PORT
2) Conn Type { PVC(1), SVC(2) }         : PVC
3) Max VCCs (1-1023)                   : 1023
4) Max VCI bits (1..10)                 : 10
5) UNI Type                             : Private
6) Tx SAR Buffer Size (2048-131072)      : 16384
7) Rx SAR Buffer Size (2048-131072)      : 16384
8) Tx Frame Buffer Size (1800-16384)     : 4600
9) Rx Frame Buffer Size (1800-16384)     : 4600
10) Pl Scramble {(False(1),True(2))}    : True
11) Timing Mode {(Loop(1),Local(2))}    : Local
12) Loopback Config { NoLoop(1), DiagLoop(2),
    LineLoop(3) }                       : NoLoop
13) Phy media { SONET(1),SDH(2)}        : SONET

Enter (option=value/save/cancel) : 2=2
```

## CLIENT

```
CLIENT / >map 2/1

Slot 2 Port 1 Configuration

1) Description (30 chars max)           : ATM PORT
2) Conn Type { PVC(1), SVC(2) }         : PVC
3) Max VCCs (1-1023)                   : 1023
4) Max VCI bits (1..10)                 : 10
5) UNI Type                             : Private
6) Tx SAR Buffer Size (2048-131072)      : 16384
7) Rx SAR Buffer Size (2048-131072)      : 16384
8) Tx Frame Buffer Size (1800-16384)     : 4600
9) Rx Frame Buffer Size (1800-16384)     : 4600
10) Pl Scramble {(False(1),True(2))}    : True
11) Timing Mode {(Loop(1),Local(2))}    : Local
12) Loopback Config { NoLoop(1), DiagLoop(2),
    LineLoop(3) }                       : NoLoop
13) Phy media { SONET(1),SDH(2)}        : SONET

