



Preparing CICS Connections

Overview of Preparing the Host for CICS

Preparing the host for CICS has two major steps:

- Defining CICS for Intersystem Communications
- Defining the CTRC Router to VTAM

CTRC connects to CICS using the SNA LU6.2 (APPC) communication protocol. The SNA functions are provided by a separate SNA product on the host, and CICS uses the services of that product. On a mainframe host, the SNA product is VTAM (also known as eNetwork Communications Server). You must configure both the CICS product and the associated SNA product.

If you have previously configured a DBCONN connection using SNA and your TXCONN connections are going to the same host, the router link is already defined to VTAM and you can skip this chapter.

Defining CICS for Intersystem Communications

To define CICS for the ISC, complete the following steps:

**Note**

If you have already configured another product, such as TXSeries for AIX, to connect to CICS, you may have performed many of these steps.

- Step 1** Configure the VTAM APPL definition for parallel sessions.
- Step 2** Configure CICS for ISC.
- Step 3** Install the supplied resource definition group, DFHCLNT.
- Step 4** Define the CSCC transient data queue.
- Step 5** Install APPC connections to the clients.
- Step 6** Install client virtual terminals.
- Step 7** Specify the level of security to be used for client-CICS Transaction Server for OS/390 links.
- Step 8** Specify the code pages to be used for data conversion.

Defining the CTRC Router to VTAM

If you are currently using CICS, the CICS Transaction Server and VTAM have already defined their network name and LU names. The CTRC router must be defined to CICS and VTAM so that the host recognizes and accepts session initiation requests from it. For each CTRC router, the system programmer must create a new CONNECTION definition in CICS, and new PU, LU, and MODEENT definition statements in VTAM.

VTAM handles network communications for MVS for direct VTAM and SNA gateway configurations. The VTAM must contain a mode table entry and major node definitions for the CTRC router link. Consult your VTAM documentation for detailed instructions on configuring VTAM. You might want to take advantage of VTAM's support for dynamic definition of independent LU's, which also is described in the VTAM documentation.

Logmode Table Entry

The logmode table entry contains information that governs how conversations take place in VTAM. It defines pacing, RU sizes and Class of Service (COS) parameters. The mode entry can be placed in any mode table under VTAM—the default mode table or the mode table used in the APPL statement for CICS's LU definition (see the APPL Statement section on page 3-4). If you are using CTRC for CICS and DB2 access and you have already defined a mode for DB2, you can use the same mode for both subsystems.

The name you specify for LOGMODE, which is IBMRDB in the following example mode table entry, must be the same as the DLOGMOD name in the major node definitions and in the SNA configuration. The PSERVIC field identifies the LU traffic protocol—the value shown in the following example is for an independent LU using LU 6.2.

```
IBMRDB  MODEENT  LOGMODE=IBMRDB ,
          FMPPROF=X'13' ,
          TSPPROF=X'07' ,
          PRIPROT=X'B0' ,
          SECPROT=X'B0' ,
          COMPROT=X'50A1' ,
          RUSIZES=X'8989' ,
          TYPE=0 ,
          PSNDPAC=X'03' ,
          SRVCPAC=X'03' ,
          SSNDPAC=X'02' ,
          PSERVIC=X'0602000000000000000002F00'
```

Major Node Definitions

The VTAM must contain major node definitions for the connection to the CICS host from the router. You can use a switched, non-switched, or channel-attached major node. Switched major nodes are most commonly used with CTRC. In the major node definitions, the DLOGMOD value must match the LOGMODE value in the mode table entry.

Make a note of the PU and LU names, and the CPNAME, DLOGMOD and CONNTYPE parameter values because you need to specify the same values in the SNA configuration and in the CICS APPC CONNECTION and SESSION definitions.

The following example shows a switched major node definition with an independent LU:

```

S02CTRC      VBUILD      TYPE=SWNET
*   CTRC   DOWNSTREAM  PU
CTRCPU      PU          ADDR=01,
                CPNAME=CTRCBOX,
                ANS=CONT,
                DISCNT=NO,
                IRETRY=NO,
                ISTATUS=ACTIVE,
                PUTYPE=2,
                SECNET=NO,
                MAXDATA=521,
                MAXOUT=2,
                MAXPATH=1,
                USSTAB=USSS,
                MODETAB=ISTINCLM,
                DLOGMOD=IBMRDB,
                CONNTYPE=APPN
*
CTRCCIP     PATH  GRPNM=G02E20A, CALL=IN
*
CTRCBOX     LU          LOCADDR=00,          INDEPENDENT LU
                DLOGMOD=IBMRDB,

```

The “Sample Router Configurations” appendix contains additional configuration examples.

Define CICS for Intersystem Communication

APPL Statement

The APPL statement defines the CICS subsystem to VTAM to support remote access. If your CICS subsystem is not already supporting remote access, you must create an appropriate APPL statement.

