Unicenter® TCPaccess™ Communications Server

Getting Started

r6 sp5

Fifth Edition

Contents

Chapter 1: Introduction

Chapter 2: CA Common Services for z/OS and OS/390

Chapter 3: System Requirements

Chapter 4: Installation

Chapter 5: Basic Configuration

Chapter 6: Diagnosis and Problem Reporting

Index

Chapter 1

Introduction

This guide introduces you to Unicenter® TCPaccess™ Communications Server in an efficient and visual manner. By the time you have finished reading this guide, you will have an overview of the wide scope of the product, and its usability will be familiar to you. It is important to us that you feel comfortable with Unicenter TCPaccess Communications Server before you begin to use it.

About

Unicenter TCPaccess Communications Server was the first IP protocol stack for the z/OS and OS/390 environment. Since day one, its fault tolerant architecture and low storage and resource requirements, and real-time diagnostic capabilities have made it the first choice for discerning customers looking for:

- Top performance
- Reliability
- Service ability combined with increased user and application productivity across the enterprise

Today, Unicenter TCPaccess Communications Server still maintains its traditional leadership in these roles while delivering increased integration with the Unicenter® NetMaster™ suite of products and new features that are important to your organization. This new release of the Unicenter TCPaccess Communications Server combines all the services of previous releases along with several new features that are presented in the Release Guide.

Your mainframe is a key component of your networked enterprise environment. Unicenter TCPaccess Communications Server extends the reliability, scalability, and performance of the mainframe as a platform for connecting legacy data through an IP infrastructure to eBusiness applications. This is why our stack is used in many organizations worldwide.

CA Technology Services: Delivering Business Value on Your Terms

CA Technology Services provides operational excellence at every stage of an organization's IT development to ensure that CA solutions are functioning optimally by leveraging industry best practices. Teaming with CA Technology Services global network of certified professionals, customers maximize their investment in CA technology to achieve more efficient IT performance, and better manage their enterprise infrastructure, security, storage, and applications life cycle, which drive meaningful business value and financial results.

CA Education Services: Ready When You Are

CA Education Services lets you realize the full potential of your CA investment by providing comprehensive training focused on how to implement, use, and administer CA products. We deliver these services through flexible options—including traditional classroom, web-based, and self-paced training—that are customized to meet your specific requirements. All CA instructors are fully certified and provide you with real-world hands-on experience and guidance. Armed with the most up-to-date training, you will have the knowledge you must to successfully leverage the capabilities of your CA software and obtain maximum value.

For a complete list of courses that CA Education Services offers, visit http://ca.com/education or call 1-800-237-9273.

Computer Associates: Commitment, Quality, Innovation

For more than a quarter century, CA has been developing and supporting software solutions that are currently used by more than 99 percent of the Fortune 500 companies in more than 100 countries. CA is committed to offering leading technologies in flexible partnerships to help you derive full value from your software investments.

At Computer Associates, we are committed to offering simple and meaningful solutions to your complex problems, and to delivering management solutions that offer security, reliability, availability, and performance. We work hard to achieve the highest levels of quality in our solutions to help you meet your changing business needs.

To meet these requirements, CA's world-class solutions address all aspects of process management, information management, and infrastructure management with six focus areas:

- Enterprise management
- Security
- Storage
- Portal and business intelligence
- Database management
- Application life cycle management and application development

In addition, our innovative approach to technology is carried over into our innovative business solutions. From a revolutionary new business model to a dedicated customer relationship organization, CA is responding to your changing business needs.

We know what it takes to deliver and support valuable solutions 24 hours a day, 7 days a week, 365 days a year while maintaining the highest standards for quality and innovation:

- We are the first global enterprise software company to meet the exacting standards for worldwide ISO 9001:2000 certification.
- We have earned over 150 patents for innovative software solutions.
- We have the highest caliber software developers and consultants in the industry.

We also know you expect us to stand by our commitments. And we do.

For More Information

After reading this *Getting Started*, you can refer to the numerous resources available to you for additional information. Your product CD contains instructional documents that showcase your software and provide detailed explanations about the product's comprehensive, feature-rich components. In addition, you can obtain procedural information and answers to any questions you may encounter by contacting Customer Support for assistance at http://ca.com/supportconnect. For telephone assistance, call 1-800-645-3042 (U.S. and Canada) or (1) 631-342-4683 (International).

Chapter 2

CA Common Services for z/OS and OS/390

To help you quickly understand all that CA Common Services for z/OS and OS/390 offers, this section provides a brief description of the common services that can be used by Unicenter TCPaccess Communications Server.

CAIRIM

CAIRIM, CAI Resource Initialization Manager, is the common driver for a collection of dynamic initialization routines that eliminate the need for user SVCs, SMF exits, subsystems, and other installation requirements commonly encountered when installing systems software. These routines are grouped under the Computer Associates z/OS and OS/390 dynamic service code, S910. Some of the features of CAIRIM include the following:

- Obtaining SMF data
- Verification of proper software installation
- Installation of z/OS and OS/390 interfaces
- Automatic startup of CA and other vendor products
- Proper timing and order of initialization

No other services are required to operate properly.

Note: CAIRIM is mandatory for Unicenter TCPaccess Communications Server. It must be installed and started within 30 minutes of IPL time. CAIRIM is part of the CA Common Services for z/OS and OS/390.

CA LMP

The CA License Management Program (LMP) provides a standardized and automated approach to the tracking of licensed software. It uses common realtime enforcement software to validate the user's configuration. CA LMP reports on license, usage, and financial activities of Unicenter TCPaccess Communications Server. The routines that accomplish this are integrated into the Computer Associates z/OS and OS/390 dynamic service code, S910 (the CAIRIM service). Some of the features of CA LMP include the following:

- Common key data set can be shared among many CPUs
- *Check digits* are used to detect errors in transcribing key information
- Execution keys can be entered without affecting any CA software solution already running
- No special maintenance requirements

Requirements

Unicenter TCPaccess Communications Server requires CA Common Services for z/OS and OS/390 at genlevel 9901 or above.

Using CA LMP

Unicenter TCPaccess Communications Server requires CA LMP (License Management Program), one of the Common Services, to initialize correctly. CA LMP also provides a standardized and automated approach to the tracking of licensed software.

CA LMP is provided as an integral part of CAIRIM (Resource Initialization Manager), another one of the Common Services. If CAIRIM has not already been installed on your system, you must do so now. Once CAIRIM has been installed or maintained at Service Level C1/9901 or higher, CA LMP support is available for all CA LMP—supported CA software solutions. See the *CA Common Services for z/OS and OS/390 Getting Started* guide for detailed instructions on installing CAIRIM.

Examine the CA LMP Key Certificate you received with your Unicenter TCPaccess Communications Server installation or maintenance tape. That certificate contains the following information:

Fields	Descriptions
Product Name	The trademarked or registered name of the CA software solution licensed for the designated site and CPUs.
Product Code	A two-character code that corresponds to Unicenter TCPaccess Communications Server.
Supplement	The reference number of your license for Unicenter TCPaccess Communications Server, in the format *nnnnnn - nnn*. This format differs slightly inside and outside North America, and in some cases may not be provided at all.
CPU ID	The code that identifies the specific CPU for which installation of Unicenter TCPaccess Communications Server is valid.
Execution Key	An encrypted code required by CA LMP for Unicenter TCPaccess Communications Server initialization. During installation, it is referred to as the LMP Code.
Expiration Date	The date *(ddmmmyy* as in 01AUG00) your license for Unicenter TCPaccess Communications Server expires.
Technical Contact	The name of the technical contact at your site responsible for the installation and maintenance of Unicenter TCPaccess Communications Server. This is the person to whom CA addresses all CA LMP correspondence.
MIS Director	The name of the Director of MIS, or the person who performs that function at your site. If the title but not the individual's name is indicated on the Certificate, you should supply the actual name when correcting and verifying the Certificate.
CPU Location	The address of the building where the CPU is installed.

The CA LMP execution key, provided on the Key Certificate, must be added to the CAIRIM parameters to ensure proper initialization of Unicenter TCPaccess Communications Server. To define a CA LMP execution key to the CAIRIM parameters, modify member KEYS in the OPTLIB data set.

