

CICS Universal Client Configuration

What this exercise is about

The objective of this lab is to explore the installation of CICS Universal Client (CUC) as provided by TXSeries, then configure the CUC to connect to a CICS region.

The CUC is a separately available product from IBM, the intention is that all CICS users will use the CUC provided terminals to connect to their CICS systems. TXSeries automatically installs a single license of CUC so that users can connect to their local TXSeries CICS regions.

Notice

The CUC should be automatically installed during the TXSeries installation. If you need to install the CUC separately the install image is provided on the TXSeries CD or in the TXSeries install image.

What you should be able to do

At the end of this lab you should understand how to configure CUC on the Windows platform. You should have become familiar with:

1. How to configure two CICS region listeners for the CUC (Named Pipe and TCP/IP).
2. How to configure CUC to connect to an existing CICS region using Named Pipe and TCP/IP protocols.

Part 1: Define Listeners to the CICS Region

Overview

In this part you will define two CICS listeners to the CICS region. One is a TCP/IP listener the other is a Named Pipe listener.

The Setup

The CUC should be installed.

In the following steps:

1. **<regionName>** should be replaced with the actual name of a CICS region running on your machine.
2. **<installDrive>** should be replaced with the drive letter of the TXSeries installation.
3. **<address>** should be replaced with the ip address or hostname of the machine running CICS.

Instructions

- ___ 1. Create a CICS TCP/IP listener.
 - ___ a. Start a windows command prompt. Change to the cics directory using the following command.

```
cd c:\opt\cics\bin
```
 - ___ b. Enter the following command to create the listener definition.

```
cicsadd -c ld -r <regionName> -P LISTEN2 Protocol=TCP  
TCPAddress=<address>
```
- ___ 2. Create a Named Pipe listener.
 - ___ a. Enter the following command to create the listener definition.

```
cicsadd -c ld -r <regionName> -P LISTEN3 Protocol=NamedPipe  
NamedPipeName=CICSBB
```
- ___ 3. Restart the CICS region.
 - ___ a. Since the changes were only made to the permanent database, you need to stop and restart the CICS region if it is currently running using the following commands.

```
cicscp -v stop region <regionName>  
cicscp -v start region <regionName> StartType=cold
```
 - ___ b. Use the following command to view the region console. Part way through the console you should see messages confirming that two new listener processes are started.

```
cicstail -r <regionName> -b 15000
```
 - ___ c. The tcp/ip listener will automatically default to listening on port 1435. This is the default listener port for the CUC.

Part 2: Configure a CUC Connection to the CICS Region

Overview

In this part you will configure the CUC so that it connects to the CICS region via a Named Pipe and also via a TCP/IP connection.

The Setup

The CUC should be installed.

The Named Pipe and TCP/IP listeners should be defined to CICS and the region restarted.

Instructions

- ___ 1. The CUC configuration tool requires a Java runtime, but does not install one by default during the CUC installation.
 - ___ a. Locate the supplied Java 1.4.2 runtime install executable provided and run it.
 - ___ b. Accept the license agreement and all the defaults. Making the new Java runtime the system Java runtime allows the CUC configuration tool to automatically locate the Java runtime.
 - ___ c. Start a windows command prompt and enter the following command.


```
ctgjava -v
```
 - ___ d. Make sure the following messages appear:-


```
CTG8814I CTGJAVA - CICS Transaction Gateway Java location tool
CCL0002I (C) Copyright IBM Corporation 1994, 2004. All rights
reserved
CTG8810I Current JVM set to:
'C:\PROGRA~1\IBM\Java142\jre\bin\java.exe'
```
 - ___ e. If this fails, try using the command **ctgjava -a** or **ctgjava -s** to configure the Java runtime for the CTG.
- ___ 2. Create two CUC Server configurations.
 - ___ a. From the Windows **start** menu select **Programs -> IBM CICS Universal Client -> Configuration Tool**.
 - ___ b. Select **NO** to the Task Guide Configuration Tool.
 - ___ c. From the menu bar select **Tools -> New Server**.
 - ___ d. Complete the dialog box as follows; see Figure 1 "CUC Server Configuration".

