

# Configuring a TN3270 Server Via DLSw+ to Remote MVS and VM Hosts

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## Introduction

This document provides a sample configuration for configuring a TN3270 server via DLSw+ to remote Multiple Virtual Storage (MVS) and Virtual Media (VM) hosts

## Before You Begin

### Conventions

For more information on document conventions, see the Cisco Technical Tips Conventions.

### Prerequisites

There are no specific prerequisites for this document.

### Components Used

This document is not restricted to specific software and hardware versions.

The information presented in this document was created from devices in a specific lab environment. All of the devices used in this document started with a cleared (default) configuration. If you are working in a live network, ensure that you understand the potential impact of any command before using it.

### Design Notes

- This sample configuration includes two mainframes: one running MVS, one running VM. Both are channel-attached to the remote Channel Interface Processor A (CIPA) Cisco router.
- The LOCAL Cisco router is configured with the CIP TN3270 server.
- There is a DLSw+ cloud between routers.
- The TN3270 server defines two IP addresses to connect either to remote MVS or VM hosts via the DLSw+ cloud:

- ◆ 10.17.42.13 255.255.255.0: connect to VM
- ◆ 10.17.43.14 255.255.255.0: connect to MVS
- The CIP virtual interface x/2 is used only in the LOCAL Cisco router for TN3270 server configuration. None of the physical channel interfaces are used. There is no channel connection to the VTAM host through the CIP on the LOCAL Cisco router.

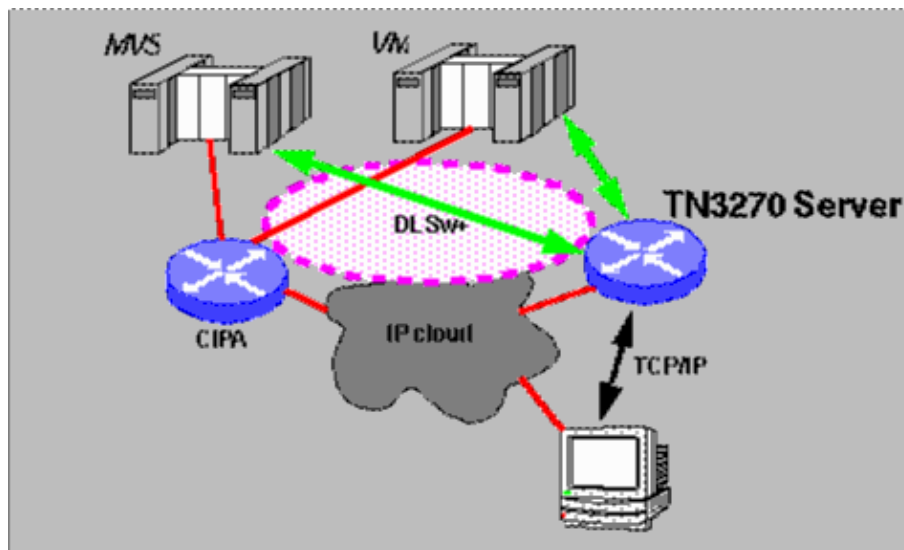
## Configure

In this section, you are presented with the information to configure the features described in this document.

**Note:** To find additional information on the commands used in this document, use the Command Lookup Tool (registered customers only).

## Network Diagram

This document uses the network setup shown in the diagram below.



## Configurations

This document uses the configurations shown below.

- IOCP
- VTAM XCA Major Node on VM
- VTAM XCA Major Node on MVS
- VTAM SW Major Node on VM
- VTAM SW Major Node on MVS
- VTAM LU Major Node on VM
- VTAM LU Major Node on MVS
- Router Configuration for LOCAL
- Router Configuration for CIPA

### IOCP

**CHPID 22 is used to connect to MVS Host**

\*

```

CHPID PATH=((22)),TYPE=CNC
CNTLUNIT CUNUMBR=0100,PATH=(22),UNITADD=((E0,16)),UNIT=SCTC, SHARED=N      X
IODEVICE ADDRESS=(8E0,16),CUNUMBR=(0100),UNIT=SCTC