Enter (option=value/save/cancel) : 2=2
```



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# Lan Emulation auf ASM Board (Xylan OmniSwitch)



<p>Slot 2 Port 1 Configuration</p> <p>1) Description (30 chars max) : ATM PORT 2) Conn Type { PVC(1), SVC(2) } : SVC</p> <p>30) Sig version { 3.0(1) 3.1(2) } : 3.0 31) Signaling VCI (0..1023) : 5 32) ILMI Enable {(False(1),True(2))} : True 33) ESI (12 hex-chars) : 0020da7ee98d 34) ILMI VCI (0..1023) : 16 35) ILMI Polling {(Off(1),On(2))} : Off</p> <p>3) Max VCCs (1-1023) : 1023 4) Max VCI bits (1..10) : 10 5) UNI Type : Private 6) Tx SAR Buffer Size (2048-131072) : 16384 7) Rx SAR Buffer Size (2048-131072) : 16384 8) Tx Frame Buffer Size (1800-16384) : 4600 9) Rx Frame Buffer Size (1800-16384) : 4600 10) PI Scramble {(False(1),True(2))} : True 11) Timing Mode {(Loop(1),Local(2))} : Local 12) Loopback Config { NoLoop(1), DiagLoop(2), LineLoop(3) } : NoLoop 13) Phy media { SONET(1),SDH(2)} : SONET</p> <p>Enter (option=value/save/cancel) : <b>30=2</b></p> <p>Slot 2 Port 1 Configuration</p> <p>1) Description (30 chars max) : ATM PORT 2) Conn Type { PVC(1), SVC(2) } : SVC</p> <p>30) Sig version { 3.0(1) 3.1(2) } : 3.1 31) Signaling VCI (0..1023) : 5 32) ILMI Enable {(False(1),True(2))} : True 33) ESI (12 hex-chars) : 0020da7ee98d 34) ILMI VCI (0..1023) : 16 35) ILMI Polling {(Off(1),On(2))} : Off</p> <p>3) Max VCCs (1-1023) : 1023 4) Max VCI bits (1..10) : 10 5) UNI Type : Private 6) Tx SAR Buffer Size (2048-131072) : 16384 7) Rx SAR Buffer Size (2048-131072) : 16384 8) Tx Frame Buffer Size (1800-16384) : 4600 9) Rx Frame Buffer Size (1800-16384) : 4600 10) PI Scramble {(False(1),True(2))} : True 11) Timing Mode {(Loop(1),Local(2))} : Local 12) Loopback Config { NoLoop(1), DiagLoop(2), LineLoop(3) } : NoLoop 13) Phy media { SONET(1),SDH(2)} : SONET</p> <p>Enter (option=value/save/cancel) : <b>35=2</b></p> <p>Slot 2 Port 1 Configuration</p> <p>1) Description (30 chars max) : ATM PORT 2) Conn Type { PVC(1), SVC(2) } : SVC</p> <p>30) Sig version { 3.0(1) 3.1(2) } : 3.1 31) Signaling VCI (0..1023) : 5 32) ILMI Enable {(False(1),True(2))} : True 33) ESI (12 hex-chars) : 0020da7ee98d 34) ILMI VCI (0..1023) : 16 35) ILMI Polling {(Off(1),On(2))} : On</p> <p>3) Max VCCs (1-1023) : 1023 4) Max VCI bits (1..10) : 10 5) UNI Type : Private 6) Tx SAR Buffer Size (2048-131072) : 16384 7) Rx SAR Buffer Size (2048-131072) : 16384 8) Tx Frame Buffer Size (1800-16384) : 4600 9) Rx Frame Buffer Size (1800-16384) : 4600 10) PI Scramble {(False(1),True(2))} : True 11) Timing Mode {(Loop(1),Local(2))} : Local 12) Loopback Config { NoLoop(1), DiagLoop(2), LineLoop(3) } : NoLoop 13) Phy media { SONET(1),SDH(2)} : SONET</p> <p>Enter (option=value/save/cancel) : <b>save</b></p>	<p>Slot 2 Port 1 Configuration</p> <p>1) Description (30 chars max) : ATM PORT 2) Conn Type { PVC(1), SVC(2) } : SVC</p> <p>30) Sig version { 3.0(1) 3.1(2) } : 3.0 31) Signaling VCI (0..1023) : 5 32) ILMI Enable {(False(1),True(2))} : True 33) ESI (12 hex-chars) : 0020da8156fd 34) ILMI VCI (0..1023) : 16 35) ILMI Polling {(Off(1),On(2))} : Off</p> <p>3) Max VCCs (1-1023) : 1023 4) Max VCI bits (1..10) : 10 5) UNI Type : Private 6) Tx SAR Buffer Size (2048-131072) : 16384 7) Rx SAR Buffer Size (2048-131072) : 16384 8) Tx Frame Buffer Size (1800-16384) : 4600 9) Rx Frame Buffer Size (1800-16384) : 4600 10) PI Scramble {(False(1),True(2))} : True 11) Timing Mode {(Loop(1),Local(2))} : Local 12) Loopback Config { NoLoop(1), DiagLoop(2), LineLoop(3) } : NoLoop 13) Phy media { SONET(1),SDH(2)} : SONET</p> <p>Enter (option=value/save/cancel) : <b>30=2</b></p> <p>Slot 2 Port 1 Configuration</p> <p>1) Description (30 chars max) : ATM PORT 2) Conn Type { PVC(1), SVC(2) } : SVC</p> <p>30) Sig version { 3.0(1) 3.1(2) } : 3.1 31) Signaling VCI (0..1023) : 5 32) ILMI Enable {(False(1),True(2))} : True 33) ESI (12 hex-chars) : 0020da8156fd 34) ILMI VCI (0..1023) : 16 35) ILMI Polling {(Off(1),On(2))} : Off</p> <p>3) Max VCCs (1-1023) : 1023 4) Max VCI bits (1..10) : 10 5) UNI Type : Private 6) Tx SAR Buffer Size (2048-131072) : 16384 7) Rx SAR Buffer Size (2048-131072) : 16384 8) Tx Frame Buffer Size (1800-16384) : 4600 9) Rx Frame Buffer Size (1800-16384) : 4600 10) PI Scramble {(False(1),True(2))} : True 11) Timing Mode {(Loop(1),Local(2))} : Local 12) Loopback Config { NoLoop(1), DiagLoop(2), LineLoop(3) } : NoLoop 13) Phy media { SONET(1),SDH(2)} : SONET</p> <p>Enter (option=value/save/cancel) : <b>35=2</b></p> <p>Slot 2 Port 1 Configuration</p> <p>1) Description (30 chars max) : ATM PORT 2) Conn Type { PVC(1), SVC(2) } : SVC</p> <p>30) Sig version { 3.0(1) 3.1(2) } : 3.1 31) Signaling VCI (0..1023) : 5 32) ILMI Enable {(False(1),True(2))} : True 33) ESI (12 hex-chars) : 0020da8156fd 34) ILMI VCI (0..1023) : 16 35) ILMI Polling {(Off(1),On(2))} : On</p> <p>3) Max VCCs (1-1023) : 1023 4) Max VCI bits (1..10) : 10 5) UNI Type : Private 6) Tx SAR Buffer Size (2048-131072) : 16384 7) Rx SAR Buffer Size (2048-131072) : 16384 8) Tx Frame Buffer Size (1800-16384) : 4600 9) Rx Frame Buffer Size (1800-16384) : 4600 10) PI Scramble {(False(1),True(2))} : True 11) Timing Mode {(Loop(1),Local(2))} : Local 12) Loopback Config { NoLoop(1), DiagLoop(2), LineLoop(3) } : NoLoop 13) Phy media { SONET(1),SDH(2)} : SONET</p> <p>Enter (option=value/save/cancel) : <b>save</b></p>
---	---



# Lan Emulation auf ASM Board (Xylan OmniSwitch)