Server Name:	TX-PIPE
Description:	Named pipe connection to TXSeries region
Network protocol:	Named pipe
Named pipe name:	CICSBB

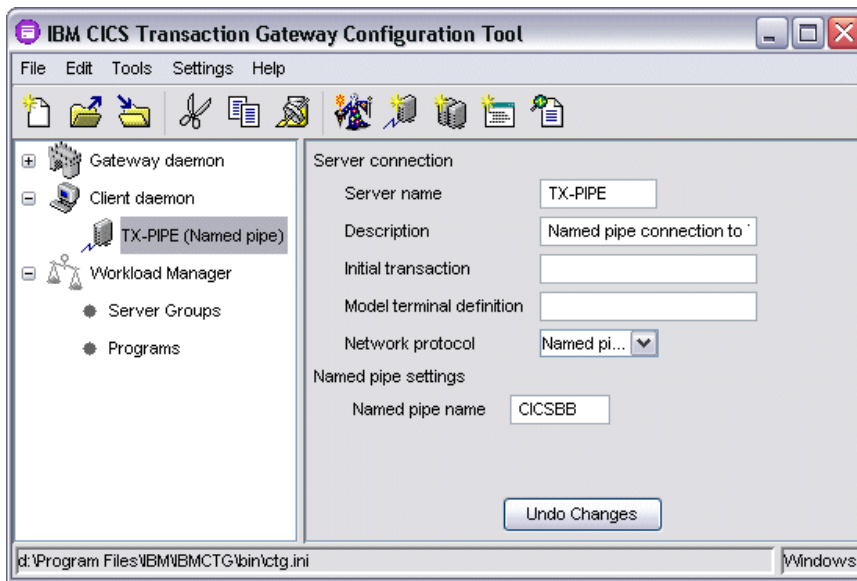


Figure 1 "CUC Server Configuration"

___ e. Save the changes using **File -> Save** from the menu bar and saved the configuration file as **<ctg_install_dir>\bin\CTG.INI**.

___ f. From the menu bar select **Tools -> New Server** to define the TCP/IP connection.

___ g. Complete the dialog box as follows:-

- Server Name:** TX-TCP
- Description:** TCP/IP connection to TXSeries region
- Network protocol:** TCP/IP
- Host Name or ip address:** <ip address or hostname of machine running CICS>
- Port:** Leave blank as the CUC will default to the same port as CICS

___ h. Save the changes.

___ i. Close the configuration tool.

___ 3. Start the CUC Client Daemon.

___ a. From the Windows **Start** menu, select **Programs -> IBM CICS Universal Client -> Start Client**.

___ 4. Start two CICS terminals connected to the TXSeries region.

___ a. From the Windows **Start** menu, select **Programs -> IBM CICS Universal Client -> CICS Terminal**.

___ b. Since there are two servers defined to the CUC, it displays the following prompt. See Figure 2 "Start a CICS Terminal".