```

\*

### CHPID 23 is used to connect to VM Host

\*

\*

```

CHPID PATH=((23)),TYPE=CNC
CNTLUNIT CUNUMBR=0200,PATH=(23),UNITADD=((E0,16)),UNIT=SCTC, SHARED=N      X
IODEVICE ADDRESS=(7E0,16),CUNUMBR=(0200),UNIT=SCTC

```

### VTAM XCA Major Node on VM

```

===== XCALAB  VBUILD TYPE=XCA
===== XCA7EC  PORT    ADAPNO=1,CUADDR=7EC,SAPADDR=04,MEDIUM=RING,TIMER=60
===== *
===== GRP7EC  GROUP  ANSWER=ON,
=====                          AUTOGEN=(10,L,P),
=====                          CALL=INOUT,
=====                          DIAL=YES,
=====                          ISTATUS=ACTIVE
===== * * * End of File * * *

```

### VTAM XCA Major Node on MVS

```

000001 XCA8E0  VBUILD TYPE=XCA
000002 PORTLAB2 PORT    ADAPNO=0,CUADDR=8E8,SAPADDR=04,MEDIUM=RING,TIMER=60
000004 *
000005 GROUCCIP GROUP  DIAL=YES,ISTATUS=ACTIVE,ANSWER=ON,CALL=INOUT
000006 LICIP1   LINE
000007 PUCIP1   PU

```

### VTAM SW Major Node on VM

```

===== LABTN32  VBUILD TYPE=SWNET
===== LABPU01  PU     ADDR=01,
=====                          IDBLK=05D,
=====                          IDNUM=0200A,
=====                          ISTATUS=ACTIVE,
=====                          MAXPATH=1,
=====                          PUTYPE=2,
=====                          LUGROUP=LABLUGRP,
=====                          LUSEED=LAB01T##
===== *

```

### VTAM SW Major Node on MVS

```

000001 SWTN3270 VBUILD TYPE=SWNET
000002 A3270PU  PU     ADDR=01,
000003                          PUTYPE=2,
000004                          LUGROUP=DDDLULAB,LUSEED=A3270L##,
000005                          PACING=8,VPACING=8,
000006                          IDBLK=05D,
000007                          IDNUM=0100A
000008 *