```
CLIENT />reboot
Confirm? (n) : y
System going down immediately...
switch[48b11a10]: System rebooted by admin
```

Nachdem die physikalischen Ports beider Switche mit SVC und Signalling 3.1 belegt wurde muss ein Reboot durchgeführt werden. Es sei nochmals darauf hingewiesen, dass die Fiberverbindungen aktiv gesteckt ist.

## CREATE LES/BUS

```
SERVER />lsmcfg 2/1
Creating LSM service ... please wait
LSM service created for slot 2, port 1

1) Global elan name :
2) Create LES/BUS : No
3) Modify LES/BUS : No
4) Delete LES/BUS : No
5) Create LECS : No
6) Modify LECS : No
7) Delete LECS : No
8) Add elan to LECS database : No
9) Delete elan from LECS database : No
10) Add policy to elan in LECS database : No
11) Delete policy from elan in LECS database: No

1 = No, 2 = Yes

Enter (option=value/exit) : 2=2

LES/BUS for Slot 2 Port 1

1) ELAN name (32 chars max) :
2) ELAN type { 802.3 (1), 802.5 (2) } : 802.3
3) Max Data Frame Size { 1516 (1), 4544 (2),
9234 (3), 18190 (4) } : 1516
4) Control time-out { 10 - 300 seconds } : 120
5) Max. Frame age { 1 - 4 seconds } : 1
6) Enable redundancy { No (1), Yes (2) } : NO
7) Admin Status { Disable (1), Enable (2) } : Enable
8) LES/BUS Security { Disable (1), Enable (2) } : Disable

Enter (option=value/save/cancel) : 1=eth1

LES/BUS for Slot 2 Port 1

1) ELAN name (32 chars max) : eth1
2) ELAN type { 802.3 (1), 802.5 (2) } : 802.3
3) Max Data Frame Size { 1516 (1), 4544 (2),
9234 (3), 18190 (4) } : 1516
4) Control time-out { 10 - 300 seconds } : 120
5) Max. Frame age { 1 - 4 seconds } : 1
6) Enable redundancy { No (1), Yes (2) } : NO
7) Admin Status { Disable (1), Enable (2) } : Enable
8) LES/BUS Security { Disable (1), Enable (2) } : Disable
```