The parameter structure for member KEYS is as follows:

```
PROD(pp) DATE(ddmmmyy) CPU(tttt–mmmm/ssssss) LMPCODE(kkkkkkkkkkkkkkkk)
```

Where:

***pp*—**Required. The two-character product code. For any given CA LMP software solution, this code agrees with the product code already in use by the CAIRIM initialization parameters for earlier gen levels of that software solution.

The two-character product codes for Unicenter TCPaccess are:

Y8 Communications Server

2F Telnet Server

0V FTP Server

***ddmmmyy*—**The CA LMP licensing agreement expiration date.

***tttt-mmmm*—**Required. The CPU type and model (for example: 3090 - 600) on which the CA LMP software solution is to run. If the CPU type and/or model require less than four characters, blank spaces are inserted for the unused characters.

***ssssss*—**Required. The serial number of the CPU on which the CA LMP software solution is to run.

***kkkkkkkkkkkkkkkk*—**Required. The execution key needed to run the CA LMP software solution. This CA LMP execution key is provided on the Key Certificate shipped with each CA LMP software solution.

The following is an example of a control statement for the CA LMP execution software parameter. Although this example uses the Unicenter TCPaccess Communications Server two-character product code, the CA LMP execution key value is invalid and is provided as an example only!

```
PROD(VP) DATE(01AUG00) CPU(3090– –– –600 /370623) LMPCODE(52H2K06130Z7RZD6)
```

For a full description of the procedure for defining the CA LMP execution key to the CAIRIM parameters, see the *CA Common Services for z/OS and OS/390 Getting Started*.

Chapter 3

System Requirements

This chapter provides a brief overview of the requirements necessary for a Unicenter TCPaccess Communications Server installation using SMP/E.

It contains the following sections:

- Installation Materials
- Installation Prerequisites

For detailed information about these installation procedures, refer to:

- The SMP/E installation of the product as outlined in this guide
- The security modifications outlined in the *Planning Guide*

Installation Materials

Before beginning the installation procedure, make sure that you have the following Unicenter TCPaccess installation materials:

- The installation tape—the volume serial number is specified on the PML (product maintenance letter) received with the installation package
- The CA Common Services for z/OS and OS/390 tape and documentation
- The documentation list described in the chapter "Introduction"

Installation Prerequisites

To operate this version of Unicenter TCPaccess, your IBM software should be at an IBM supported release equal to or greater than the following:

- OS/390 Release 2 Version 8

  Note: If running Telnet SSL, you will need a minimum of OS/390 Version 2.10.

- DFSMS 1.3 and above

- ACF/VTAM 3.9 and above
- PSF MVS 3.1 and above

If you are running any of the following software, it must meet these requirements to run concurrently with this version of Unicenter TCPaccess:

- CICS/ESA Release 4.1 and above (includes CICS Transaction Server For OS/390 Version 1 Release 1 through Version 1 Release 3)

  For 4.1 PTF UQ18193 is necessary for the successful operation of the CICS Web Interface (CWI).

  TS 1.1 requires PTF UQ19747 for the successful operation of the CICS Web Interface (CWI).
- IMS/ESA Version 4 Release 1 and above
- CA Common Services for z/OS and OS/390 Genlevel 9901 or above

OS/390 / ESA Release Level

Unicenter TCPaccess requires an IBM supported release of OS/390 or z/OS. Contact Customer Support to verify that your system is at the correct supported level.

Important! *To use the SSL enabled Telnet server, you must be at OS/390 2.10 or higher.*

PDSE/SMS Requirements

The Unicenter TCPaccess installation jobs, T00ALLOC includes a symbolic of SMSCLAS. This symbolic represents the SMS storage class and is used to allocate the PDSE libraries.

The following data set is defined as PDSE:

T00ALLOC—SMPLTS

Note:

- Support for non-SMS PDSEs is provided in DFSMS/MVS 1.4 and 1.5 with the appropriate maintenance applied. It is in the base of DFSMS 2.10. If you want to use non-SMS PDSEs replace STORCLAS with the UNIT= and VOL=SER= parameters.
- Some maintenance levels of data set utilities such as PDSMAN do not support PDSEs. If you are using such a product, be sure that it supports PDSEs or use the standard IBM IEBCOPY utility.

APF Authorizations

The following files are APF-authorized.

hlq.LOAD	TCPaccess program library
hlq.LINK	TCPaccess client commands
hlq.PFSLOAD	TCPaccess PFS modules for use with UNIX System Services
hlq.SASLINK	Runtime modules for Unicenter TCPaccess commands such as PING and TRACEROUTE.
hlq.TLNLOAD	Telnet Server program library*
hlq.FTPLOAD	FTP Server program library*
hlq.FTPLINK	FTP Server library containing the client program

* If installed and running in the TCPaccess address space these libraries must be included in the STEPLIB concatenation.

Note: CEE.SCEERUN, an APF authorized library must always be available through linklist or STEPLIB.CBC.SCLBDLL is also required when using Telnet SSL, as is GSK.SGSKLOAD, when running under z/OS 1.5 and prior, or SYS1.SIEALNKE, when running z/OS 1.6 and later.

Linked List Data Sets

We recommend the LINK and SASLINK data sets be link listed to avoid having to include STEPLIBs in TSO procedures and batch jobs.

If you plan to use the TCPaccess FTP Server's FTP Client program, you should also add FTPLINK to the list of link listed data sets.

If TCPaccess is used with UNIX System Services the PFSLOAD library must be either in the linklist or included in the STEPLIB in the OMVS cataloged procedure.

Note: the LOAD library must *never* be included in the linklist.

Callable System Services Library and Language Environment

You must have the Callable System Services library, SYS1.CSSLIB, available for the installation. Modules from this library are linked with Unicenter TCPaccess 6.0 for UNIX System Services support.

IBM's Language Environment link-time library, SCEELKED, is also a required SMP/E data set used by the CALLLIB facility.

Important! *Unicenter TCPaccess will not install properly without these libraries.*

SAS/C Release Level

Unicenter TCPaccess is compiled with SAS/C Release 7.0 and shipped with SAS/C 7.0 runtime modules. In general, SAS/C runtime libraries must be at a release equal to or higher than that with which a program has been compiled. If you are not running with the correct SAS/C libraries, unpredictable results may occur.

Hardware Requirements

A hardware connection is required for Unicenter TCPaccess Communications Server to send and receive network traffic. Several drivers are supported in Unicenter TCPaccess Communication Server for the details of each driver and the configuration options refer to the "Network Configuration" chapter in the *Customization Guide*.

3722/3762 Considerations

Interlink 3722 and 3762 users running the CETI interface should install the latest release of microcode. The CETI driver may terminate at startup if you are using earlier releases. Bus-tech now recommends the 8232 (IBM 3172) microcode. The latest 8232 microcode is also acceptable.

Chapter

4

Installation

This chapter provides information for system administrators and installation managers who are responsible for installing and supporting the Unicenter TCPaccess Communications Server.

This chapter discusses the following topics:

For additional information about these installation procedures, see the following in the *Planning Guide* :

- The pre-installation procedures
- The security modifications

Installation Notes

Unicenter TCPaccess Communications Server suite consists of three components:

- Unicenter TCPaccess Communications Server—This latest release is r6.0 SP5 and is delivered on Tape CS60S5. This release is installed on FMID C2E6000. Also included on this tape are cumulative PTF updates for Unicenter TCPaccess Telnet Server and cumulative PTF updates for Unicenter TCPaccess FTP Server release r6.0.

- Unicenter TCPaccess Telnet Server—This release is r6.2 SP1 and is delivered on Tape TL62S1. This release is installed on FMID C2C6200. Also, included on this tape are cumulative PTF updates for Communications Server release r6.0, cumulative PTF updates for Telnet Server release r6.0, and cumulative PTF updates for Telnet Server release r6.1. These older releases were installed on FMIDs C2C6000 and C2C6100, respectively.
- Unicenter TCPaccess FTP Server—This release is r6.1 SP3 and is delivered on Tape FT61S3. This release is installed on FMID C196100. Also included on this tape, are cumulative PTF updates for Communications Server r6.0, and cumulative PTF updates for FTP Server r6.0. This older release was installed on FMID C196000.