```

### VTAM LU Major Node on VM

```

===== LUTNSYED  VBUILD TYPE=LUGROUP
===== LABLUGRP  LUGROUP

```

```

===== 327802    LU    DLOGMOD=D4A32782,MODETAB=ISTINCLM,LOGAPPL=VM
===== 327803    LU    DLOGMOD=D4A32783,MODETAB=ISTINCLM,LOGAPPL=VM
===== 327804    LU    DLOGMOD=D4A32784,MODETAB=ISTINCLM,LOGAPPL=VM
===== 327805    LU    DLOGMOD=D4A32785,MODETAB=ISTINCLM,LOGAPPL=VM
===== 327902    LU    DLOGMOD=D4A32782,MODETAB=ISTINCLM,LOGAPPL=VM
===== 327903    LU    DLOGMOD=D4A32783,MODETAB=ISTINCLM,LOGAPPL=VM
===== 327904    LU    DLOGMOD=D4A32784,MODETAB=ISTINCLM,LOGAPPL=VM
===== 327905    LU    DLOGMOD=D4A32785,MODETAB=ISTINCLM,LOGAPPL=VM
===== 327802E   LU    DLOGMOD=SNX32702,MODETAB=ISTINCLM,LOGAPPL=VM
===== 327803E   LU    DLOGMOD=SNX32703,MODETAB=ISTINCLM,LOGAPPL=VM
===== 327804E   LU    DLOGMOD=SNX32704,MODETAB=ISTINCLM,LOGAPPL=VM
===== 327805E   LU    DLOGMOD=SNX32705,MODETAB=ISTINCLM,LOGAPPL=VM
===== 327902E   LU    DLOGMOD=SNX32702,MODETAB=ISTINCLM,LOGAPPL=VM
===== 327903E   LU    DLOGMOD=SNX32703,MODETAB=ISTINCLM,LOGAPPL=VM
===== 327904E   LU    DLOGMOD=SNX32704,MODETAB=ISTINCLM,LOGAPPL=VM
===== 327905E   LU    DLOGMOD=SNX32705,MODETAB=ISTINCLM,LOGAPPL=VM
===== 3278S2    LU    DLOGMOD=D4A32782,MODETAB=ISTINCLM,LOGAPPL=VM
===== 3278S3    LU    DLOGMOD=D4A32783,MODETAB=ISTINCLM,LOGAPPL=VM
===== 3278S4    LU    DLOGMOD=D4A32784,MODETAB=ISTINCLM,LOGAPPL=VM
===== 3278S5    LU    DLOGMOD=D4A32785,MODETAB=ISTINCLM,LOGAPPL=VM
===== 3279S2    LU    DLOGMOD=D4A32782,MODETAB=ISTINCLM,LOGAPPL=VM
===== 3279S3    LU    DLOGMOD=D4A32783,MODETAB=ISTINCLM,LOGAPPL=VM
===== 3279S4    LU    DLOGMOD=D4A32784,MODETAB=ISTINCLM,LOGAPPL=VM
===== 3279S5    LU    DLOGMOD=D4A32785,MODETAB=ISTINCLM,LOGAPPL=VM
===== 3278S2E   LU    DLOGMOD=SNX32702,MODETAB=ISTINCLM,LOGAPPL=VM
===== 3278S3E   LU    DLOGMOD=SNX32703,MODETAB=ISTINCLM,LOGAPPL=VM
===== 3278S4E   LU    DLOGMOD=SNX32704,MODETAB=ISTINCLM,LOGAPPL=VM
===== 3278S5E   LU    DLOGMOD=SNX32705,MODETAB=ISTINCLM,LOGAPPL=VM
===== 3279S2E   LU    DLOGMOD=SNX32702,MODETAB=ISTINCLM,LOGAPPL=VM
===== 3279S3E   LU    DLOGMOD=SNX32703,MODETAB=ISTINCLM,LOGAPPL=VM
===== 3279S4E   LU    DLOGMOD=SNX32704,MODETAB=ISTINCLM,LOGAPPL=VM
===== 3279S5E   LU    DLOGMOD=SNX32705,MODETAB=ISTINCLM,LOGAPPL=VM
===== @        LU    DLOGMOD=D4A32782,MODETAB=ISTINCLM,LOGAPPL=VM

```

### VTAM LU Major Node on MVS

```

TN3270G  VBUILD TYPE=LUGROUP
*
DDDLULAB LUGROUP
*
327802    LU    DLOGMOD=D4C32782,
              MODETAB=ISTINCLM,
              USSTAB=USSTCPIP,
              SSCPFM=USS3270
              X
              X
              X
327803    LU    DLOGMOD=D4C32783,
              MODETAB=ISTINCLM,
              USSTAB=USSTCPIP,
              SSCPFM=USS3270
              X
              X
              X
327804    LU    DLOGMOD=D4C32784,
              MODETAB=ISTINCLM,
              USSTAB=USSTCPIP,
              SSCPFM=USS3270
              X
              X
              X
327805    LU    DLOGMOD=D4C32785,
              MODETAB=ISTINCLM,
              USSTAB=USSTCPIP,
              SSCPFM=USS3270
              X
              X
              X
327902    LU    DLOGMOD=D4C32782,
              MODETAB=ISTINCLM,
              USSTAB=USSTCPIP,
              SSCPFM=USS3270
              X
              X
              X
327903    LU    DLOGMOD=D4C32783,
              MODETAB=ISTINCLM,
              USSTAB=USSTCPIP,
              SSCPFM=USS3270
              X
              X
              X
327904    LU    DLOGMOD=D4C32784,
              X

