

CICS Transaction Gateway JCA resource adapter installation verification test (IVT)

SupportPac CH91

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Description

This SupportPac provides an installation verification test (IVT) that verifies whether the CICS Transaction Gateway (CICS TG) ECI resource adapters can be used with a given J2EE 1.4 application server. The test verifies transactional and non-transactional support using the resource adapters and must run successfully if you want to use a J2EE application server not listed on the IBM support page. For more information go to the following IBM support page, click 'Software requirements' for your version of CICS Transaction Gateway and scroll down to see which J2EE application servers are supported:

<http://www-01.ibm.com/support/docview.wss?fdoc=aimctg&rs=9&uid=swg21239203>

The IVT runs as a servlet within a J2EE application server and calls program EC01 on the CICS server. The IVT sends two ECI requests to CICS:

1. A non-transactional request which is not coordinated by the transaction manager.
2. A transactional request which uses the global transaction support provided by the application server.

IBM has successfully tested the CICS Transaction Gateway resource adapters on those application servers listed on the IBM support page. For other J2EE application servers, if you experience problems after you have successfully run this IVT, you can report these to IBM for investigation.

If the IVT does not run successfully, problems you encounter are likely to be caused by incorrect deployment of the CICS Transaction Gateway resource adapter. Investigate the problem using your J2EE application server documentation and support organization.

Prerequisites for running the IVT

System Requirements

1. CICS Transaction Gateway V7.0 or later.
2. Any J2EE application server which has passed the J2EE 1.4 Compatibility Test Suite.

Skills Required

System administrators must be able to perform the following tasks:

- Create deployment plans for the chosen J2EE application server.

2. Configure the CICS Transaction Gateway.
3. Build and install CICS applications.

Required Components

1. The EC01 sample program.

This is shipped with CICS Transaction Gateway as a COBOL file in <CICS TG install path>/samples/server/ec01.ccp. Before running the IVT you must build and install the EC01 sample program on your CICS server.

2. The CICS Transaction Gateway resource adapter RAR files (cicseci.rar and cicseciXA.rar).

These are shipped with the CICS Transaction Gateway in the <install path>/deployable directory. These RAR files implement the J2EE Connector Architecture V1.5 interfaces.

3. The IVT program.

This is supplied as an enterprise archive (EAR) file with the filename ECIIVT.ear in this SupportPac.

4. A CICS Transaction Gateway configured with a CICS server connection.

To ensure you have correctly configured the CICS Transaction Gateway, follow the instructions in the file <CICS TG install path>/samples/samples.txt to run the EciB1 sample program. The sample program can be found under the “samples” sub-directory of the CICS TG installation directory.

Downloading and unpacking the SupportPac

To download and unpack the SupportPac :

1. Copy the file ch91.zip to a temporary directory on your application server machine.
2. Uncompress the file using unzip.

The supplied files are :

1. ECIIVT.ear - EAR file containing the IVT
2. Ch91.pdf - Documentation
3. license - Directory for translated license files

Deploying and configuring

To deploy and configure the IVT and resource adapters:

1. Install either the ECI resource adapter (cicseci.rar) or the ECI XA resource adapter (cicseciXA.rar) into your J2EE application server.
2. Define a connection factory that has the property:

JNDI name set to “eis/ECI”.

3 Define the connection factory custom properties:

Connection URL - the URL of the CICS Transaction Gateway with which the resource adapter will communicate.

1 In local mode, set the Connection URL to “local://”.

2 In remote mode, set the Connection URL to “<protocol>://address”, where <protocol> is tcp or ssl.

Port Number - in remote mode it is the tcp or ssl port on which the Gateway daemon is configured to listen.

1 Set PortNumber to the port number defined in the configuration file ctg.ini. This property is not required in local mode.

Server Name - the name of the CICS server to which CICS Transaction Gateway will connect.

1 For IPIC in local mode, set the Server Name to “<protocol>://hostname:port” where <protocol> is tcp or ssl.

2 For EXCI, set the ServerName to the CICS APPLID.

3 For all other configurations, set the Server Name to the server defined in the configuration file ctg.ini.

4 Install the application ECIIVT.ear with a Target Resource JNDI Name of “ECIIVTBean1”.

Running the IVT

To run the IVT:

1 Use a web browser to display the first IVT Web page “index.jsp”. For example, on WebSphere this is done by pointing your browser at: http://app_server_host:port/ECIIVTWeb/index.jsp

2 Click "Run IVT".

If the test is successful, it returns a Web page that displays the date and time on the CICS server and a success confirmation message. If the test fails, it returns a Web page with a failure message containing details of the failure including a stack trace option. Capture this data for possible use by the application server support team.

Additional Information

For additional information on the CICS Transaction Gateway refer to the relevant version of the information center:

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