

# Troubleshooting Failure Caused by Incorrect STATIC LU Definition

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## Introduction

This document describes a problem in which hardware failure is caused by an incorrect STATIC LU definition. Refer to Defining LUs for more information on Static LU definition.

## Prerequisites

### Requirements

There are no specific requirements for this document.

### Components Used

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

### Conventions

Refer to Cisco Technical Tips Conventions for more information on document conventions.

## Problem

The user gets this message when a TN3270E client attempts to connect the printer session with the use of Reflection, and specifies TZHC2A31 and 163.249.245.2:

```
An error occurred in communications - Host does not recognize
requested device name.
```

There was no error message generated on the router console.

## Definition

Switched PU Definition

```
-----  
SWXCAC2  VBUILD TYPE=SWNET  
ZZH1C2A  PU    ADDR=01, IDBLK=05D, IDNUM=24702,           X  
          PUTYPE=2,                                       X  
          LUSEED=TZHC2A##, LUGROUP=XCALUGRP,             X  
          ISTATUS=ACTIVE,                                X  
          MAXDATA=521, MAXPATH=1,                        X  
          MODETAB=ISTINCLM,                              X  
          DLOGMOD=D4C32782,                              X  
          VPACING=8, PACING=8,                           X  
          SSCPFM=USS3270,                                 X  
          USSTAB=USSDIPC
```

```
TZHC2A31 LU    LOCADDR=33, DLOGMOD=DSC2K
```

TN3270 Server Configuration

```
-----  
interface Channel5/2  
ip address 163.249.245.1 255.255.255.0  
no keepalive  
lan TokenRing 1  
adapter 0 4000.01c2.0001  
tn3270-server  
pu CZHS1C2A 05D24702 163.249.245.2 token-adapter 0 10 rsap 08lu-seed TZHC2A##
```

## Clarification

- Is the mapping of client-specified LU to VTAM LU strictly by LU name(client-luNAME=luname in PU statement range=luname on VTAM)?
  - ◆ No
- Does the TN3270 server assign a locaddr to pass to VTAM based on the relative position of the specified LU name in the range (such as locaddr=33)?
  - ◆ Yes

The message on the window of the user is appropriate. The client has requested an LU that does not exist to the router.

This is an explanation of how to name LUs in the CIP TN3270 server.

- For DLUR-based LUs, the TN3270 server uses the exact name that VTAM uses for the LU because the TN3270 server gets the LU name at ACTLU time from the DLUS (SSCP) host.
- But, the TN3270 server does *not* get this information on a direct PU-attached LU at ACTLU time because the host strips off this information as a part of the FID4 to FID2 conversion.

So, the TN3270 server attempts to create the VTAM name at the router. This is why the TN3270 server uses the **lu-seed** parameter on direct PU definitions. But, this does not always come up with the same name as the host, as can be seen in the previous configuration.

- Run this command in order to get a list of LU names to which the client can connect:

```
rtp-lab-gw1#show extended channel3/2 tn pu tv3pu01
```

This is the output:

```
name(index)   ip:tcp           xid   state   link   destination   r-lsap
TV3PU01(3)   172.18.4.212:23 05D29001 ACTIVE   tok 2   4000.0890.2000 04 70

luseed TV301T##
idle-time    0      keepalive 1800      unbind-act keep      generic-pool perm
bytes 12201 in, 186384 out; frames 786 in, 585 out; NegRsp 0 in, 0 out
actlus 4, dacltus 0, binds 9

lu   name   client-ip:tcp           state   model   frames in out   idle for
1   T3P01T01 171.69.160.30:35808   ACT/SESS 327904E 73      55      13:36:24
2   T3P01T02 171.69.160.30:63459   ACT/SESS 327904E 316     207     13:36:25
```

The previous **show** command displays the `lu-seed` and the names of all activated LUs. These are the names that TN3270 clients should use when they use specific LU names.

**Note:** Only statically-defined LUs, such as those that are defined in the SWNET definition at the host, can be reached by TN3270E clients that use the specific-LU capability.

## Solution

The user has defined the LUs in an odd way. The SWNET definition has this:

```
TZHC2A31 LU      LOCADDR=33,DLOGMOD=DSC2K
```

Yet the router definition has this:

```
pu CZHS1C2A 05D24702 163.249.245.2 token-adapter 0 10 rsap 08 lu-seed TZHC2A##
```

LOCADDR 33 (decimal), given an LU-SEED of TZHC2A##, gives a downstream LU name of TZHC2A21, not TZHC2A31 (the name given in SWNET definition). You have two options in this case:

1. Change the **lu-seed** parameter on the router to reflect decimal LU numbering, ###, and change TZHC2A31 to TZHC2A33 in the SWNET definition, or
2. Keep the **lu-seed** parameter on the router to reflect hexadecimal LU numbering, ##, and change TZHC2A31 to TZHC2A21 in the SWNET definition.

The TN3270 server **show** command output displays the change of the SWNET definition as shown:

```
cip-router#show extended channel15/2 tn pu CZHS1C2A

name(index)   ip:tcp           xid   state   link   destination   r-lsap
CZHS1C2A(1)   163.249.245.2:23 05D24702 ACTIVE   tok 0   (loopback) 08 10

luseed TZHC2A##
idle-time    0      keepalive 1800      unbind-act discon      generic-pool
perm
bytes 75 in, 57 out; frames 3 in, 4 out; NegRsp 0 in, 0 out
actlus 3, dacltus 0, binds 0

!--- If the state is ACT/NA, then the client is disconnected.

lu   name   client-ip:tcp           state   model   frames in out   idle for
33  TZHC2A21 never connected      ACT/NA      1      1      17:54:48
```

The user tried TZHC2A21, and it worked.

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## Related Information

- [Technical Support & Documentation – Cisco Systems](#)
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