```

		USSTAB=USSTCPIP, SSCPFM=USS3270	X
327905	LU	DLOGMOD=D4C32785, MODETAB=ISTINCLM, USSTAB=USSTCPIP, SSCPFM=USS3270	X X X
327802E	LU	DLOGMOD=SNX32702, MODETAB=ISTINCLM, USSTAB=USSTCPIP, SSCPFM=USS3270	X X X
327803E	LU	DLOGMOD=SNX32703, MODETAB=ISTINCLM, USSTAB=USSTCPIP, SSCPFM=USS3270	X X X
327804E	LU	DLOGMOD=SNX32704, MODETAB=ISTINCLM, USSTAB=USSTCPIP, SSCPFM=USS3270	X X X
327805E	LU	DLOGMOD=SNX32705, MODETAB=ISTINCLM, USSTAB=USSTCPIP, SSCPFM=USS3270	X X X
327902E	LU	DLOGMOD=SNX32702, MODETAB=ISTINCLM, USSTAB=USSTCPIP, SSCPFM=USS3270	X X X
327903E	LU	DLOGMOD=SNX32703, MODETAB=ISTINCLM, USSTAB=USSTCPIP, SSCPFM=USS3270	X X X
327904E	LU	DLOGMOD=SNX32704, MODETAB=ISTINCLM, USSTAB=USSTCPIP, SSCPFM=USS3270	X X X
327905E	LU	DLOGMOD=SNX32705, MODETAB=ISTINCLM, USSTAB=USSTCPIP, SSCPFM=USS3270	X X X
3278S2	LU	DLOGMOD=D4C32782, MODETAB=ISTINCLM, USSTAB=USSSNA, SSCPFM=USSSCS	X X X
3278S3	LU	DLOGMOD=D4C32783, MODETAB=ISTINCLM, USSTAB=USSSNA, SSCPFM=USSSCS	X X X
3278S4	LU	DLOGMOD=D4C32784, MODETAB=ISTINCLM, USSTAB=USSSNA, SSCPFM=USSSCS	X X X
3278S5	LU	DLOGMOD=D4C32785, MODETAB=ISTINCLM, USSTAB=USSSNA, SSCPFM=USSSCS	X X X
3279S2	LU	DLOGMOD=D4C32782, MODETAB=ISTINCLM, USSTAB=USSSNA, SSCPFM=USSSCS	X X X
3279S3	LU	DLOGMOD=D4C32783, MODETAB=ISTINCLM, USSTAB=USSSNA, SSCPFM=USSSCS	X X X
3279S4	LU	DLOGMOD=D4C32784, MODETAB=ISTINCLM, USSTAB=USSSNA, SSCPFM=USSSCS	X X X

3279S5	LU	DLOGMOD=D4C32785, MODETAB=ISTINCLM, USSTAB=USSSNA, SSCPFM=USSSCS	X X X
3278S2E	LU	DLOGMOD=SNX32702, MODETAB=ISTINCLM, USSTAB=USSSNA, SSCPFM=USSSCS	X X X
3278S3E	LU	DLOGMOD=SNX32703, MODETAB=ISTINCLM, USSTAB=USSSNA, SSCPFM=USSSCS	X X X
3278S4E	LU	DLOGMOD=SNX32704, MODETAB=ISTINCLM, USSTAB=USSSNA, SSCPFM=USSSCS	X X X
3278S5E	LU	DLOGMOD=SNX32705, MODETAB=ISTINCLM, USSTAB=USSSNA, SSCPFM=USSSCS	X X X
3279S2E	LU	DLOGMOD=SNX32702, MODETAB=ISTINCLM, USSTAB=USSSNA, SSCPFM=USSSCS	X X X
3279S3E	LU	DLOGMOD=SNX32703, MODETAB=ISTINCLM, USSTAB=USSSNA, SSCPFM=USSSCS	X X X
3279S4E	LU	DLOGMOD=SNX32704, MODETAB=ISTINCLM, USSTAB=USSSNA, SSCPFM=USSSCS	X X X
3279S5E	LU	DLOGMOD=SNX32705, MODETAB=ISTINCLM, USSTAB=USSSNA, SSCPFM=USSSCS	X X X
@	LU	DLOGMOD=D4C32782, MODETAB=ISTINCLM, USSTAB=USSSNA, SSCPFM=USSSCS	X X X