This guide provides installation instructions for the Unicenter TCPaccess Communications Server product. The tape's serial number helps you to identify the install tape as either a new product release tape or a service pack tape for a supported release.

New release tapes use the product code followed by the two-digit release (for example, CS60). Some time after the initial release of the product, service pack tapes containing the latest maintenance for this release are distributed. Service pack serial numbers have the same first four characters as a release tape, followed by S*x*. The *x* identifies the service pack number for this particular product release (for example,CS60S5).

Using either a new release tape or a service pack tape, you can apply the latest maintenance to the Unicenter TCPaccess Communications Server r6.0 product, and the Unicenter TCPaccess FTP Server and Unicenter TCPaccess Telnet Server r6.0 products. Also, you can install Unicenter TCPaccess Communications Server r6.0 with the latest maintenance included.

If you are planning to upgrade to the newer release of Unicenter TCPaccess FTP Server r6.1 or Unicenter TCPaccess Telnet Server r6.2, at the same time you apply maintenance to your already installed Unicenter TCPaccess Communications Server, you can skip the installation steps presented in this guide. You can instead choose to install either the Unicenter TCPaccess FTP Server r6.1 or Unicenter TCPaccess Telnet Server r6.2, and maintenance will be applied to Unicenter TCPaccess Communications Server automatically. You can also skip the installation steps in this guide if you are applying maintenance to either of the Unicenter TCPaccess FTP Server or Unicenter TCPaccess Telnet Server products. For installation and maintenance instructions of these products, see the *Getting Started* guides that accompanied your Unicenter TCPaccess FTP Server Tape FT61S3 or Unicenter TCPaccess Telnet Server Tape TL62S1.

Before Running the Installation Jobs

Before you run the installation jobs, do the following:

- Back up all SMP/E CSIs and libraries.
- Compress all libraries.
- Before you apply a service pack, issue P CLEAR to any systems that use the target libraries to ensure that all Unicenter TCPaccess control blocks are refreshed.

  Important! *SOC4 or SOC6 abends may occur if you apply maintenance to active libraries. Use the P CLEAR command to correct them.*

Note the following:

- A complete installation of the Unicenter TCPaccess Communications Server r6.0 requires 300 cylinders of DASD space. You should choose your target volumes accordingly.
- You must install Unicenter TCPaccess Communications Server r6.0 in a separate CSI from Unicenter TCPaccess 5.2 or 5.3 installations.

Unloading the Installation Library

Copy and execute the following JCL to unload the control file from which you will be able to install and customize Unicenter TCPaccess. This control file, INSTLJCL, is the first file on your Unicenter TCPaccess Communications Server installation tape.

Important! *To install the Unicenter TCPaccess Communications Server, you must have READ access to the data sets on the installation tape. A list of these data sets is provided in the Installation Data Sets section of the $READT01 member of the installation library.*

```
//UNLOAD   JOB
//*
//UNLOAD   EXEC PGM=IEBCOPY
//*
//SYSIN    DD *
 COPY INDD=((INDD,R)),OUTDD=OUTDD
//SYSPRINT DD SYSOUT=*
//*
//INDD     DD DSN=INSTLJCL,
//            UNIT=tapeunit,VOL=SER=tapevolser,
//            LABEL=(1,SL,,EXPDT=98000),
//            DISP=OLD
//*
//OUTDD    DD DSN=trgindx.CNTL,
//            UNIT=trgunit,VOL=SER=trgvol,SPACE=(CYL,(1,1,25)),
//            DSORG=PO,RECFM=FB,LRECL=80,BLKSIZE=6160,
//            DISP=(NEW,CATLG,DELETE)
```

Reading Installation-Specific Information

The $READT01 member of the installation library contains information about the contents of the tape, and may contain important last-minute information about how to complete the installation. Review it carefully before you proceed.

Using the TCPNAMES CLIST

The TCPNAMES ISPF edit macro is a member of the INSTLJCL control file that lets customize the installation jobs.

It does the following:

- Inserts a copy of the locally customized JOB statement
- Updates all data set high-level qualifiers to your local standards
- Updates all DASD unit names and volume serial numbers to your local standards
- Updates all tape unit names and volume serial numbers to your local standards

Setting Up the TCPNAMES CLIST

To use the TCPNAMES edit macro, you must prepare your TSO environment to recognize it. To do so, follow these steps:

1. Copy the TCPNAMES member of the installation library to a command library listed in the SYSPROC concatenation of your TSO logon procedure. You can find the proper command library by following these steps:
   a. Determine the name of your logon procedure. It is in a field on your TSO logon screen.
   b. Determine the data set that your logon procedure resides in. It is probably in SYS1.PROCLIB. If not, execute command LISTA from your TSO command line. The command lists all data sets allocated to your TSO session, and your TSO logon procedure is probably located in a data set with the final qualifier of PROCLIB.
   c. Determine the CMDLIB you will use.
      i. Select the member containing your logon procedure.
      ii. Find the SYSPROC DD.
      iii. Select a CMDLIB into which to copy TCPNAMES. **Note:** In many locations, a *userid*.CLIST data set is available for this purpose.)

d. If you are copying the TCPNAMES EXEC into a library with a variable-length record format, enter *unnum* at the command line before you copy the member. This deletes the sequence numbers at the far right side of the member, allowing the CLIST to run with variable-length records.

e. If after following these suggestions you are still not able to tell which CLIST library to use, contact your TSO administrator.

2. Update the JOBCARD member in the installation library for use by the CLIST. This JOB statement will be inserted as the first line in every job that you run TCPNAMES on.

3. If you are using JES3, replace the JOBPARM statement with the following:

```
//*MAIN LINES=(999,W)
```

4. If you want all data sets to be SMS controlled, make the following global changes:

a. For T00ALLOC: `'C ALL VOLUME(  STORCLAS('`

b. For T00ALLOC: `'C ALL VOL=SER  STORCLAS'`

c. For T01ALLOC: `'C ALL VOL=SER  STORCLAS'`

d. For T00ALLOC and T01ALLOC: Substitute the SMS storage class for all occurrences of SMPVOL, TRGVOL, and DSTVOL.

Using the TCPNAMES CLIST to Customize Installation Jobs

The TCPNAMES CLIST is an ISPF edit macro. To use it, you must edit an installation job and type the TCPNAMES command on the primary command line.

As distributed, the TCPNAMES CLIST assumes that you want to use the same tape unit, disk unit, disk volume, and SMS storage class for all of the disk data sets in a particular installation job. Two high-level qualifiers, *hlq.smp* and *hlq.dsn*, are provided so you can include newer releases of products in a common CSI. If this does not suit your purposes, you can update the CLIST directly.

Note: If you want, make sure that you save a copy for reference before you modify the CLIST.

If it is acceptable to use the same high-level qualifiers, disk unit, and disk volume for all of the disk data sets, you do not need to edit the TCPNAMES CLIST. Instead, you can enter the command with parameters as follows:

```
TCPNAMES hlq.smp hlq.dsn diskvolser diskunit tapevolser tapeunit smsclass
```

The parameters are as follows:

hlq.smp	High-level qualifier for SMP index
hlq.dsn	High-level qualifier for other data set names
diskunit	A valid unit name for a disk drive in your environment
tapevolser	The volume serial name of the installation tape
tapeunit	A valid unit name for a tape drive in your environment
smsclass	The storage class for SMS-managed data sets

An example of this usage is the following:

```
TCPNAMES TCP.V600SMS TCP.V600 MVS001 3390 CS60S5 TAPE NMDCLASS
```

This command reflects the following environment:

TCP.V600SMS	Use TCP.V600SMS as the high-level qualifier for SMP data sets.
TCP.V600	Use TCP.V600 as the high-level qualifier for all other data sets.
MVS001	Put all created data sets on disk volume MVS001.
3390	Indicate that volume MVS001 is a 3390 device.
CS60S5	The tape's volume serial number is CS60S5.
TAPE	The tape is to be mounted on the TAPE unit.
NMDCLAS	SMS-managed data sets are to use storage class NMDCLASS.

