Session Switching with DLUR and DLUS Using Static Links and Dynamic PUs

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Contents

Introduction

This document provides a sample configuration for a Cisco TN3270 Server that is using session switching with a Dependent Logical Unit Requester (DLUR) and a Dependent Logical Unit Server (DLUS) that is using static links and dynamic Physical Units (PUs).

Prerequisites

Requirements

There are no specific requirements for this document.

Components Used

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

The information in this document was created from the devices in a specific lab environment. All of the devices used in this document started with a cleared (default) configuration. If your network is live, make sure that you understand the potential impact of any command.

Conventions

For more information on document conventions, refer to Cisco Technical Tips Conventions.
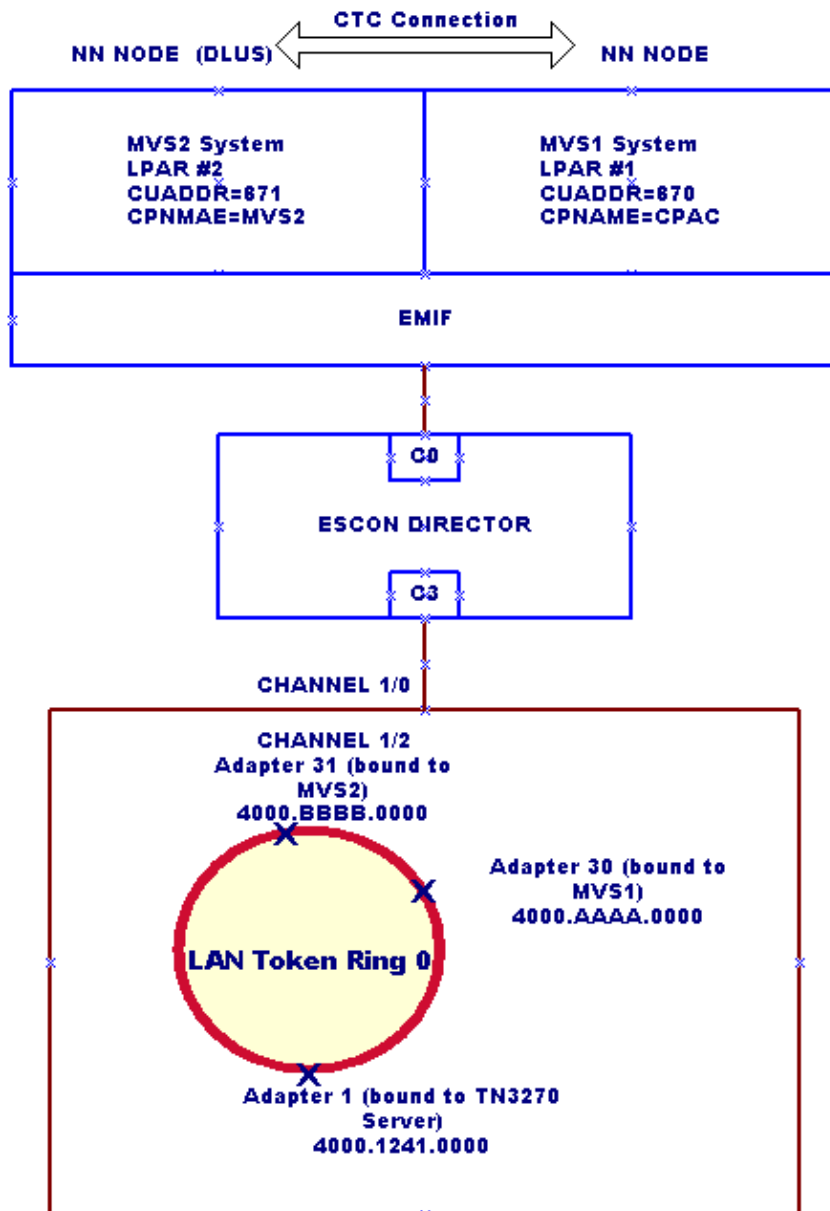
Configure

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 this network setup:

CTC Connection

NN NODE (DLUS) ⟺ NN NODE

MVS2 System
LPAR #2
CUADDR=871
CPNMAE=MVS2

MVS1 System
LPAR #1
CUADDR=870
CPNAME=CPAC

EMIF

C0

ESCON DIRECTOR

C3

CHANNEL 1/0

CHANNEL 1/2
Adapter 31 (bound to MVS2)
4000.BBBB.0000

Adapter 30 (bound to MVS1)
4000.AAAA.0000

LAN Token Ring 0

Adapter 1 (bound to TN3270 Server)
4000.1241.0000

Configuration

This is in place for this sample configuration:

