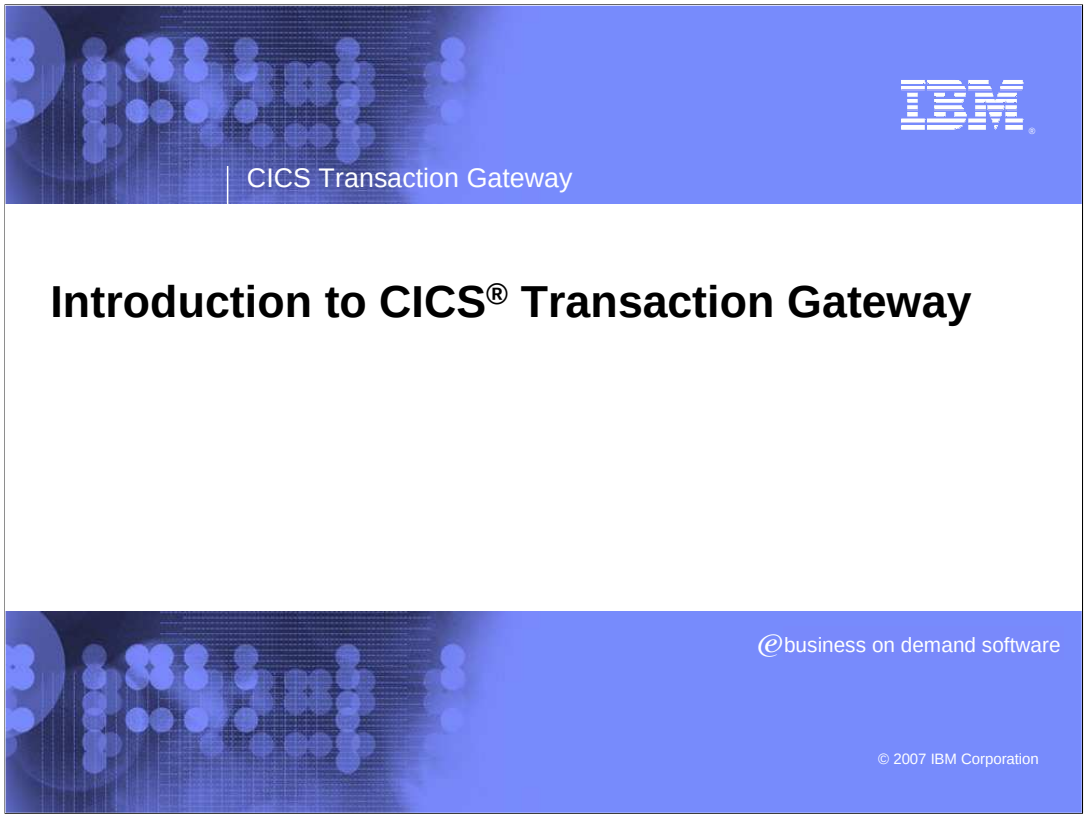

CICS Transaction Gateway
Introduction to CICS® Transaction Gateway
ebusiness on demand software
© 2007 IBM Corporation