Download the Most Recent PTFs from SupportConnect

The Unicenter TCPaccess family of products contain many co-requisite PTFs which cross product components. For instance, there are many PTFs written for Unicenter TCPaccess Telnet Server that require co-requisite PTFs in the Unicenter TCPaccess Communications Server common FMIDs. If these latest co-requisites are not available when you apply maintenance, the procedure may fail.

So, we highly recommend that you download the latest PTFs for your product group. For this CS60S5 installation, the product group would be Unicenter TCPaccess Communications Server. For more instructions, see Getting PTFs Online and Getting Hold Data in this chapter.

After you have downloaded the fixes, put them in a data set that can be referenced by the SMPPTFIN DD in the routines SRVPAC1, or T01INST1. For more information, see Job Descriptions in this chapter.

Running the Installation Jobs

The following sections are designed to assist you in running the installation jobs.

Determining Your Installation Type

Before you run any installation jobs, you must determine which type of installation is appropriate for your current configuration. Use the following criteria to determine what your installation type is:

Installation Type A

You have previously installed Unicenter TCPaccess Communications Server r6.0. In addition, you may have installed any of the following products:

- Unicenter TCPaccess Telnet Server r6.0, r6.1, or r6.2
- Unicenter TCPaccess FTP Server r6.0 or r6.1
- Unicenter® SOLVE:CPT™ r6.1
- Unicenter® NetMaster™ Socket Management for CICS r1.0 or r1.1

This procedure also applies the latest maintenance to all of the products listed above, except for the Unicenter NetMaster Socket Management for CICS r1.0 product.

Installation Type B

You have not previously installed Unicenter TCPaccess Communications Server r6.0, or any of the products listed in Installation Type A.

Note: If you would like to additionally install the Unicenter TCPaccess FTP Server or Unicenter TCPaccess Telnet Server products, see the *Getting Started* guides that accompanied your Unicenter TCPaccess FTP Server r6.1 on tape FT61S3 or Unicenter TCPaccess Telnet Server r6.2 on tape TL62S1 for installation instructions of these products. The guides also include information about applying maintenance to these products.

Running the Required Jobs

When you have determined your installation type, use it and the following table to determine which installation jobs to run. You must run the jobs in order from top to bottom, and you must *not* run any jobs that do not have a "Yes" entry in the table for your installation type. (Explanations of each job follow the chart.)

Job Name	Description	Installation Type	
		A	B
SRVPAC1	Receive service pack maintenance.	Yes	
SRVPAC2	Apply service pack maintenance.	Yes	
T00ALLOC	Initialize the SMP/E environment		Yes
T01ALLOC	Initializes the SMP/E libraries used by the Unicenter TCPaccess Communications Server product.		Yes
T01INST1	Receive the Unicenter TCPaccess Communications Server functions.		Yes
T01INST2	Apply and accept the Unicenter TCPaccess Communications Server functions.		Yes

Job Descriptions

For any of these jobs you can run the TCPNAMES edit macro to make the necessary global changes. For more information, see Using the TCPNAMES CLIST in this chapter.

Important! *Be sure to examine the Important Notes comments in each job, and take any required action before you run them.*

Job SRVPAC1

Maximum acceptable return code: 4.

The SRVPAC1 job receives service pack maintenance for the Unicenter TCPaccess family of products. Before running this job, make sure you have downloaded the latest PTFs, see Getting PTFs Online in this chapter and replaced the field L_MAINT in SRVPAC1 to point to the data set containing them. The HOLDDATA file identifies any fixes that may have been PEd since the installation tape was distributed.

The highest PTFs included on the tape are identified in the $READT01 file in the INSTLJCL members. For instructions about how to download PTFs from the SupportConnect web site, see Getting PTFs Online in this chapter. Review the hold data, especially that of type ACTION, and take appropriate action.

Important! *If you have run the SRVPAC1 and SRVPAC2 jobs previously, you may receive a GIM24801W warning: NO SYSMODS STATISFIED THE OPERANDS SPECIFIED. This indicates that there were no new PTFs received and you do not need to run the SRVPAC2 job--it will fail. One reason this might occur is that you recently completed another installation and applied this service pack maintenance to the same CSI. In this case, skip job SRVPAC2 and proceed to the following job.*

Job SRVPAC2

Maximum acceptable return code: 4.

The SRVPAC2 job applies service pack maintenance for the Unicenter TCPaccess family of products. Before you remove the comment markers from the BYPASS option, make sure that you have taken any necessary actions noted in the hold data.

We recommend that you run SRVPAC2 with the CHECK and BYPASS options specified, to see if any errors are picked up. Assuming that you have all the required PTFs and no errors are identified, comment out the CHECK statement and run SRVPAC2 again.

Important! *The GSKSSL DD statement is required for the maintenance of the Unicenter TCPaccess Telnet Server. The path name is case-sensitive and may be installation-dependent; see the Unicenter TCPaccess Telnet Server Getting Started for details. If you do not have Unicenter TCPaccess Telnet Server installed, you should comment out the GSKSSL DD statement, because it will cause a JCL error if the path does not exist.*

Job T00ALLOC

Maximum acceptable return code: 0.

The T00ALLOC job allocates the data sets needed for the SMP/E environment and for shared components. It also initializes the CSI and adds all required SMP/E definitions.

After you run the TCPNAMES CLIST, if you want all data sets to be SMS controlled, make the following global changes to T00ALLOC:

- `'C ALL VOLUME(  STORCLAS('`
- `'C ALL VOL=SER  STORCLAS'`
- The SMS storage class for all occurrences of SMPVOL, TRGVOL, and DSTVOL

Notes:

- The Language Environment link-time library SCEELKED is required for SMP/E APPLY processing.
- The SMPLTS library is allocated as a PDSE. If your site does not support PDSEs, replace the STORCLAS and DSNTYPE parameters with UNIT and VOL=SER parameters. Note that the SMPLTS MUST be allocated as a PDSE if you plan on performing the Telnet Server installation.

Job T01ALLOC

Maximum acceptable return code: 4.

The T01ALLOC job allocates the data sets needed for the Unicenter TCPaccess Communications Server, and adds all required SMP/E definitions for them.

After you run the TCPNAMES CLIST, if you want all data sets to be SMS controlled, make the following global changes to T01ALLOC:

- `'C ALL VOL=SER  STORCLAS'`
- The SMS storage class for all occurrences of SMPVOL, TRGVOL, and DSTVOL

Job T01INST1

Maximum acceptable return code: 4.

The T01INST1 job receives the functions necessary to run the Unicenter TCPaccess Communications Server, associated hold data, and any last-minute maintenance. Before running this job, make sure you have downloaded the latest PTFs, as described in Getting PTFs Online in this chapter, and replaced the field L_MAINT in T01INST1 to point to the data set containing them. The HOLDDATA file identifies any fixes that may have been found to be in error (PE's) since the installation tape was distributed.

Note: If you are using a tape management system such as CA1, you must modify the label parameter on your DD statements to include EXPDT=98000.

```
LABEL=(2,SL,,EXPDT=98000)
```

Job T01INST2

Maximum acceptable return code: 4.

The T01INST2 job applies and accepts the functions necessary to run the Unicenter TCPaccess Communications Server, and applies any last-minute maintenance. Before you run it, make sure that you have taken any necessary actions noted in the hold data.

Getting PTFs Online

You can check for the most recent PTFs available by visiting the SupportConnect home page at http://ca.com/supportconnect. If you have not yet registered for SupportConnect, see Enrolling for SupportConnect in this chapter.

After you have registered for the SupportConnect web site, you can use the web site by entering your login and password information..

After the security prompts are satisfied, you are brought back to the home page. Click *Published Solutions* in the left frame.

Select Unicenter TCPaccess Communications Server – MVS from the Product box, then check SELECT ALL . This selects the Unicenter TCPaccess Communications Server product group, which includes the FMIDs required to support the Unicenter TCPaccess Communications Server. When you do this, you automatically get fixes for the support components and for the Unicenter TCPaccess Communications Server application. However, note that all of the PTFs for one component are shown before starting with those of another component. Select the release you will be installing or updating in the Release box.

