Installing Con-nect Teleservices Under z/OS and VSE/ESA

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This chapter describes step by step how to install Con-nect Teleservices under the operating systems z/OS and VSE/ESA.

It contains the following topics:

The Installation Tape

The installation tape for z/OS contains the dataset listed in the table below. The sequence of the dataset is shown in the Report of Tape Creation which accompanies the installation tape.

The installation tape for VSE/ESA is delivered along with the documentation for the package (Product Installation Package or Product Maintenance Package). In this documentation, the format of the installation tape (tape marks etc.) is described. The volume serial number (VOLSER) of the tape is listed in the Report of Tape Creation.

The notation *nnn* in dataset/file name represents the version number of the product.

Dataset Name	**Contents**
CMT*nnn*.INPL	INPL dataset containing the Con-nect Teleservices programs.

Installation Steps

1. Load Dataset CMT*nnn*.INPL

Use the INPL utility (Job I061, Step 0295) to load the dataset/file CMT*nnn*.INPL.

2. Copy Library to SYSCNT2 and SYSCNT2T

The dataset CMT*nnn*.INPL contains the libraries X-TLXCAE (for the CAESAR system), X-TLXGNT (for the GNT system), and X-TLXTOP (for the TOPCALL system). Depending on the telex box which is being used, the corresponding library must be copied into the libraries SYSCNT2 and SYSCNT2T. Use the SYSMAIN utility to do this.

3. Define STEPLIB

Define SYSCNT2 as the STEPLIB for SYSCNT2T in the application definition for Natural Security. For further information, see *Con-nect Teleservices and Natural Security*.

4. Run INSTALL

Once Con-nect Teleservices is installed, run the Con-nect INSTALL program. See *Running INSTALL*.

Natural Parameter

The Natural parameter CSIZE must be set to 32KB. Specify this parameter in the Natural parameter module. See the *Natural Installation and Operations* documentation for additional information on profile parameters.

See also *Modify Parameter Modules* (Job I080).

Translating Special Characters in Telexes

It is possible to translate special national characters or any other special characters that might occur in a text sent as a telex into those characters required for a telex transmission. Con-nect Teleservices translates these characters according to a translation table prior to sending the telex to the telex box. The translation table, which is shown below with its default characters, is part of the module CONFSRT. This module is contained in the dataset CMF*nnn*.SRCE (see the *Con-form Installation* documentation).

```
CONFSRT
       ...
       ...
       CDTLX C'Ä',C'AE'
       CDTLX C'Ö',C'OE'
       CDTLX C'Ü',C'UE'
       CDTLX C'ä',C'AE'
       CDTLX C'ö',C'OE'
       CDTLX C'ü',C'UE'
       CDTLX C'ß',C'SS'
       CDTLX C'$',C'DLR'
       CDTLX C'"',C''''
       CDTLX C'^',C''''
       ...
       ...
```

If you want other characters to be translated, you can modify this table according to your requirements. After modification of the table, the module CONFSRT must be assembled and linked to the Natural nucleus.

Con-nect Teleservices under Net-pass and Com-plete

The following description pertains to an environment comprising the Software AG products Net-pass and Com-plete. To further control the application, you can use Natural Security.

General Description of the Process

A permanent terminal address for the special "Telex line" that runs from the host to the telex box, is defined in Net-pass tables. The Net-pass profile defines that, when this line is active, the user ID TELEX automatically logs on to Com-plete. From Com-plete, this user then logs on to Natural Security, which further specifies that the user directly logs on to the library containing the Telex Driver programs. The user then automatically calls the Telex Driver start program from this library. The following sections describe how this is accomplished for specific applications.