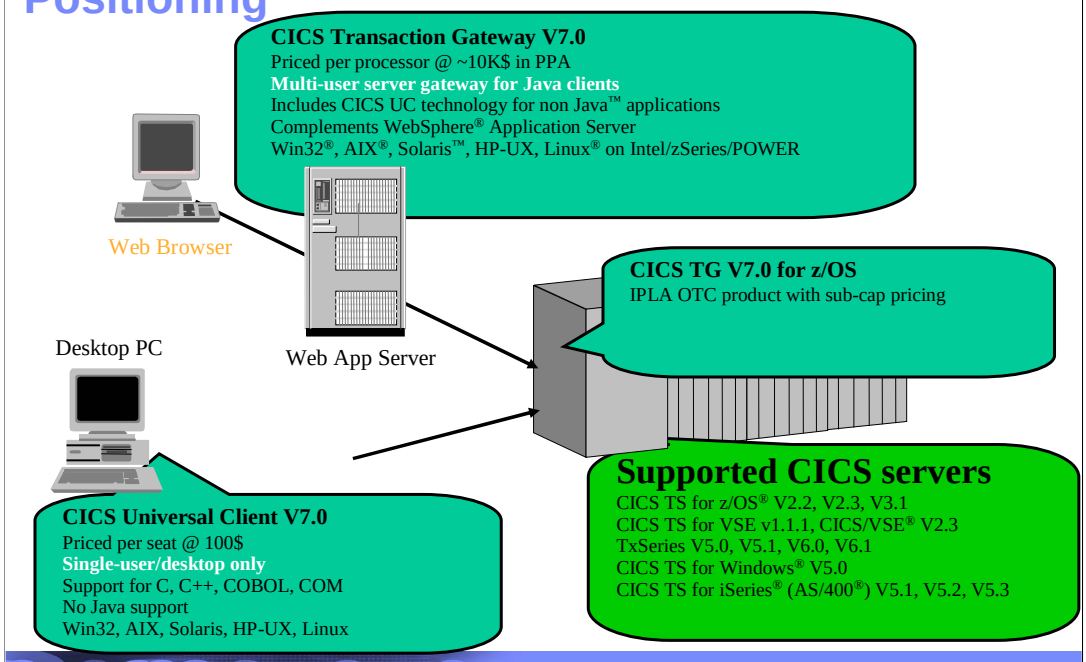
Agenda

- Introduction
- Overview
- Application development

Section

Introduction

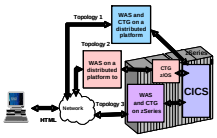
Positioning



What is the CICS TG?

1. **Interconnectivity** - Inbound into CICS
   - Primary inbound connector to CICS
   - COMMAREA (ECI) and 3270 (EPI) based connectors
   - Gateway support into CICS (3-tier AND 2-tier configuration)
   - TCP/IP, SSL and SNA connectivity options

2. **Interfaces** - Java and non-Java APIs
   - J2EE Connector Architecture (JCA) is strategic Java API and provides enhance QoS
   - Base Java, C, COBOL and COM interfaces are stabilised
   - CICS JCA resource adapters integrated with RAD v6 J2C tooling



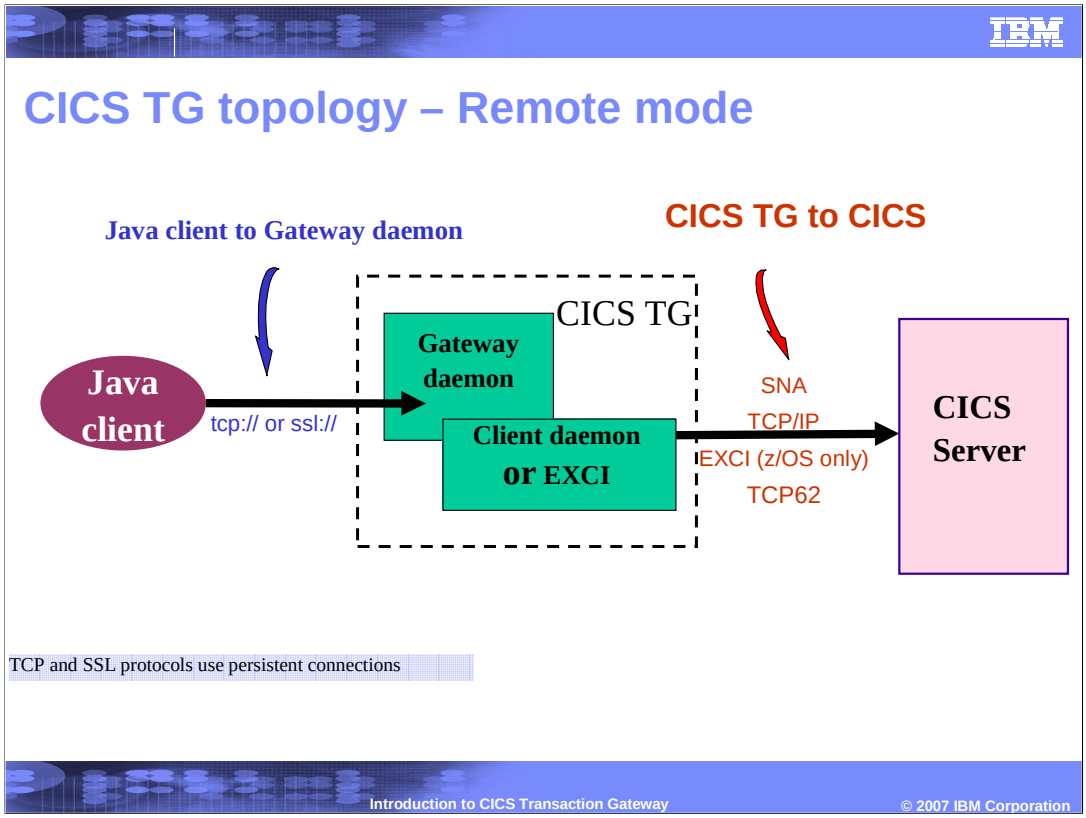
3. **Integration** - WebSphere and CICS
   - Aim is to support all version of CICS and all version of WebSphere in support by IBM
   - 12 CICS releases across 8 CICS platforms
   - 4 WebSphere releases on 8 platforms
   - 5 SNA servers on 4 platforms