To find the PTFs that have been built and published since the installation tape was produced, consult the Last Published *Date* included in the $READT01 member of the installation library, then enter the following day in the Confirmed Since box.

Click Search for your results. You can then check each of the Add to Cart boxes for each PTF you want to download. Then click Go To Solution Cart and follow the directions to download your PTFs.

Important! *If you have problems with the SupportConnect download process, contact Customer Support or your Customer Relationship Manager.*

Enrolling for SupportConnect

Existing users of CA's Support.ca.com, Webtrack.ca.com, and eSupport.ca.com do not need to enroll to get access to SupportConnect. These users should follow the procedures in Existing CA Support Users in this chapter to migrate their customer information to the SupportConnect web site.

New users should use the procedure outlined in the next section to enroll in SupportConnect.

New User Enrollment

You can get enrollment forms by visiting the SupportConnect home page at http://ca.com/supportconnect and clicking New User Enroll Now. After you have submitted your enrollment, CA will send you a confirmation email. When your enrollment has been processed, you get an email that includes login instructions. You can then log in with the email address and password that you specified on your enrollment form.

Existing CA Support Users

For a limited time, CA provides a seamless way to migrate your information from Support.ca.com, Webtrack.ca.com, and eSupport.ca.com to SupportConnect. During this period, you can convert existing accounts to SupportConnect by visiting http://ca.com/supportconnect and clicking Convert Existing Account on the home page. After this period, you must use the New User Enrollment procedure described previously.

After the account has been converted, you can either install a digital certificate, or use an existing email address and password to log in.

Getting Hold Data

To get hold data that may be more current than that on your installation or service pack tape, use one of the following methods:

- Call Customer Support and ask for the latest hold data.
- Recommended: Get the latest hold data through the web by following these steps:
  - Go to http://ca.com/supportconnect and log in.

    Note: You must be enrolled. For information about how to enroll, see Enrolling for SupportConnect in this chapter.
  - Click Published Solutions in the left frame.

- In the Enter a fix number box, enter QO20643, and submit.
- Click Add To Cart, and then on Go To Solution Cart.
- Left-click $$HOLD.VIEW to view the entire text of the hold data.
- Right-click $$HOLD.BIN, to download the hold data file in binary.

After Running the Installation Jobs

The following information explains the tasks you must perform after you complete running the installation jobs.

Applying Downloaded Maintenance

These are the steps required to apply the maintenance you downloaded after the installation process. For more information, see Getting PTFs Online in this chapter. These are only sample job streams. Although the steps are described in terms of PTFs, you can also use them for APARs.

Receive PTFs

Following is a sample JCL for a job to perform the RECEIVE procedure. This procedure reads the PTFs that were moved to a disk file from the SupportConnect web site. An installation may maintain several different copies of the operating system (a production version, a test version, and so on) and there may be different versions of the SMP/E CSI for maintaining each of these.

Note: For APARs, the SMPPTFIN DD statement should point to the file containing the APAR text, typically a disk file.

```
//RECEIVE  JOB  ...
//*
//*   Change the JOB statement to comply with installation standards.
//*   Change "<hlq>" to match your high-level-qualifier of your CSI.
//*   Change "<ptf_file>" to point at the PTF/APAR you wish to receive.
//*
//S1       EXEC PGM=GIMSMP,
//         PARM='PROCESS=WAIT,CSI=<hlq>.CSI',
//         DYNAMNBR=120
//*
//* NOTE:      SMP ZONE-RELATED FILES ARE DYNAMICALLY ALLOCATED,
//*            THIS INCLUDES THE SMPPTS, SMPLOG, AND SMPTLIB DATA SETS,
//*            IF APPLICABLE.
//*
//* SMP FILES
//*
//SMPPTFIN DD DISP=(SHR,KEEP),DSN=<ptf_file>
//SMPCNTL  DD *
  SET    BOUNDARY (GLOBAL) .
  RECEIVE  SYSMODS .
//*
```

Apply Check PTFs

This procedure goes through the PTFs and validates each without modifying the actual system files. You should review the log file from this procedure before continuing:

```
//APPLYCHK JOB ...
//*
//*   Change the JOB statement to comply with installation standards.
//*   Change "<hlq>" to match your high-level-qualifier of your CSI.
//*   Change "<tpxxxxx>" to match the PTF/APAR you wish to apply.
//*
//*   If your target zone is not TCPTZN then change:
//*      SET    BOUNDARY(TCPTZN) .
//*   statement (below) to match your target zone.
//*
//*   If you receive a return code of 4 from this job then check
//*   the output for any HOLD information that was bypassed. The HOLD
//*   information will show any documentation or action that may be
//*   required after the PTF/APAR is applied.
//*
//S1       EXEC PGM=GIMSMP,
//         PARM='PROCESS=WAIT,CSI=<hlq>.CSI',
//         DYNAMNBR=120
//*
//* NOTE:      SMP ZONE-RELATED FILES ARE DYNAMICALLY ALLOCATED,
//*            THIS INCLUDES THE SMPPTS, SMPLOG, AND SMPTLIB DATA SETS,
//*            IF APPLICABLE.
//*
//* SMP FILES
//*
//SMPCNTL  DD *
  SET    BOUNDARY(TCPTZN) .
  APPLY  BYPASS(HOLDSYSTEM) GROUP JCLINREPORT
         CHECK
         SELECT(<tpxxxxx>)
         RETRY(YES) .
```

Apply PTFs

This step performs the actual modification. Check for SMP holds on the PTFs. You may need to issue a BYPASS(HOLDSYSTEM).

```
//APPLY    JOB ...
//*
//*   Note: Run the APPLYCHK first to see if any HOLDDATA exists and
//*         to insure you have all the PRE-REQ's.
//*
//*   Change the JOB statement to comply with installation standards.
//*   Change "<hlq>" to match your high-level-qualifier of your CSI.
//*   Change "<tpxxxxx>" to match the PTF/APAR you wish to apply.
//*
//*   If your target zone is not TCPTZN then change:
//*      SET    BOUNDARY(TCPTZN) .
//*   statement (below) to match your target zone.
//*
//S1       EXEC PGM=GIMSMP,
//         PARM='PROCESS=WAIT,CSI=<hlq>.CSI',
//         DYNAMNBR=120
//*
//* NOTE:      SMP ZONE-RELATED FILES ARE DYNAMICALLY ALLOCATED,
//*            THIS INCLUDES THE SMPPTS, SMPLOG, AND SMPTLIB DATA SETS,
//*            IF APPLICABLE.
//*
//* SMP FILES
//*
//SMPCNTL  DD *
  SET    BOUNDARY(TCPTZN) .
  APPLY  BYPASS(HOLDSYSTEM) GROUP JCLINREPORT
         SELECT(<tpxxxxx>)
         RETRY(YES) .
```

Starting Unicenter TCPaccess Communications Server

The startup member, RUNTCP, is in the SAMP library. This member invokes Unicenter TCPaccess Communications Server. You can submit RUNTCP as a started task or as a batch job. This is an Installation Verification Procedure (IVP) to ensure that the installation was done properly. For complete list of configuration options, see the *Customization Guide*.

Task 1: Edit the RUNTCP Member

Note: Do *not* execute TCPNAMES.

1. Change the symbolic HLQ to the value you specified in *hlq.dsn* for the CLIST member TCPNAMES.
2. Verify that the symbolic U=ACSS is available for use. Issue the MVS command, D SSI. Check that its response does not include ACSS or shows ACSS as inactive. If ACSS is active, you must choose a different name for your subsystem.

3. Verify that the character used for the symbol SRC is not in use by another subsystem.
4. If you have a line limit, add one of the following lines immediately after the JOBCARD to support diagnostics:
   - If you are using JES2, add /*JOBPARM LINES=9999
   - If you are using JES3, add //*MAIN LINES=(999,W)
5. Update the JOB statement for RUNTCP.
6. To prepare RUNTCP as a started task:
   a. Delete the RUNTCP JOBCARD and comments that appear prior to the PROC statement.
   b. Delete the following two JCL statements from RUNTCP:

```
//         PEND
//TCPIP    EXEC TCPIP
```

   c. Copy member RUNTCP into a system PROCLIB.