Con-nect Teleservices and Net-pass

In the case of normal telecommunications between a host and terminals, the user has to log on to the system before any other activities can be started. The addresses that are allocated can vary from logon to logon. Such logons are not possible from a Telex device. When generating the system, a permanent terminal address must be reserved for the coaxial port that is allocated to the Telex device. In this example, this is the terminal ID LOCS130. When this address (line) is active, a VTAM-type logon is made to Net-pass.

```
*/* THIS LIST SUPPORTS LOCAL TERMINALS ON A3274-1A          00060000
*/* CONTROLLER. THE TERMINAL TYPES ARE:                     00070000
*/*                                                         00080000
*/* 3278 MODELS 2                                          00090000
*/*                                                         00110000
...
...
...
LOCS129 LU LOCADDR=30                                       00300000
LOCS130 LU LOCADDR=31,LOGAPPL=ENETPASS                      00300000
LOCS131 LU LOCADDR=32                                       00300000
DAE82132 LU LOCADDR=33,DLOGMOD=DSC2K,                      X00300000
MODETAB=MODTBSAG
*                                                           01400000
```

When the LU is activated and connected to Net-pass, NPEXIT03 (Net-pass physical terminal logon exit) gains control and supplies logon data (user ID and password) for the telex "user". Therefore, NPEXIT03 has to be modified as follows.

Insert the following statements after label VTAMLGN:

```
         L      R1,EPLPTERM              GET LUNAME
         CLC    0(8,R1),=CL8'LOCS130'    TELEX BOX LU ???
         BE     VTAMLGN1                 YES - SUPPLY LOGON DATA
         B      NOTELEX                  NO - SOMETHING ELSE
*
VTAMLGN1 DS     OH                       TELEX DRIVER
         L      R4,EPLPTB                PHYSICAL TERMINAL C.B.
         CMUSE  DPTB,R4
         L      R5,PTBPTE                PHYSICAL TERMINAL ENTRY
         CMUSE  DPTE,R5
         MVC    PTEUSER,=CL8'TELEX'      SET USERID
         MVC    PTBPASSW,=CL8'TELEX'     & PASSWORD
         XC     PTBPASSW,NCBPCODE
         OI     PTBSLGND,PTBMLGND        NOTE LOGON DATA IS SET
         B      RETO                     AND RETURN

         CMDROP R4
         CMDROP R5

*
NOTELEX  DS     OH
```

Note:
In the above examples, LOCS130 must be replaced with the LU name assigned to your Telex device. ENETPASS and ECOMPLET are example names which must be replaced by the names which are valid in your environment.

In the NETPASS profile for the Telex Driver, COMPLET is entered for APPL and YES is entered for START. This means that an automatic LOGON to ECOMPLET is made after the LOGON to Net-pass.

```
         ...
         ...
         CMUSER
                USERID=TELEX             USERID AS FROM NPEXIT03
                PROFILE=PROFTLX          ... USES PROFILE PROFTLX
         ...
         ...
         CMPROF=PROFTLX
                CONTROL=NO               AUTHORIZED USER
                BRODCST=NO               NO BROADCAST MESSAGE
                GROUP=TELEX              GROUP CAN BE USED FOR SEND
                RESCAN=NO                DO NOT SCAN FOR OTHER PROFILES
                SUSPKEY=NULL             NO SUSPEND KEY
                LGNLGF=YES               AFTER LOGOFF NET-PASS LOGO
                MENUFMT=L                N.A.T FORMAT
                AUTOLGF=NO               EXEMPT FROM AUTO-LOGOFF
                AUTODSC=NO               EXEMPT FROM AUTO-DISCONNECT
                MAXLVL=1                 MAXIMUM OF ONE SESSIONS
                NOTIFY=NO                NOTIFY USER ON RECEIVE+LOSTSESS
                RESTART=YES              AUTO RESTART LOST SESSIONS
                COMP=0                   NO COMPRESSION
                WSLV=0                   NO INCORE SUSPEND BUFFERS
                READBUF=NO               DON'T DO READBUFFER
*  MAYBE USED   CLSPASS=YES              DO CLOSEDEST PASS
*  ...LATER     RELOGON=YES              BACK TO NET-PASS IF SESS DROP
                STRTLVL=1                AUTO START FOR LEVEL 1
                CMLEVEL=1
                ID=CONNECT
                APPL=ECOMPLET
                START=YES                AUTO-START APPLICATION
```

Con-nect Teleservices and Com-plete

The user TELEX is created in ULOGM (USER ID MAINTENANCE UTILITY, see the *Com-plete Utilities* documentation). In our example, CON2 (call Con-nect session) is entered as the user startup program in the associated user profile which then appears. This means that this startup transaction is automatically called each time this user logs on to Com-plete. Because Con-nect runs under Natural Security in our example, the user TELEX is passed to Natural Security, where the corresponding security definitions come into effect.