The following example shows an APPL statement that defines CICS to VTAM:

```
A02CICS  VBUILD  TYPE=APPL
CICSB   APPL    AUTH=(ACQ,SPO,PASS,VPACE),
          MODETAB=ISTINCLM,
          DLOGMOD=IBMRDB,
          HAVAIL=YES,
          VPACING=9,
          EAS=10000,
          PARSESS=YES,
          APPC=NO,
          SONSCIP=YES
```

Make a note of the APPL statement label, which is **CICSB** in the example, and the password if one is specified, because you need to specify the same values in the SNA configuration.

System Initialization Parameters

Set **ISC=YES** in the CICS system initialization table (SIT). The following example shows override to the CICS system initialization parameters:

```
APPLID=(CICSB),
GMTEXT='CICS TS V1.2',
AUXTR=OFF,
EDSALIM=80M,
FCT=NO,
ISC=YES,
MXT=100,
.
.
.
```

DFHCLNT Resource Group

You must install the CICS-supplied resource definition group, **DFHCLNT**. This group includes definitions of the CICS internal transactions, **CCIN** and **CTIN**, and the programs they use.

CSCC Transient Data Queue

Messages relating to Client support are written to the CSCC transient data queue. You must define CSCC to CICS. There is a sample definition in the supplied resource definition group, DFHDCTG. The sample defines CSCC as an indirect extra partition destination, pointing to CSSL.

Installing the APPC Connections to CTRC

You must install APPC connections to CTRC. The connections can be single- or parallel-session links. Install APPC connections to CICS either by creating static definitions for the router or using an autoinstall. Each method is described in the following sections.

Creating Static Definitions for Router Connections

You can use CEDA DEFINE and INSTALL commands to create static definitions. For more information about defining APPC connections, see the *CICS Intercommunication Guide*.

The following example shows a CONNECTION definition named CTRC. Note that the NETNAME value must be the same as the CTRC router's LU name, which is CTRCBOX in this example. Setting the AUTOCONNECT option to YES allows CICS to dynamically activate the router connection.

```
DEFINE
    CONNECTION (CTRC)
    DESCRIPTION (CTRC)
    AUTOCONNECT (YES)
    NETNAME (CTRCBOX)
    ACCESSMETHOD (VTAM)
    PROTOCOL (APPC)
    SINGLESESS (NO)
    ATTACHSEC (IDENTIFY)
    BINDPASSWORD (NO)
    BINDSECURITY (NO)
    USEDFLTUSER (YES)
```

The following example shows a SESSIONS definition. Note that the value for the CONNECTION parameter must be the same as the name of the CONNECTION definition, which is CTRC for this example.

```
DEFINE
    SESSIONS(CTRC)
    CONNECTION(CTRC)
    MODENAME(IBMURDB)
    PROTOCOL(APPC)
    MAXIMUM(64,1)
    SENDSIZE(4096)
    RECEIVESIZE(4096)
```

Using Autoinstall for Router Connections

Another method of installing router connections is to use autoinstall. If you use autoinstall you must create suitable CONNECTION and SESSIONS template definitions.

For information about autoinstall and defining templates, see the *CICS Resource Definition Guide*. For information about customizing your autoinstall user program to handle APPC connections, see the *CICS Customization Guide*.

Installing Client Virtual Terminals

Virtual terminals are used by the External Presentation Interface (EPI) and terminal emulator functions of the CICS Clients products. Both IBM-supplied autoinstall programs support virtual terminal autoinstall. Refer to the *CICS Customization Guide* for detailed information on autoinstall for virtual terminals.

Security

CICS supports the Bind, Link, and User security models.

Bind Security

Bind-time security currently cannot be configured on Cisco routers. Therefore, specify BINDSECURITY(NO) on the CONNECTION definitions that define the router to CICS.

Link Security

Link security provides the lowest level of resource security for intercommunication links. It defines the total set of resources that can be accessed across the connection.

To set link security for a CICS Client connection, specify a userid for the SECURITYNAME link option of the CONNECTION definition. Next, define a profile to your External Security Manager for the link userid. Connection users can access only those resources that the link userid is authorized to access.

If you do not specify a userid for the SECURITYNAME option, the authority of the link is that of the CICS default user.

User Security

User (attach-time) security defines how individual users of an intercommunication link are checked. It also affects the resources that individual users are able to access. Unless you specify LOCAL user security (in which case all potential users share the authority of the link userid), you must define user profiles to your External Security Manager.

Data Conversion

When a CICS client sends a request, the server controller calls a routine that supports code page translations and data conversions. Regardless of whether translations and conversions are required, you need to create or modify a DFHCNV table to allow the server controller to handle incoming requests. The use of the DFHCNV macro for defining the table is described in the *CICS Family, Communicating from CICS on System/390* document.

The following example shows the DFHCNV table entries:

```
PRINT NOGEN
DFHCNV TYPE=INITIAL,SRVERCP=037,CLINTCP=437
DFHCNV TYPE=FINAL
END DFHCNVBA
```

**Note**

It is not necessary to code the pages used with CICS clients on the CLINTCP and SRVERCP operands of the DFHCNV TYPE=INITIAL macro.

Define CICS for Intersystem Communication