- Two Logical Partitions (LPARs) that are running Multiple Virtual Storage (MVS) in an Enterprise System Connection (ESCON) Multiple Image Facility (EMIF) mainframe:

  - LPAR #1: MVS1 System. This system should be configured as a Network Node (NN) only.
  - LPAR #2: MVS2 System. This system should be configured as an NN and a primary DLUS.
- No Advanced Peer–to–Peer Networking (APPN) subsystem on the Router, except for the Cisco TN3270 Server DLUR, which is used as an end node.
- The Cisco TN3270 Server Listening IP address 172.26.19.99 connected to the DLUS (MVS2).
- Static links configured under the Cisco TN3270 Server DLUR for connection to the MVS1 and

MVS2.
- MVS1 connected to MVS2 through the Channel To Channel (CTC) link.
- Control Point to Control Point (CP–CP) Connection established between MVS1 and MVS2 over the CTC link via Multi–Path Channel (MPC). (Transport Resource List [TRL] and LOCAL Major Node definitions are required in MVS1 and MVS2.)

This document uses these configurations:

- Router Configuration
- External Communication Adapter (XCA) Major Node in MVS1: XCAMVS1
- XCA Major Node in MVS2: XCAMVS2
- Logical Unit (LU) Major Node in MVS2: LUCPCP
- Switched Network (SWNET) Major Node in MVS2: SW1TSYSP
- TRL Network Node in MVS1 for the CTC Connection: MPCM1ICN
- LOCAL Major Node in MVS1 for the CTC Connection: TRLM1ICN
- TRL Network Node in MVS2 for the CTC Connection: MPCM2NN
- LOCAL Major Node in MVS2 for the CTC Connection: TRLM2NN

Router Configuration

```
!
version 11.2
service udp-small-servers
service tcp-small-servers
!
interface TokenRing0/0
 ip address 172.26.7.16 255.255.255.0
 ring-speed 16
!
interface Channel1/0
 csna C010 70

!--- This is the Cisco Systems Network Architecture (SNA) connection to MVS1.

 csna C020 71

!--- This is the Cisco SNA connection to MVS2.

!
interface Channel1/2
 ip address 172.26.19.98 255.255.255.224
 no keepalive
 lan TokenRing 0
  adapter 1 4000.1241.1000

!--- This is bound to the TN3270 server.

  adapter 30 4000.aaaa.0000

!--- This is bound to the MVS1 Cisco SNA connection.

  adapter 31 4000.bbbb.0000

!--- This is bound to the MVS2 Cisco SNA connection.

 tn3270-server
  dlur NETA.WALL NETA.MVS2

!--- The DLUR: NETA.WALL and the DLUS: NETA.MVS2.

   lsap token-adapter 1
    link CPAC  lsap C0   rmac 4000.aaaa.0000 rsap 04
```

```
    link MVS2  lsap C0   rmac 4000.bbbb.0000 rsap 04
   pu dlurpup eeeeffff 172.26.19.99
!
router eigrp 109
 network 172.26.0.0
!
line con 0
 exec-timeout 0 0
line aux 0
line vty 0 4
 password cisco
 login
!
end
```

XCA Major Node in MVS1: XCAMVS1

```
MVS1870 VBUILD TYPE=XCA
PR870   PORT  ADAPNO=30,CUADDR=870,SAPADDR=04,MEDIUM=RING,TIMER=60
*
GRP870  GROUP ANSWER=ON,                                             X
              AUTOGEN=(5,U,P),                                       X
              CALL=INOUT,                                            X
              DIAL=YES,                                              X
              DYNPU=YES,                                             X
              DYNPUFX=CN,                                            X
              ISTATUS=ACTIVE
```

XCA Major Node in MVS2: XCAMVS2

```
MVS871  VBUILD TYPE=XCA
PR871   PORT  ADAPNO=31,CUADDR=871,SAPADDR=04,MEDIUM=RING,TIMER=60
*
GRP871  GROUP ANSWER=ON,                                             X
              AUTOGEN=(5,U,P),                                       X
              CALL=INOUT,                                            X
              DIAL=YES,                                              X
              DYNPU=YES,                                             X
              DYNPUPFX=CN,                                           X
              ISTATUS=ACTIVE
```