Con-nect Teleservices and Natural Security

Define SYSCNT2 as the STEPLIB for SYSCNT2T in the application definition in Natural Security.

The application SYSCNT2T is created under Library Maintenance (see the *Natural Security* documentation). SYSCNT2T is the library that contains the Telex Driver programs. The name of the Telex Driver start program must be entered in the input field Startup. In most cases, this will be the supplied program TLXDRV. This program will then be called after each successful logon to this application.

The user TELEX is subsequently defined under User Maintenance, and SYSCNT2T is entered in the input field Libraries Default (see the *Natural Security* documentation). This application is automatically called when the user TELEX logs on to Natural.

If Natural Security has not been installed, an Assembler program, which will be provided by Software AG on request, must be written to call the library and start the program.

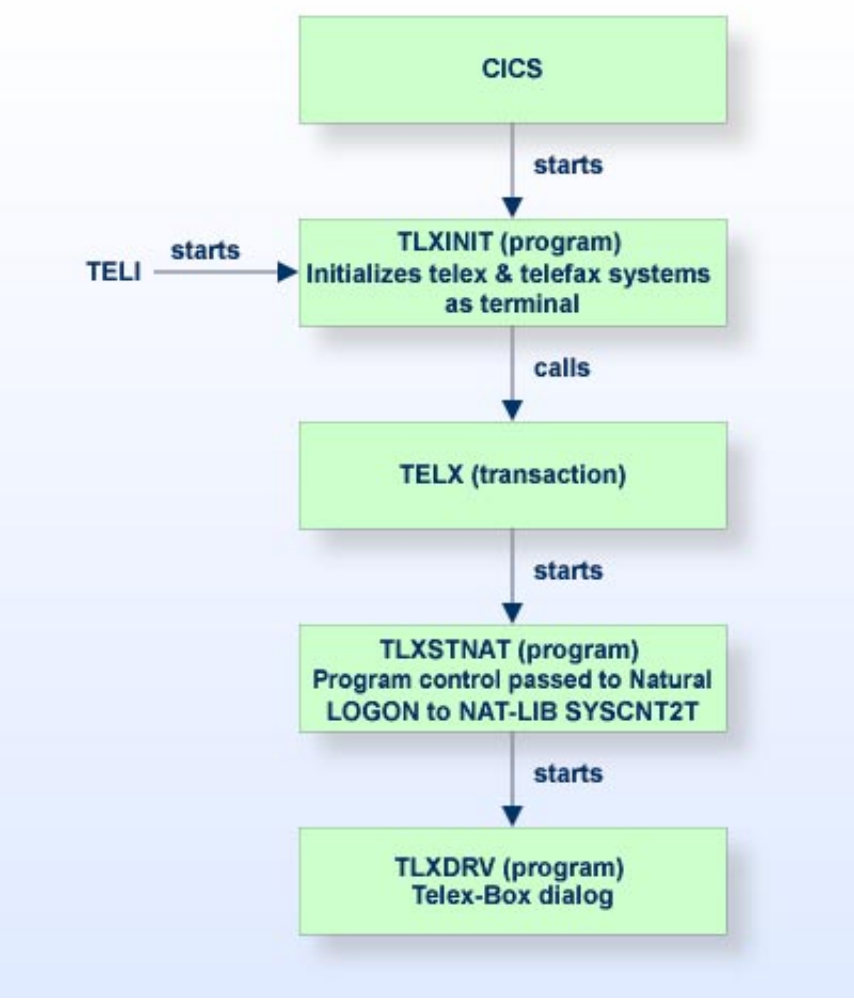
Con-nect Teleservices under CICS

The following description pertains to an environment with the transaction monitor CICS. To further control the application, you can use Natural Security.

General Description of the Process

A permanent terminal address for the special "Telex line" that runs from the host to the telex box is defined in the CICS Terminal Control Table (TCT) tables. The transaction TELI starts the Telex Driver program TLXINIT which initializes the telex and/or telefax system and then calls the transaction TELX. TELX starts the program TLXNAT which logs on to the Natural library SYSCNT2T and automatically calls the Telex Driver Start program from this library. The following sections describe how this is accomplished for specific applications.