What does the CICS TG do?

- **What does it do?**
  - Provides ability to link to CICS COMMAREA programs or invoke CICS 3270 transactions from local/remote Java applications, or local *native* (non-Java) applications
- **What does it offer?**
  - Synchronous transactional access to CICS
  - API: Java class libraries
  - API: COBOL, C and COM interfaces of CICS Universal Client
  - WebSphere J2EE integration: J2EE resource adapter
  - Remote API access for Java clients: Gateway daemon
  - GUI Configuration tool: ctgcfg
- **What it does *not* offer**
  - Remote API access for C, C++, COBOL or COM applications
  - Outbound access from CICS
  - Data conversion facilities (handled by CICS)

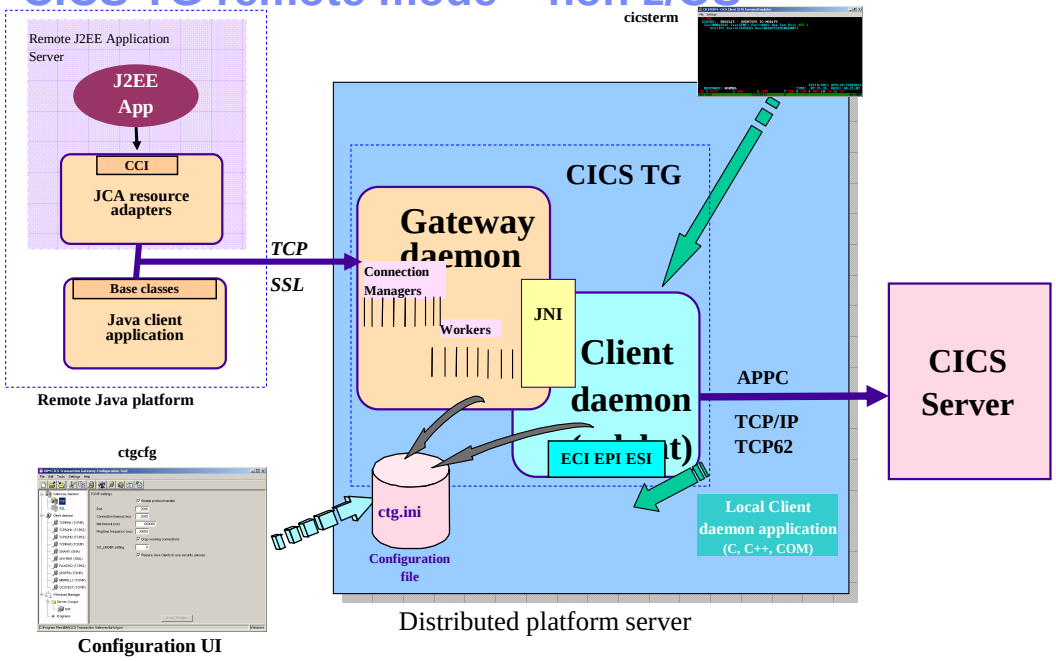
Section

Overview

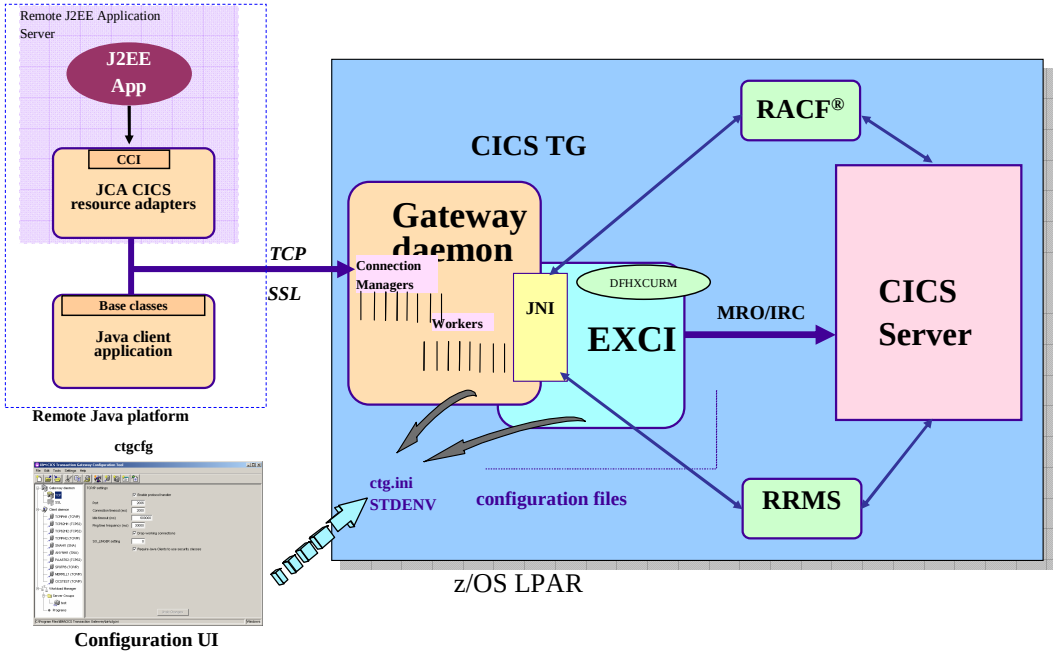


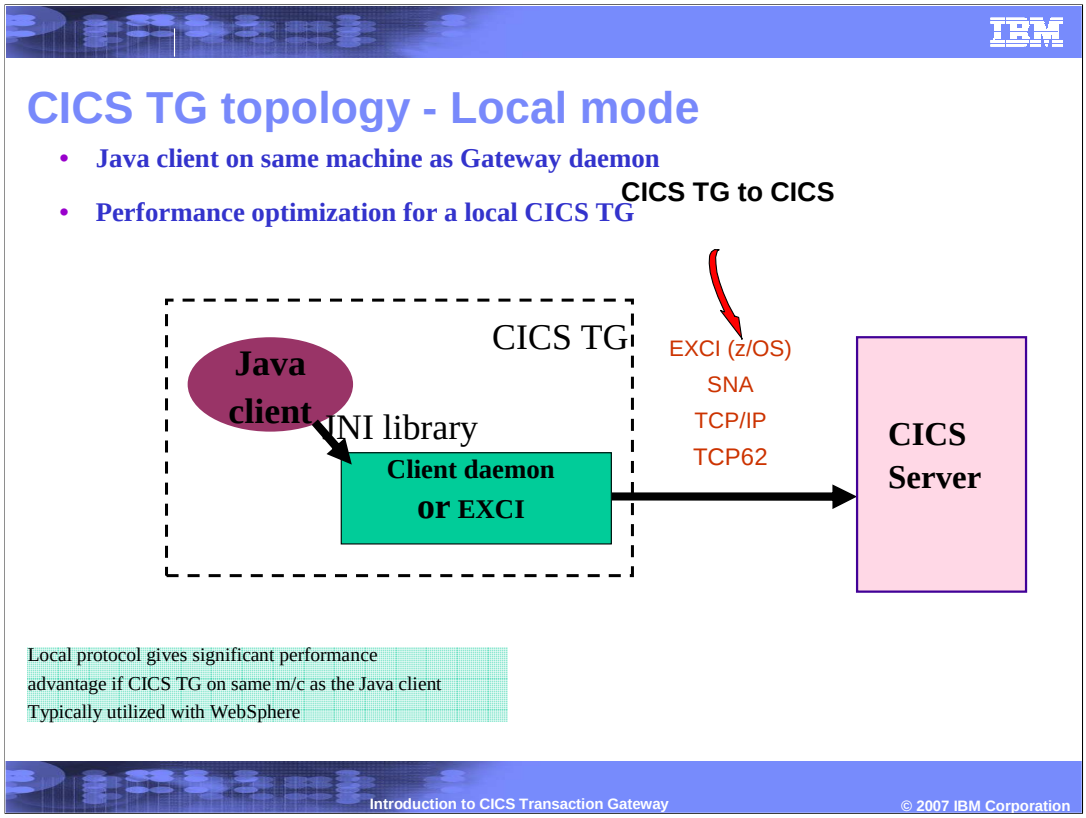
Remote Gateway – uses Gateway Daemon – network protocols to connect to gw. TCP/IP SSL HTTP HTTPS