LU Major Node in MVS2: LUCPCP

```
LUGRL    VBUILD TYPE=LUGROUP
DLUSYED  LUGROUP
327802  LU   DLOGMOD=D4C32782,LOGAPPL=NETTESTR,                      X
              MODETAB=ISTINCLM,USSTAB=USSL3270,SSCPFM=USS3270
327804E LU   DLOGMOD=D4C32784,LOGAPPL=NETTESTR,                      X
              MODETAB=ISTINCLM,USSTAB=USSL3270,SSCPFM=USS3270
@       LU   DLOGMOD=D4C32782,LOGAPPL=NETTMVS2,                      X
              MODETAB=ISTINCLM,USSTAB=USSL3270,SSCPFM=USS3270

!--- The NETTESTR application is on MVS1.
!--- This is specified with LOGAPPL=NETTESTR.
```

Switched Network (SWNET) Major Node in MVS2: SW1TSYSP

```
SW1TSYS  VBUILD TYPE=SWNET
*
*
TSYSPU  PU    ADDR=02,                                               X
              IDBLK=EEE,IDNUM=EFFFF,                                 X
              ISTATUS=ACTIVE,                                        X
```

```
                LUGROUP=DLUSYED,LUSEED=M3270L##,                       X
                PUTYPE=2,DLOGMOD=D4C32784,MODETAB=ISTINCLM,            X
                SSCPFM=USS3270,PACING=8,VPACING=8
M3270L01 LU     LOCADDR=01,LOGAPPL=TSOMVS1


!--- PU TSYSPU is used for the Cisco TN3270 Server
!--- session switching connection.
```

TRL Network Node in MVS1 for the CTC Connection: MPCM1ICN

```
************************************************************************
*   MVS1 READ  CUAS: A60,A70 CTC UNITAD 20,30                         *
*   MVS2 WRITE CUAS: B20,B30 CNC UNITAD 20,30                         *
*   MVS1 WRITE CUAS: B40,B50 CNC UNITAD 00,10                         *
*   MVS2 READ  CUAS: A00,A10 CTC UNITAD 00,10                         *
************************************************************************

MPCM1ICN VBUILD TYPE=TRL
MPCM1M2  TRLE  LNCTL=MPC,MAXBFRU=16,                                    X
               READ=(A60,A70),                                         X
               WRITE=(B40,B50)
```

LOCAL Major Node in MVS1 for the CTC Connection: TRLM1ICN

```
TRLM1ICN VBUILD TYPE=LOCAL
*        XID=YES,HPR=YES FOR NN ONLY
TRLM1PU1 PU     TRLE=MPCM1M2,                                          X
                ISTATUS=ACTIVE,VPACING=0, *XID=YES,HPR=YES             X
                SSCPFM=USSSCS,CONNTYPE=APPN,CPCP=YES
```

TRL Network Node in MVS2 for the CTC Connection: MPCM2NN

```
************************************************************************
*   MVS1 READ  CUAS: A60,A70 CTC UNITAD 20,30                         *
*   MVS2 WRITE CUAS: B20,B30 CNC UNITAD 20,30                         *
*   MVS1 WRITE CUAS: B40,B50 CNC UNITAD 00,10                         *
*   MVS2 READ  CUAS: A00,A10 CTC UNITAD 00,10                         *
************************************************************************

MPCM2NN  VBUILD TYPE=TRL
MPCM2M1  TRLE  LNCTL=MPC,MAXBFRU=16,
               READ=(A00,A10),
               WRITE=(B20,B30)
```

LOCAL Major Node in MVS2 for the CTC Connection: TRLM2NN

```
TRLM2NN  VBUILD TYPE=LOCAL
*******        USE XID=YES,HPR=YES  IF OTHER MVS IS NN
TRLM2PU1 PU     TRLE=MPCM2M1,                                          X
                ISTATUS=ACTIVE,VPACING=0,  *XID=YES,HPR=YES,           X
                 SSCPFM=USSSCS,CONNTYPE=APPN,CPCP=YES
```

Verify

There is currently no verification procedure available for this configuration.

Troubleshoot

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

Related Information

- **Technology Support**
- **Product Support**
- **Technical Support – Cisco Systems**

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