```
Enter (option=value/save/cancel) : save

Creating LES/BUS pair for elan 'eth1' on slot 2, port 1, please
wait...
LES/BUS pair for elan 'eth1' created on slot 2, port 1

1) Global elan name :
2) Create LES/BUS : No
3) Modify LES/BUS : No
4) Delete LES/BUS : No
5) Create LECS : No
6) Modify LECS : No
7) Delete LECS : No
8) Add elan to LECS database : No
9) Delete elan from LECS database : No
10) Add policy to elan in LECS database : No
11) Delete policy from elan in LECS database: No

1 = No, 2 = Yes
```

## CREATE LECS

```
Enter (option=value/exit) : 5=2

Configuration for LECS at Slot 2 Port 1

1) Max Config Direct VCCs to LECS {1 - 128}: 128
```

```
2) Seconds before VCC declare idle {1 - 43200}: 60
3) Priority for ELAN name policies {0 - 65535}: 1
4) Priority for ELAN type policies {0 - 65535}: 0 - not used
5) Priority for ATM addr prefix policies {0 - 65535}: 0 - not used
6) Priority for MAC address policies {0 - 65535}: 0 - not used
7) Priority for Max. Frame Size policies {0 - 65535}: 0 - not used
8) Priority for Route Descriptor policies {0 - 65535}: 0 - not used
9) Admin Status { Disable (1), Enable (2) } : Enable

Enter (option=value/save/cancel) : save
Creating LECS on slot 2, port 1, please wait...
LECS created on slot 2, port 1

1) Global elan name :
2) Create LES/BUS : No
3) Modify LES/BUS : No
4) Delete LES/BUS : No
5) Create LECS : No
6) Modify LECS : No
7) Delete LECS : No
8) Add elan to LECS database : No
9) Delete elan from LECS database : No
10) Add policy to elan in LECS database : No
11) Delete policy from elan in LECS database: No

1 = No, 2 = Yes

Enter (option=value/exit) : exit
```

## COPY LES ATM ADDRESS IN CLIPBOARD

```
SERVER />ls1b 2/1
ELAN Type (E=Ethernet/802.3, T=Token Ring/802.5)
| LES-BUS State (UP=Up, ID=Idle, ND=Net Down, ER=Error/Down,
| **=Other: Work with specific LES-BUS to see actual
state)
| | ELAN Name LES ATM Addr
| | -----
E UP eth1
3903488001bc900001000100010020da7ee98dc1
SERVER />
```

```
SERVER />lsmcfg 2/1

1) Global elan name :
2) Create LES/BUS : No
3) Modify LES/BUS : No
4) Delete LES/BUS : No
5) Create LECS : No
6) Modify LECS : No
7) Delete LECS : No
8) Add elan to LECS database : No
9) Delete elan from LECS database : No
10) Add policy to elan in LECS database : No
11) Delete policy from elan in LECS database: No

1 = No, 2 = Yes

Enter (option=value/exit) : 8=2

1) ELAN name (32 chars max) :
2) ELAN type { 802.3 (1), 802.5 (2) } : 802.3
3) Max Frame Size { 1516 (1), 4544 (2),
9234 (3), 18190 (4) } : 1516
4) Primary LES's ATM address :
index ATM address
-----
5) Backup LES { No (1), Yes (2) } : No
```



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# Lan Emulation auf ASM Board (Xylan OmniSwitch)



1 = No, 2 = Yes

Enter (option=value/save/cancel) : **l=eth1**

```
1) ELAN name (32 chars max) : eth1
2) Elan type {802.3 (1), 802.5 (2)} : 802.3
3) Max Frame Size { 1516 (1), 4544 (2)
  9234 (3), 18190 (4) } : 1516
4) Primary LES's ATM address :
   index ATM address
   -----
   1 3903488001bc900001000100010020da7ee98dcl
5) Backup LES { No (1), Yes (2) } : No
```

Enter (option=value/save/cancel) :

**4=3903488001bc900001000100010020da7ee98dcl**