The following is an example of Con-nect Teleservices under CICS.



The steps below are required in order to install Con-nect Teleservices under CICS:

1. Define the telex and/or telefax system in the TCT (Terminal Control Table)
2. Define the transaction TELI in the PCT (Program Control Table)
3. Define the transaction TELX in the PCT (Program Control Table)
4. Define the program TLXINIT in the PPT (Processing Program Table)
5. Define the program TLXSTNAT in the PPT (Processing Program Table)
6. Define the program TLXINIT in the PLT (Program Load Table)

An example for each of these steps, and programs TLXINIT and TLXSTNAT are given in the following sections.

Con-nect Teleservices and CICS

Define Telex and Telefax Systems in the TCT

The telex and telefax system works in the same way as a normal terminal. It must be defined in the TCT using the TRANSCEIVE option. The terminal ID (TID) must be defined as TERMID(' *xxxx* ') in the program TLXINIT (for example, TERMID('c1281')).

Example:

```
D081     DFHTCT TYPE=TERMINAL,
               ACCMETH=VTAM,
               FEATURE=(AUDALARM,UCTRAN),
               GMMSG=YES,
               NETNAME=c1281,
               PGESTAT=PAGE,
               RELREQ=(,YES),
               TCTUAL=255,
               TIOAL=300,
               TRMIDNT=c1281,
               TRMMODL=2,
               TRMSTAT=TRANSCEIVE,
               TRMTYPE=L3277,
```

Define the Transaction TELI in the PCT

The transaction TELI starts the Telex Driver and is also necessary for testing or error handling. Set TRANSID=TELI, TWASIZE=150 and PROGRAM=TLXINIT in the PCT.

Example:

```
DFHPCT TYPE=ENTRY,TRANSID=TELI,
      DTB=YES,
      TWASIZE=150,
      CLASS=SHORT,PROGRAM=TLXINIT,
      RESTART=NO
```

Define the Transaction TELX in the PCT

The program TLXINIT calls the transaction TELX which starts the program TLXSTNAT. Set TRANSID=TELX, TWASIZE=150 and PROGRAM=TLXSTNAT in the PCT.

Example:

```
DFHPCT TYPE=ENTRY,TRANSID=TELX,
      DTB=YES,
      TWASIZE=150,
      CLASS=SHORT,PROGRAM=TLXSTNAT,
      RESTART=NO
```

Define the Program TLXINIT in the PPT

The program TLXINIT starts the transaction TELX with the terminal ID specified when the telex and telefax system was defined in the TCT (c1281 in the example).

Example:

```
DFHPPT TYPE=ENTRY,PROGRAM=TLXINIT,
      PGMLANG=ASSEMBLER,RES=YES
```

Define the Program TLXSTNAT in the PPT

The transaction TELX calls the program TLXSTNAT. This program logs on to the Natural library SYSCNT2T, and starts the program TLXDRV.

Example:

```
DFHPPT TYPE=ENTRY,PROGRAM=TLXSTNAT,
      PGMLANG=ASSEMBLER,RES=YES
```

Define the Program TLXINIT in the PLT

The program TLXINIT must be included in the PLT, so that the Telex Driver will be activated when CICS is started.

Example:

```
DFHPLT TYPE=ENTRY,PROGRAM=TLXINIT
```

Example: Program TLXINIT (Assembler)

```
*
*ASSEMBLER
*-----------------------------------------------------------------
* TLXINIT INITIALIZES THE PROKOR. THE TRANSACTION TELX IS CALLED
* AND THE PROGRAM TLXSTART IS SUBSEQUENTLY STARTED.
*-----------------------------------------------------------------
*
*
TLXINIT  TITLE 'TINIT'
         EJECT
         SPACE 1
*
*
TELE     START 0
*
*
*
         EXEC CICS START              ,                          +
              TRANSID('TELX')         ,                          +
              TERMID('c1281')         ,                          +
              INTERVAL(000100)        ,                          +
              NOCHECK
         EXEC CICS RETURN
*
*-----------------------------------------------------------------
*  ENTER THE TERMINAL ID WHICH WAS SPECIFIED IN THE TCT
*  UNDER TERMID('XXXX').
*-----------------------------------------------------------------
*
         END
```