Task 2: Submit RUNTCP

To submit RUNTCP do the following:

- To submit RUNTCP as a batch job, submit member RUNTCP.
- To submit RUNTCP as a started task, issue the MVS command S RUNTCP
- To stop RUNTCP, issue the MVS command F RUNTCP,P CLEAR, and answer YES to the reply

Sample Run JCL

Following is a sample JCL to run Unicenter TCPaccess Communication Server in loopback:

```
******************************** Top of Data ********************
//RUNTCP  JOB /*JOBPARM LINES=999
//**MAIN LINES=(999,W)
//*
//*    SAMPLE JCL PROCEDURE TO RUN TCP/IP
//*    THIS JCL CAN BE USED WITH ANY INTERFACE
//*
//*    EDIT THE TRGINDX, SSN, SRC, SOUT, CMND SYMBOLIC
//*    PARAMETERS
//*
//*    VERIFY THAT THE JOB CARD AND NAMING CONVENTIONS MEET
//*    YOUR SITE'S JCL REQUIREMENTS, THEN SUBMIT THIS JOB.
//*
//TCPIP  PROC TRGINDX='TRGINDX', TARGET LIBRARIES DSN INDEX
//            SSN=ACSS,        DFLT SUBSYSTEM NAME
//            SRC='%',         DFLT SUBSYSTEM RECOGNITION CHAR
//            SOUT='*',        CHOOSE A HOLD NONPURGE SYSOUT CLASS
//            CMND=START00,    DFLT STARTUP COMMAND SCRIPT NAME
```

```
//            CNFG=00          IJTCFGxx SUFFIX
//*
//TCPIP  EXEC PGM=IFSSTART,REGION=6144K,TIME=1440,
// PARM='IFSINIT,U=&SSN,SR=&SRC,SO=&SOUT,CM=&CMND,CF=&CNFG'
//*
//STEPLIB  DD  DISP=SHR,DSN=&TRGINDX..LOAD
//         DD  DISP=SHR,DSN=&TRGINDX..SASLINK
//*
//* WARNING: THE LOAD DATA SET MUST NEVER BE ADDED TO THE LINK LIST.
//*          TCPACCESS' ELEMENT NAMES ARE NOT UNIQUE AND COULD AFFECT
//*          THE OPERATIONS OF OTHER SOFTWARE.  THE LOAD DATA SET
//*          SHOULD ALWAYS BE REFERENCED THROUGH A STEPLIB OR JOBLIB
//*          STATEMENT.
//*
//*          CONFIGURATION DATA SETS
//*
//SYSPARM  DD  DISP=SHR,DSN=&TRGINDX..PARM
//SYSPROC  DD  DISP=SHR,DSN=&TRGINDX..PARM
//*
//*          LOG DATA SETS
//*
//T01LOG   DD  SYSOUT=&SOUT
//SYSPRINT DD  SYSOUT=&SOUT
//DNRLOG   DD  SYSOUT=&SOUT
//DNRERR   DD  SYSOUT=&SOUT
//GTDLOG   DD  SYSOUT=&SOUT
//GTDERR   DD  SYSOUT=&SOUT
//GTDTRC   DD  SYSOUT=&SOUT
//MAPLOG   DD  SYSOUT=&SOUT
//MAPERR   DD  SYSOUT=&SOUT
//SNMLOG   DD  SYSOUT=&SOUT
//*
//*          DUMP DATA SETS
//*
//SYSUDUMP DD  SYSOUT=&SOUT
//*
//*          MISC DATA SETS
//*
//ARPAHELP DD  DISP=SHR,DSN=&TRGINDX..HELP
//SYSHELP  DD  DISP=SHR,DSN=&TRGINDX..HELP
//ABNLIGNR DD  DUMMY            /* DISABLE ABEND-AID PROCESSING */
//         PEND
//TCPIP    EXEC TCPIP
```

Testing Unicenter TCPaccess Communication Server in Loopback Mode

The local Internet address for loopback is 127.0.0.1. For more information, see the *Customization Guide* on testing Unicenter TCPaccess Communication Server in loopback mode.

Test the VTAM/Telnet interface by entering this VTAM LOGON command:

```
LOGON APPLID(ACCES) DATA(127.0.0.1)
```

Successful loopback returns the Server Telnet screen.

You might need to use the assembler syntax for LOGON specify the following:

```
LOGON APPLID=ACCES, DATA=127.0.0.1
```

Enter *bye* to exit.

Test FTP and Telnet TSO commands by logging on to TSO and entering these commands:

TELNET Returns the TSO Telnet screen. Enter *bye* to exit.

FTP1 Returns the FTP prompt. Enter *end* to exit.

FTP2 Returns the FTP2 login prompt. Enter *bye* to exit.

To use the FTP1, FTP2, and Telnet commands, the LINK library must be available to your TSO STEPLIB concatenation or in the MVS link list.

If you plan to include FTP data transfer in the IVP, you must issue a SITE UNIT(*disk*) where *disk* is a valid DASD unit name at your installation.

Verifying That the Application Servers Are Active

Enter this MVS command from an MVS console to verify that the listeners are active:

```
F jjjj,NETSTAT CONN
```

where: *jjjj* is the started task or job name.

Output is written to Unicenter TCPaccess Communication Server JESMSGLG.

```
T00IJ000I NETSTAT CONN
T01NT020I Job jjjj processing: NETSTAT CONN
T01NT054I TCP  ATLI 0.0.0.0:1023<-->0.0.0.0:0 Listening
T01NT055I  Bytes: 0 in, 0 out. Ses# 2 Idle 22:47:52 J=jjjj
T01NT054I TCP  ATLI 0.0.0.0:7<-->0.0.0.0:0 Listening
.
.
.
```

There should be a T01NT054I message for each port in the APPCFG00 SERVICE statements. There are also entries for ports 111 (portmapper) and 161 and 162 (snmp). These are listed as BOUND.

Verifying the API Installation

This section describes the Installation Verification Procedures (IVPs) you run to ensure that the Unicenter TCPaccess API is installed correctly.

Testing TTCP TSO Command Processor

Execute the TTCP TSO command processor to exercise the Unicenter TCPaccess API components. The *User Guide* describes how to run TTCP.

Execute this TTCP command in transmit mode to send data to the Unicenter TCPaccess TCP discard port:

```
TTCP TRANS PORT(9) HOST(127.0.0.1)
```

This command sends 1024 buffers of length 1024 to the discard port. You receive a message on successful completion.

Execute TTCP in two TSO user address spaces so that one TTCP transmits data to the other receiving TTCP.

In one TSO user address space, enter this command:

```
TTCP RECV PORT(2000)
```

In the other TSO user address space, enter this command:

```
TTCP TRANS PORT(2000) HOST(127.0.0.1)
```

TTCP sends 1024 buffers of length 1024 from the TTCP in transmit mode to the TTCP in receive mode. You receive messages from each TTCP on successful completion. The TTCP in receive mode should be stopped by TSO attention.

Verifying the IUCV Interface

This section describes the Installation Verification Procedure (IVP) you may run to ensure that the Unicenter TCPaccess IUCV Interface is installed and configured correctly. For more information on configuring and starting IUCV, refer to Chapter 18: Inter-User Communications Vehicle (IUCV) Sockets of the Unicenter TCPaccess Communications Server Customization Guide, and for information on Troubleshooting IUCV Sockets, refer to chapter 4: Diagnostic Procedures of the Unicenter TCPaccess Communications Server System Management Guide.

Using T02VREZ to Test IUCV Interface

Member T02VREZ, in the SAMP library, is an IVP procedure that executes an IUCV API program to verify that the IUCV interface is operating correctly. The job executes program T02VPEZ, which makes several IUCV calls. The program issues a WTO before and after each call to verify the call was successful. There are two TCPDATA parameters, TCPIPJOBNAME and VMCFNAME, in the job that may need to be modified according to your installation.

Review SAMP member IUCVNOTE that explains the parameters in more detail and provides an overview of the IUCV SOCKET DEBUG parameter. IUCVNOTE also gives information on how to read the IUCV SOCKET DEBUG trace output.