```
1) ELAN name (32 chars max) : eth1
2) Elan type {802.3 (1), 802.5 (2)} : 802.3
3) Max Frame Size { 1516 (1), 4544 (2)
  9234 (3), 18190 (4) } : 1516
4) Primary LES's ATM address :
   index ATM address
   -----
   1 3903488001bc900001000100010020da7ee98dcl
5) Backup LES { No (1), Yes (2) } : No
```

Enter (option=value/save/cancel) : **save**

elan eth1 added to the LECS database

```
1) Global elan name :
2) Create LES/BUS : No
3) Modify LES/BUS : No
4) Delete LES/BUS : No
5) Create LECS : No
6) Modify LECS : No
7) Delete LECS : No
8) Add elan to LECS database : No
9) Delete elan from LECS database : No
10) Add policy to elan in LECS database : No
11) Delete policy from elan in LECS database: No
```

1 = No, 2 = Yes

Enter (option=value/exit) : **10=2**

Enter (elan name) : **eth1**

Add policy value to elan 'eth1'

```
1) By Elan name { No (1), Yes (2) } : No
2) By Elan type { No (1), Yes (2) } : No
3) By ATM address prefix { No (1), Yes (2) } : No
4) By MAC address { No (1), Yes (2) } : No
5) By Max. Frame size { No (1), Yes (2) } : No
6) By Route Descriptor { No (1), Yes (2) } : No
```

Enter (option=value/exit) : **1=2**

Enter elan name : **eth1**

policy added to LECS database for elan 'eth1'

Add policy value to elan 'eth1'

```
1) By Elan name { No (1), Yes (2) } : No
2) By Elan type { No (1), Yes (2) } : No
3) By ATM address prefix { No (1), Yes (2) } : No
4) By MAC address { No (1), Yes (2) } : No
5) By Max. Frame size { No (1), Yes (2) } : No
6) By Route Descriptor { No (1), Yes (2) } : No
```

Enter (option=value/exit) : **exit**

```
1) Global elan name :
2) Create LES/BUS : No
3) Modify LES/BUS : No
4) Delete LES/BUS : No
5) Create LECS : No
6) Modify LECS : No
7) Delete LECS : No
8) Add elan to LECS database : No
9) Delete elan from LECS database : No
10) Add policy to elan in LECS database : No
11) Delete policy from elan in LECS database: No
```

Enter (option=value/exit) : **exit**

## CREATE LAN EMULATION SERVICE ON SERVER

SERVER / >**cas 2/1**

Slot 2 Port 1 Service 3 Configuration

```
1) Description (30 chars max) : PTOp Bridging Service 3
2) Service type { LANE client(1),
  Trunking (4),
  Classical IP(5),
  PTOp Bridging(6),
  VLAN cluster(7) } : PTOp Bridging
10) Encaps Type { Private(1),
  RFC1483(2) } : Private
3) Connection Type { PVC(1),
  SVC(2) } : PVC
4) PTOp Group : 1
5) PTOp connection : none
6) Admin Status { disable(1),
  enable(2) } : Enable
```

Enter (option=value/save/cancel) : **2=1**

Slot 2 Port 1 Service 3 Configuration

```
1) Description (30 chars max) : LAN Emulation Service
3
2) Service type { LANE client(1),
  Trunking (4),
  Classical IP(5),
  PTOp Bridging(6),
  VLAN cluster(7) } : LAN Emulation
21) LAN type { 802.3 (1),
  802.5 (2) } : 802.3
22) Change LANE Cfg { NO (1),
  YES (2) } : NO
3) Connection Type { PVC(1),
  SVC(2) } : SVC
30) SEL for the ATM address : 03
4) LAN Emulated Group : 1
5) LECS Address (40-char-hex) :
47007900000000000000000000000000A03E00000100
6) Admin Status { disable(1),
  enable(2) } : Enable
```

Enter (option=value/save/cancel) : **22=2**

Slot 2 Port 1 Service 3 LANE Configuration Parameters

