CICS Transaction Gateway V7.2 .NET application support

Current Version: v1.1, Jun 2009 Authors: Paul Crockett, IBM UK, Hursley

Description

This SupportPac builds on the new ECI v2 capability of CICS Transaction Gateway V7.2 by providing an API that allows .NET applications to access CICS servers using the ECI API. The SupportPac contains a mixed mode DLL assembly that exposes the functions of the ECI v2 C language API in a form that will be familiar to developers working in C# or VB.NET. This API allows .NET applications, such as ASP.NET applications running in Microsoft IIS, to invoke COMMAREA-based programs in CICS using the facilities of a remote CICS Transaction Gateway. The SupportPac includes sample ECI applications written in C# and VB.NET and documentation for using the API.

System requirements

CICS Transaction Gateway for Multiplatforms - V7.2 (or later) CICS Transaction Gateway for z/OS – V7.2 (or later) Client Operating System – Any supported Microsoft Windows operating system with .NET Framework v2 (or later)

Skill level required

Application developers familiar with C#, VB.NET, or other .NET languages.

Changes in v1.1

• IBM.CTG.Client.dll is strong-name signed and can be installed into the Global Assembly Cache (GAC)

Supplied files

• Samples

- IBM.CTG.Client.dll .NET assembly containing the SupportPac API
- ca73.pdf SupportPac documentation
 - Sample program in C# and VB.NET
- Documentation
 HTML documentation for the SupportPac API
- Licenses Translated license files

Installation

Copy the file ca73.zip to a temporary directory on your chosen system and uncompress using an unzip utility.

Compiling and using the sample program

The SupportPac includes a sample program in C# and VB.NET. To run the sample program you need the EC01 server program compiled and available on your CICS server. The EC01 program is supplied as part of the CICS Transaction Gateway installation.

The sample can be compiled using Microsoft Visual Studio 2005 or higher using the included Visual Studio project files, or from the command line using the C# and VB.NET compilers csc.exe and vbc.exe which are supplied as part of the .NET Framework. If compiling from the command line, please read the important note below.

Application development

To use the SupportPac API in your .NET applications, add a reference to the file IBM.CTG.Client.dll. In Visual Studio, go to Project \rightarrow Add Reference... \rightarrow Browse, then select IBM.CTG.Client.dll and click OK.

The .NET assembly uses the ECI v2 API for C which is supplied as part of the CICS Transaction Gateway installation. The file ctgclient.dll must be available on the system PATH or in the same directory as the application in order to use IBM.CTG.Client.dll.

Important Note:

Any application that uses IBM.CTG.Client.dll must be compiled to target the x86 processor architecture, rather than the default of *Any CPU*. If the application is compiled for *Any CPU*, it may fail to execute on 64 bit platforms.

The included Visual Studio project files for the C# and VB.NET samples are already configured to generate executables that target the x86 architecture.

If compiling from the command line, an executable can be modified to target the x86 architecture using the corflags utility which is supplied as part of the Microsoft .NET Framework SDK:

corflags.exe <executable_name> /32BIT+

Further details

For further information on the CICS TG ECI v2 API for C, refer to the CICS TG V7.2 information center available at:

http://publib.boulder.ibm.com/infocenter/cicstgzo/v7r2/index.jsp?topic=/com.ibm.cics.tg. zos.doc/remotecapi/index.html