Adding an Alias for the FTP Client

The executable name FTP is not supplied as a default with this release of Unicenter TCPaccess Communications Server. To use FTP as an executable name for the FTP client, you must run the USERMOD described in UMMFTPA USERMOD below.

UMMFTPA USERMOD

The client portion of Unicenter TCPaccess Communications Server is shipped without any aliases. The following USERMOD sample, UMMFTPA, assigns an alias of FTP (or any desired alias name) to the client and keeps it under SMP/E control for maintenance.

The sample USERMOD, distributed in *trgindx*.FTPSAMP (T051CUM2), creates an alias of FTP for load module T051C in the load library defined by DDDEF MFTPDDEF.

Before applying this USERMOD, you must do the following:

- Add a DDDEF to SMP/E for the ddname MFTPDDEF. This DDDEF can specify the same data set as the DDDEF TCPLINK or FTPLINK. (T051C is installed into *trgindx*.FTPLINK)
- If you chose to specify a different data set name for MFTPDDEF, ensure that both of the following apply to the MFTPDDEF data set:
  - It is allocated and of a valid type.
  - It is APF authorized.

Sample SMP/E JCL to Modify UMMFTPA USERMOD

```
//T051CUM2 JOB
//* RECEIVE AND APPLY A USERMOD TO
//*    CREATE AN ALIAS OF FTP
//*
//* PERFORM THE FOLLOWING GLOBAL CHANGES BEFORE RUNNING THIS JOB:
//*
//*   1) INSURE DDDEF 'MFTPDDEF' IS DEFINED WITH VALID DATASET
//*   2) CHANGE 'SMPINDX' TO SMPE DATASETS HIGH LEVEL QUALIFIER
//*
//SMPE     EXEC PGM=GIMSMP,REGION=6M,
//         PARM='CSI=SMPINDX.CSI,PROCESS=WAIT'
//SMPHOLD  DD  DUMMY
//SMPOUT   DD  SYSOUT=*
//SMPPTFIN DD  DATA
++ USERMOD(UMMFTPA).
++ VER (Z038)
   FMID(C196100)
/*
*------------------------------------------------------------*
*                                                            *
* USERMOD TO MAKE ALIAS OF 'FTP' FOR LOAD MODULE 'T051C'     *
* (OR ANY ALIAS'S YOU DESIRE) AND KEEP IT SMP/E MAINTAIN-    *
* ABLE FOR FUTURE MAINTENANCE PURPOSES.                      *
*                                                            *
* ADD A DDDEF TO SMP/E FOR DDNAME MFTPDDEF.  THE DDDEF       *
* MAY SPECIFY THE SAME DATASET NAME AS FOR DDDEF 'TCPLINK'   *
* OR FOR ANY NEW OR EXISTING DATASET YOU DESIRE.             *
*                                                            *
*------------------------------------------------------------*
*/ .
++JCLIN.
//LINK    EXEC PGM=IEWL,
//             PARM='LIST,XREF,MAP'
//SYSPRINT DD  SYSOUT=*
//SYSLMOD  DD DISP=SHR,DSN=MFTPDDEF
//SYSLIN   DD *
 INCLUDE   ATCPLOAD(T051C3CP)
 INCLUDE   ATCPLOAD(T051CUI)
 INCLUDE   ATCPLOAD(T051CUM)
 INCLUDE   ATCPLOAD(T051CGP)
 INCLUDE   ATCPLOAD(ENGLISH)
 INCLUDE   ATCPLOAD(T00LPID)
 INCLUDE   ATCPLOAD(T051C)
 MODE      AMODE(31),RMODE(ANY)
 SETCODE   AC(1)
 ENTRY     CEESTART
 ALIAS     FTP
 NAME      T051CX(R)
++MOD(T051C) LKLIB(FTPLINK).
/*
//*
//SMPCNTL  DD  *
 SET BDY(GLOBAL) .
 RECEIVE S(UMMFTPA) .
 SET BDY(TCPTZN) .
 APPLY   S(UMMFTPA) .
/*
```

Starting Unicenter TCPaccess FTP Server

The startup member, T051RUN, is located in the FTPSAMP library. This member invokes Unicenter TCPaccess FTP Server. You have a choice to submit T051RUN as either a started task or as a batch job. This is only an installation verification procedure to ensure that the installation was done properly. See the *Administrator Guide* for more configuration options.

Task 1: Edit the T051RUN Member

Note: Do *not* execute TCPNAMES.

1. Change the symbolic HLQ to the value you specified in *hlq.dsn* for the CLIST member TCPNAMES.
2. Verify that the symbolic U=T051 is available for use. The MVS command D SSI displays subsystem names that have been invoked during the life of the current IPL. You can use T051 either if it does not display or if it shows as inactive. If T051 is active, you must choose a different name for your subsystem.
3. Verify that the character used for the symbol SRC is not in use by another subsystem.
4. If you have a line limit, add one of the following lines immediately after the JOBCARD to support diagnostics:
   - If you are using JES2, add /*JOBPARM LINES=9999
   - If you are using JES3, add //*MAIN LINES=(999,W)
5. Update the JOB statement for T051RUN.
6. To prepare T051RUN as a started task follow these steps:
   a. Delete the T051RUN JOBCARD and comments that appear before the PROC statement.
   b. Delete the following two JCL statements from T051RUN:

```
//   PEND
//RUNT051   EXEC T051
```

   c. Copy member T051RUN into a system PROCLIB.

Task 2: Submit T051RUN

To submit T051RUN do the following:

- To submit T051RUN as a batch job, submit member T051RUN.
- To submit T051RUN as a started task, issue the MVS command S T051RUN.

- To stop T051RUN, issue the MVS command F T051RUN, P CLEAR, and answer *YES* to the reply. This reply is generated if you have the PROMPT parameter specified in your T051CFI0 member of the FTPPARM library.

Starting Unicenter TCPaccess Telnet Server

The startup member, RUNTLN, is in the TLNSAMP library. This member invokes Unicenter TCPaccess Telnet Server. You can submit RUNTLN as a started task or as a batch job. This is only an Installation Verification Procedure (IVP) to ensure that the installation was done properly.

For more information about configuring the RUNTLN sample, see JCL Requirements in the chapter "Operations" in the Unicenter TCPaccess Telnet Server System Management Guide.

Task 1: Edit the RUNTLN Member

Note: Do *not* execute TCPNAMES.

1. Change the symbolic HLQ to the value you specified in *hlq.dsn* for the CLIST member TCPNAMES.
2. Verify that the symbolic U=ACTN is available for use. The MVS command D SSI displays subsystem names that have been invoked during the life of the current IPL. You can use ACTN either if it does not display or if it shows as inactive. If ACTN is active, you must choose a different name for your subsystem.
3. Verify that the character used for the symbol SRC is not in use by another subsystem.
4. If you have a line limit, add one of the following lines immediately after the JOBCARD to support diagnostics:
   - If you are using JES2, add /*JOBPARM LINES=9999
   - If you are using JES3, add //*MAIN LINES=(999,W)
5. Update the JOB statement for RUNTLN.
6. To prepare RUNTLN as a started task follow these steps:
   a. Delete the RUNTLN JOBCARD and comments that appear before the PROC statement.
   b. Delete the following two JCL statements from RUNTLN:

```
//       PEND
//TLN    EXEC TLN
```

   c. Copy member RUNTLN into a system PROCLIB.

Task 2: Submit RUNTLN

To submit RUNTLN do the following:

- To submit RUNTLN as a batch job, submit member RUNTLN.
- To submit RUNTLN as a started task, issue the MVS command S RUNTLN.
- To stop RUNTLN, issue the MVS command **F RUNTLN, P CLEAR,** and answer **YES** to the reply. This reply is generated if you have the PROMPT parameter specified in your IJTCFGTN member of the TLNPARM library.

Chapter

5

Basic Configuration

This chapter describes the minimum configuration changes that you must make to obtain basic Unicenter TCPaccess functionality and to get the product up and running. After completing this chapter, you should be able to ping your MVS host and test Telnet and FTP.