```
1) Proxy { NO (1), YES (2) } : YES
2) Max Frame Size { 1516 (1), 4544 (2)
  9234 (3), 18190 (4) } : 1516
3) Use translation options(NO (1), YES (2) ) : Yes (use Swch menu to
set)
4) Use Fwd Delay time { NO (1), YES (2) } : NO
5) Use LE Cfg Server (LECS){ NO (1), YES (2)} : YES
6) Use Default LECS address { NO(1), YES (2)} : YES
7) Control Time-out (in seconds) : 10
8) Max Unknown Frame Count : 10
9) Max Unknown Frame Time (in seconds) : 1
10) VCC Time-out Period (in minutes) : 20
11) Max Retry Count : 2
12) Aging Time (in seconds) : 300
13) Expectd LE_ARP Resp Time (in seconds) : 1
14) Flush Time-out (in seconds) : 4
15) Path Switching Delay (in seconds) : 6
16) ELAN name (32 chars max) :
```

Enter (option=value/save/cancel) : **16=eth1**

Slot 2 Port 1 Service 3 LANE Configuration Parameters

```
1) Proxy { NO (1), YES (2) } : YES
2) Max Frame Size { 1516 (1), 4544 (2)
  9234 (3), 18190 (4) } : 1516
3) Use translation options(NO (1), YES (2) ) : Yes (use Swch menu to
set)
4) Use Fwd Delay time { NO (1), YES (2) } : NO
5) Use LE Cfg Server (LECS){ NO (1), YES (2)} : YES
6) Use Default LECS address { NO(1), YES (2)} : YES
7) Control Time-out (in seconds) : 10
8) Max Unknown Frame Count : 10
9) Max Unknown Frame Time (in seconds) : 1
10) VCC Time-out Period (in minutes) : 20
11) Max Retry Count : 2
12) Aging Time (in seconds) : 300
13) Expectd LE_ARP Resp Time (in seconds) : 1
14) Flush Time-out (in seconds) : 4
15) Path Switching Delay (in seconds) : 6
16) ELAN name (32 chars max) : eth1
```

Enter (option=value/save/cancel) : **save**



## Lan Emulation auf ASM Board (Xylan OmniSwitch)



```
3) Connection Type { PVC(1),          : SVC
                    SVC(2) }          : SVC
30) SEL for the ATM address          : 02
4) LAN Emulated Group                : 1
5) LECS Address (40-char-hex)       :
4700790000000000000000000000A03E00000100

6) Admin Status { disable(1),        : Enable
                  enable(2) }        : Enable

Enter (option=value/save/cancel) : save
```

Nachdem alle oben aufgeführten Konfigurationsschritte durchgefuehrt wurden, muss ab hier ein Ping ueber die ATM Verbindungen zustandekommen.

```
CLIENT / >
CLIENT / >ping 200.1.1.2
Count (0 for infinite) (0) :
Size (64) :
Timeout (1) :
Ping starting, hit <RETURN> to stop
PING 200.1.1.2: 64 data bytes

[0      ] .....
[50     ] .....
[100    ] .....
[150    ] .....
[200    ] .....
[250    ] .....
[300    ] .....
[350    ] .....
[400    ] .....
.....

----200.1.1.2 PING Statistics----
419 packets transmitted, 418 packets received, 0% packet loss
Ping cancelled.
CLIENT / >
```



This technical document has been created and evaluated by myself with the purpose to help friends to get into new technology and installations. There is no financial interest, however, please respect the copyright.



## CONFIGURE ATM NIC on NT

Verwendeter Treiber von Interphase war die Version xxxx für Windows NT 4.0. Installiert wird der Treiber genauso wie jede andere Netzwerkkarte. Man wird allerdings mehrere ATM Services vorfinden. Nachfolgende Screenshots lassen die Einstellungen erkennen.