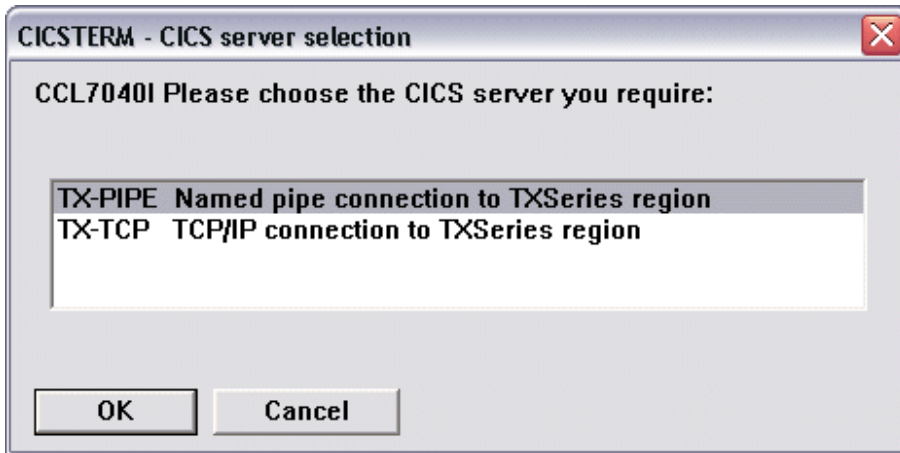


Figure 2 "Start a CICS Terminal"

- ___ c. Select **TX-PIPE** and select **OK**.
- ___ d. A CICS terminal should now appear.
- ___ e. Start another terminal and select **TX-TCP**.
- ___ f. In both terminals enter a transaction of **CSTD** in the top left corner of the window; see Figure 3 "CICS local terminal (CSTD screen)".

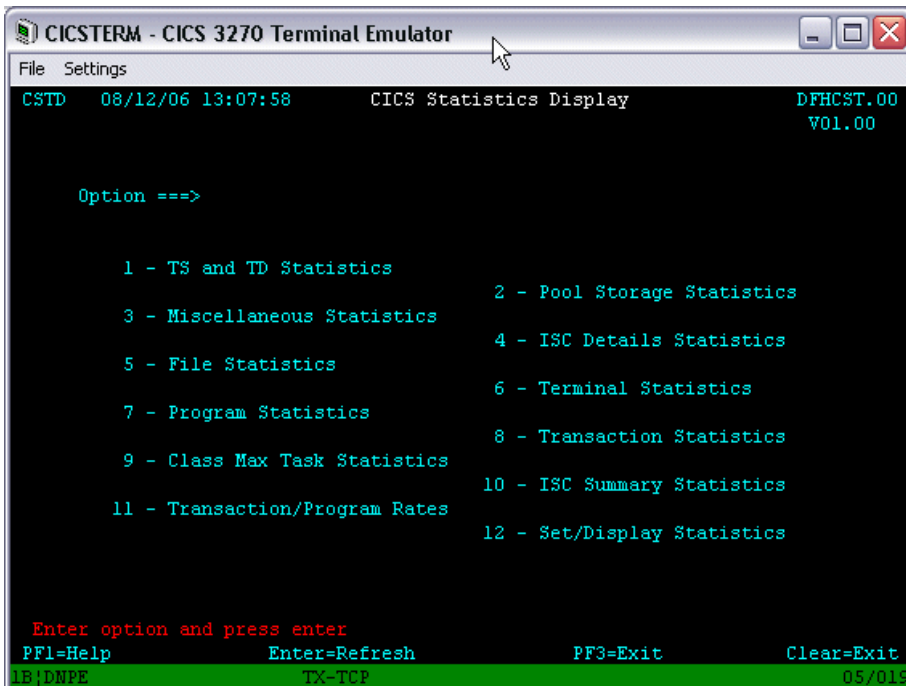


Figure 3 "CICS local terminal (CSTD screen)"

- ___ g. To exit from CSTD press **F3**.
- ___ 5. Stop both client terminals and close the CUC.

- ___ a. To close the CICS terminal, run a transaction called **EXIT**.
- ___ b. To stop the CUC, select **Programs -> IBM CICS Universal Client -> Stop Client** from the Windows **Start** menu.

Summary

There are two ways for a user to connect terminals to a TXSeries system on Windows. Either use the TXSeries supplied cicslterm and a NamedPipe process or use the CUC which provides NamedPipe and TCP/IP support.

In general, the CUC method is the more appropriate. It offers more facilities and greater resilience of the connections if the CICS server is restarted. For all remaining lab exercises the CUC client terminals will be used in preference to the cicslterm terminal provided by TXSeries.