### Router Configuration for LOCAL

```

!
version 11.0
service timestamps debug datetime
service timestamps log uptime
service udp-small-servers
service tcp-small-servers
!
hostname LOCAL
!
boot system flash slot0:gs7-k-mz.tn3270-960621
!
source-bridge ring-group 39
dlsw local-peer peer-id 10.17.1.39
dlsw remote-peer tcp 0 192.71.1.49
!
interface Channell1/0
no ip address
no keepalive
shutdown
!
interface Channell1/2
ip address 10.17.42.99 255.255.255.0

```

```

ip address 10.17.43.99 255.255.255.0 secondary
no keepalive
max-llc2-sessions 100
lan TokenRing 0
  source-bridge 257 1 39
  adapter 0 4000.0000.0066
tn3270-server
  maximum-lus 128
  unbind-action keep
  pu LABPU01 05D0200A 10.17.42.13 token-adapter 0 70 rmac 4000.000F.000F rsap 04
  pu A3270PU 05D0100A 10.17.43.14 token-adapter 0 74 rmac 4000.000E.000E rsap 04
!
interface TokenRing3/0
  mac-address 4000.0000.0039
  ip address 171.68.120.39 255.255.255.0 secondary
  ip address 10.17.1.39 255.255.255.0
  no ip redirects
  no ip route-cache
  ring-speed 16
  source-bridge 1024 10 39
  source-bridge spanning
!
router igrp 777
  network 10.0.0.0
!
ip default-gateway 10.17.1.1
ip route 0.0.0.0 0.0.0.0 10.17.1.1
ip route 171.68.118.103 255.255.255.255 10.17.1.1
!
logging buffered 50000
!
line con 0
  exec-timeout 0 0
line aux 0
  transport input all
line vty 0 4
  exec-timeout 0
  login
!
end

```

### Router Configuration for CIPA

```

!
version 11.0
service udp-small-servers
service tcp-small-servers
!
hostname CIPA
!
boot system rsp-ak-mz.110-8 171.68.118.103
boot system flash slot0:
enable secret 5 $1$bKGn$JE6B6FuyadLomrdIYRmq11
!
source-bridge ring-group 39
dlsw local-peer peer-id 10.17.1.49
dlsw remote-peer tcp 0 192.71.1.39
!
interface Channel0/0
  no ip address
  no keepalive
  csna C000 E9
  csna C200 EC
!
interface Channel0/2

```

```
no keepalive
lan TokenRing 0
  source-bridge 999 1 39
  adapter 0 4000.000e.000e

!--- Bound for TN3270 on CIP.

  adapter 1 4000.000f.000f
!
interface Serial2/0
description CNT link to orp3 sl/4
no ip address
no ip route-cache
bandwidth 1544
no keepalive
shutdown
no fair-queue
clockrate 1300000
no cdp enable
!
interface Serial2/1
no ip address
encapsulation sdhc
no ip route-cache
bandwidth 1544
no keepalive
clockrate 56000
sdhc address C
!
interface TokenRing3/0
ip address 10.17.1.49 255.255.255.0
no ip redirects
no ip route-cache
ring-speed 16
!
interface TokenRing3/3
mac-address 4000.0000.054b
no ip address
no ip route-cache
ring-speed 16
source-bridge 1024 2 39
!
router igrp 777
network 10.0.0.0
!
ip default-gateway 10.17.1.1
ip route 0.0.0.0 0.0.0.0 10.17.1.1
ip route 0.0.0.0 255.255.255.255 10.17.1.1
ip route 171.68.118.103 255.255.255.255 10.17.1.1
!
logging buffered 50000
!
line con 0
  exec-timeout 0 0
line aux 0
  transport input all
line vty 0 4
  exec-timeout 0 0
  login
!
end
```

## Verify

There is currently no verification procedure available for this configuration.

## Troubleshoot

There is currently no specific troubleshooting information available for this configuration.

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## Related Information

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