

CICS Transaction Gateway V8.0 channels and containers support for .NET

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Description

This SupportPac extends the capabilities of .NET applications accessing CICS by enabling them to utilize channel and container payloads with IPIC CICS connections. Prior to this, .NET applications accessing CICS were restricted to utilizing COMMAREA payloads.

SupportPac CA75 contains a mixed mode DLL assembly that exposes the functions of the ECI V2 C language API in a way that will be familiar to developers working with C# or Microsoft Visual Basic .NET. The API provided by CA75 allows .NET applications to invoke COMMAREA and channel and container programs in CICS when used in combination with CICS Transaction Gateway (CICS TG) in a remote mode topology. This assembly replaces the `IBM.CTG.Client.dll` provided with CICS Transaction Gateway V8.0.

This SupportPac includes sample ECI applications written in C# and Visual Basic .NET, and documentation on how to use the new API.

System requirements

CICS Transaction Gateway for Multiplatforms – V8.0 (or later)

CICS Transaction Gateway Desktop Edition – V8.0 (or later)

CICS Transaction Gateway for z/OS – V8.0 (or later)

.NET application operating system – Any supported Microsoft Windows operating system with .NET Framework V3.5 (or later)

Skill level required

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

Supplied files

- `dotnet35/IBM.CTG.Client.dll` - NET assembly containing the SupportPac API for use with .NET Framework V3.5.
- `dotnet40/IBM.CTG.Client.dll` - NET assembly containing the SupportPac API for use with .NET Framework V4.0.
- `ca75.pdf` - SupportPac documentation
- `Samples` - Sample program in C# and VB.NET

- Documentation - HTML documentation for the SupportPac API
- Licenses - Translated license files

Installation

Copy the file `ca75.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 the EC03 server program must be available on your CICS server. The EC03 program is included with CICS Transaction Gateway. The sample can be compiled using Microsoft Visual Studio 2008 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** → **Add Reference...** → **Browse**, then select the appropriate `IBM.CTG.Client.dll` from the SupportPac and click OK.

The .NET assembly uses the ECI V2 API for C included with CICS Transaction Gateway. 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:

All applications that use `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 might fail to execute on 64-bit platforms.

The included Microsoft Visual Studio project files for the C# and VB.NET samples are 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 supplied as part of the Microsoft .NET Framework SDK:

```
corflags.exe <executable_name> /32BIT+
```

Windows C Runtime Support

The Windows runtime libraries included in this SupportPac require the Microsoft Visual C++ 2008 Redistributable Package (x86) to be installed.

The Microsoft package can be downloaded from:

<http://www.microsoft.com/downloads/en/details.aspx?FamilyID=9b2da534-3e03-4391-8a4d-074b9f2bc1bf&displaylang=en>

If your application targets the .NET Framework v4.0, the Microsoft Visual C++ 2010 Redistributable Package (x86) is also required. This Microsoft package can be downloaded from:

<http://www.microsoft.com/downloads/en/details.aspx?familyid=A7B7A05E-6DE6-4D3A-A423-37BF0912DB84&displaylang=en>

Further details

For more information refer to the CICS TG V8.0 information center available at:

<http://www.ibm.com/software/htp/cics/ctg/library/index3.html>