The following topics are discussed in this chapter:

Note: You are encouraged to make copies of the original configuration members and rename the suffix from 00 to some other two-character suffix. Any changes made to the members with the 00 suffix can be overwritten if subsequent maintenance is applied.

Installation Considerations

This chapter assumes that you are already familiar with and have completed:

- The pre-installation procedures outlined in the *Planning Guide*
- The SMP/E installation of the product as outlined in this guide
- The security modifications outlined in the *Planning Guide*

Configuring Your Network

The statements required to define Unicenter TCPaccess on your network are in the TCPCFG*xx* member of the PARM data set. See the *Customization Guide* for detailed information.

MEDIA Statement

The MEDIA statement defines the first physical medium to which Unicenter TCPaccess is physically attached. Most of the parameters in the MEDIA statement can be left at the default values for startup, but you must set MEDIA NAME (*media_name*) .

The full MEDIA statement is described in the *Customization Guide*.

The following is an example of a minimal configuration:

```
MEDIA  NAME ( media_name )

 [ ETHERNET | VIRTUAL | CLUSTER | TOKEN4 | TOKEN16 | FDDI | HYPERCHANNEL |
         CLAW | CDLC | CTC | XCF ]
```

Specify the type of network medium.

Note: Specify ETHERNET for 10 MB/sec or 100 MB/sec ethernet. CLUSTER is used for cluster sysplex load balancing support.

Default: ETHERNET.

NETWORK Statement

The NETWORK statement describes the interface between the network and the MVS host running Unicenter TCPaccess. At a minimum, you need to specify your MVS host IP address in the IPADDRESS parameter. If your site supports subnets, you will need to specify that as well. Both must be specified in dot notation. A minimal configuration is shown below.

```
NETWORK IPADDRESS(a.b.c.d)
SUBNET(a.b.c.d)
```

For more information on the NETWORK statement, see the “Network Configuration” chapter in the *Customization Guide*.

Driver Statements

Driver statements follow the NETWORK statements and enable you to specify the hardware driver that you plan to use.

The following information is a summary of the minimum parameter requirements needed by the named driver:

Driver	Minimum Parameter Requirements
CETI	DEVADDR
CLAW	DEVADDR HOSTNAME WSNAME
CDLC	DEVADDR
CTC	DEVADDR
HYPER	CUTYPE DEVADDR
LINK	LCSNAME on the LINK statement CUTYPE and DEVADDR on the LSC statement – For 3172s, LOCALADDR and NOFILTER are required – For IBM's 2216 LOCALADDR and NOPFILTER is required – For OSAs LOCALADDR is required – For OSA Express with updated EC levels NOTIMING is required on the LCS statement
XCF	None

For more information on these parameters, see "Driver Statements" and "Network Configuration" in the *Customization Guide*.

Route Statements

You define your routing with the ROUTE statement. At a minimum you should define a default route. Here is an example:

```
ROUTE DEST(DEFAULT) ROUTER (a.b.c.d) MASK(a.b.c.d)
```

For more information on these parameters, see the chapter "Internet Route Configuration" in the *Customization Guide*.

GLOBAL Statement

No changes are required in the APPCFG*xx* member, if:

- You use the supplied, sample VTAM definition
- Are running JES2
- Will *not* be using a Domain Name Server

If using a different VTAM ACB, running JES3, or using a Domain Name Server, update the GLOBAL statement in the APPCFG*xx* member with the following:

```
GLOBAL ACBNAME(acbname)
       JES(3 JES3 JES3 *)
       DNR(* 30)
```

For more information on these parameters, see the *Customization Guide*.

DNR Configuration

The Domain Name Resolver provides information about network objects by answering queries. If you want to reach other hosts on your network, you need to configure DNR for your host. For detailed information about DNR, see the "Domain Name Resolver" chapter in the *Customization Guide*.

At a minimum, you need to edit two DNR members.

You need to map the subsystem name to the fully-qualified host name and the fully-qualified host name to the IP Address in the DNRALC*xx* member as shown in this example:

```
ACSS     host.our.com.       OUR TCP/IP SUBSYSTEM NAME
Host.our.com    xxx.xx.xx.x    IP address coded on the NETWORK
                                statement in the TCPCFG.
```

You will need to define your domain in the DNRSLC*xx* member as shown below:

```
OUR.COM.    <=== PLACE YOUR DOMAIN HERE
.           PUT ROOT LEVEL NEXT
```

If you are using a Domain Name Server you also need to add the DNS to the DNRNSC*xx* member as shown in this example:

```
OUR.COM. SERVERA.OUR.COM.  XXX.XX.XX.X  <== SET SERVER FOR YOUR DOMAIN
```

Starting Unicenter TCPaccess

Note: No changes to the START*xx* command are needed to run Unicenter TCPaccess are needed.

1. Update the START*xx* member to point to the new configuration members as shown in the following example:

   DISPLAY IFS

   DISPLAY SRC

   START TCP CNFG(*xx*)

   START RTM CNFG(00)

   START APP CNFG(*xx*)

   START DNR CNFG(*xx*)

   START MAP CNFG(00)

   START SNM CNFG(00)

   SET TEST ON TGB(TCP APP)

2. Start Unicenter TCPaccess using the START*xx* member.

Testing Connectivity

Once Unicenter TCPaccess is started on your host, verify that the host can be reached from the network.

PING

Use this command to determine if your host is reachable from another host on your network.

From a host on the network, execute the ping command, first giving the IP address (in dotted decimal notation). If you receive a reply (host is alive), then ping your host with the host name—if your host is defined to DNS.

DNRGET

Use this command to query DNR and verify it is working correctly.

DNRGET executes as a TSO command processor. All messages are written and done with TPUTs that restrict its use to interactive TSO users only. In addition, the TSO profile option PROMPT must be set if DNRGET is to prompt for correct operands in the event of an error.

DNRGET cannot be invoked with the TSO CALL or TSOEXEC commands. Therefore, the LINK data set must be in your system's link list, in the STEPLIB DD concatenation of your TSO JCL procedure or added via the TSO STEPLIB command.

If, after invocation, DNRGET waits too long for a reply from the DNR, press PA1 to interrupt its execution without causing any errors. Here is an example:

```
DNRGET HOST BYNAME hostname
```

For more details on the DNRGET command, see the "Diagnostic Commands" chapter in the *Systems Management Guide*.

At this point, if you have successfully completed the verification procedures, the basic TCP/IP services have been configured and are running in a basic mode. Now you are ready to add Telnet and FTP services.

Basic Applications (Telnet, FTP)

To tailor the applications to your specific site requirements, see the chapters "Telnet and TN3270 Configuration" and "Configuring FTP" in the *Customization Guide*.

Testing Telnet

To test Server Telnet, use a TN3270 emulator and connect to the Unicenter TCPaccess host. You should get a response of "Enter Command or Help".

Testing FTP

To test FTP, enter the command *ftp* ***hostname*** from a host on the network where *hostname* is the Unicenter TCPaccess hostname. The host should reply with:

```
Connected to hostname.yourcompany.com.
220 HOSTNAME.YOURCOMPANY.COM -- FTP Server, Enter command or HELP
Name (hostname:yourid):
```

Chapter

6

Diagnosis and Problem Reporting

Generally, Customer Support needs the following documentation to help diagnose problems thoroughly:

- SVC dump of Unicenter TCPaccess and other related address spaces
- JCL output of the Unicenter TCPaccess job
- Case record from Customer Support

Refer to the *System Management Guide* for a complete description of diagnostic tools.

Obtaining an SVC Dump

Refer to the IBM document *MVS/ESA System Commands Reference Summary* for the syntax of the required DUMP commands. In particular, include all jobs involved in the problem using the JOBNAME parameter of the DUMP command.

Obtaining JCL Output

Copy the JCL output of RUNTCP to a file using the following procedure:

- If you are using JES2/SDSF, type *XDC* beside the job listed in SDSF and follow the panel instructions. This will let you copy to a data set of your choice. Generally, for every thousand lines of job output you need three 3390 tracks.
- If you are using JES3, you may use FLASHER or a similar product to copy the RUNTCP output to a data set in a similar fashion.

Index

G

H

I

J

L

M

N

O

P

R

S

T

U

V