Example: Program TLXSTNAT (Assembler)

```
*ASSEMBLER
*
*-----------------------------------------------------------------
* TLXSTNAT IS CALLED FROM TLXINIT WHEN CICS IS STARTED VIA THE
* TRANSACTION TELX AND ACTIVATES THE CON-NECT TELESERVICES DRIVER.
*-----------------------------------------------------------------
*
*!!!!!!!!! THIS PROGRAM APPLIES TO SYSTEMS WITHOUT NAT-SEC !!!!!!
*
*
TLXSTART  TITLE 'TSTART'
          EJECT
          SPACE 1
TLXSTR    START 0
*
*
          MVC   RSTRTRID,EIBTRNID
          MVC   NATRID,=CL4'NAT2'      Natural START
TRANSACTION
          MVC   REPGID,=XL8'00'
          LA    2,FILLER
          ST    2,DYPAAD
          LA    2,L'PADA
          STH   2,DYPALE
*
          EXEC  CICS XCTL              ,                          +
                PROGRAM('NCI21RE')     ,                          +
                COMMAREA(WSCOM)
*
*-----------DATA DEFINITIONS---------------------------------
FILLER    DS    CL12
PADA      DC    C'
AUTO=OFF,MENU=OFF,LC=ON,FS=OFF,ID='','',                          +
                STACK=(LOGON SYSCNT2T;TLXDRV)'
*
*-----------WS-COMMAREA----------------------------------------
DFHEISTG  DSECT
WSCOM     DS    0CL22                WS-COMMAREA
RSTRTRID  DS    CL4                  RESTART-TRANS-ID
DYPAAD    DS    A                    DYN-PARMS-ADDRESS
DYPALE    DS    H                    DYN-PARMS-LENGTH
NATRID    DS    CL4                  NAT-TRAN-ID
REPGID    DS    CL8                  RET-PGM-ID
*
*
          END
```

Con-nect Teleservices and Natural Security

Define SYSCNT2 as the STEPLIB for SYSCNT2T in the application definition in Natural Security.

The application SYSCNT2T is created under Library Maintenance (see the *Natural Security* documentation). SYSCNT2T is the library that contains the Telex Driver programs. The name of the Telex Driver start program must be entered in the input field Startup. In most cases, this will be the supplied program TLXDRV. This program will then be called after each successful logon to this application.

The user TELEX is subsequently defined under User Maintenance, and SYSCNT2T is entered in the input field Libraries Default (see the *Natural Security* documentation). This application is automatically called when the user TELEX logs on to Natural.

Define Telex and Telefax Systems in the TCT

For further information, see *Con-nect Teleservices and CICS*.

Define the Transaction TELI in the PCT

For further information, see *Define the Transaction TELI in the PCT*.

Define the Transaction TELX in the PCT

For further information, see *Define the Transaction TELX in the PCT*.

Define the Program TLXINIT in the PPT

For further information, see *Define the Program TLXINIT in the PPT*.

Define the Program TLXSTNAT in the PPT

For further information, see *Define the Program TLXSTNAT in the PPT*.

Define the Program TLXINIT in the PLT

For further information, see *Define the Program TLXINIT in the PLT*.

Example: Program TLXSTNAT (Assembler)

Data definition in program TLXSTNAT must be specified as follows:

```
*ASSEMBLER
*
*-------------------------------------------------------------
* TLXSTNAT IS CALLED FROM TLXINIT WHEN CICS IS STARTED VIA THE
* TRANSACTION TELX AND ACTIVATES THE CON-NECT TELESERVICES DRIVER.
*-------------------------------------------------------------
*
.
.
.
*-----------DATA DEFINITIONS---------------------------------
FILLER    DS    CL12
PADA      DC    C'
AUTO=OFF,MENU=OFF,LC=ON,FS=OFF,ID='','',                          +
               STACK=(LOGON SYSCNT2T, USERID, PASSWD; TLXDRV)'
*
*-----------WS-COMMAREA--------------------------------------
.
.
.
```