CICS TG remote mode – non z/OS



CICS TG remote mode – z/OS

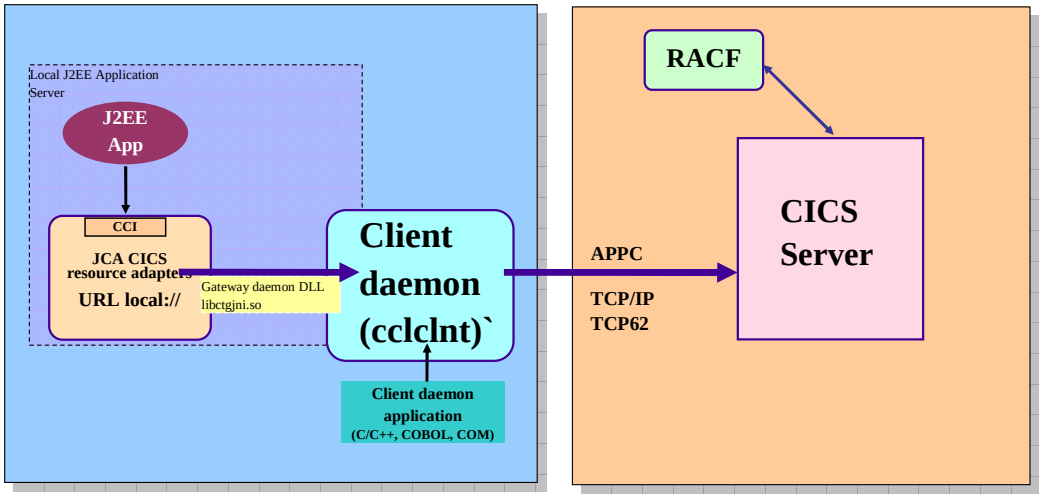




Local mode – gives performance increase.

- used where Java Client is on the same machine as Gateway daemon.

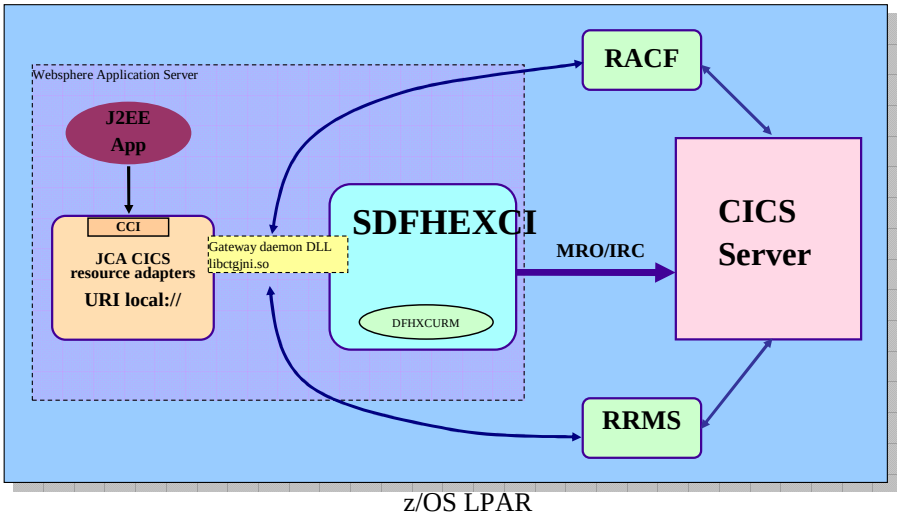
CICS TG local mode – non-z/OS



Distributed platform server

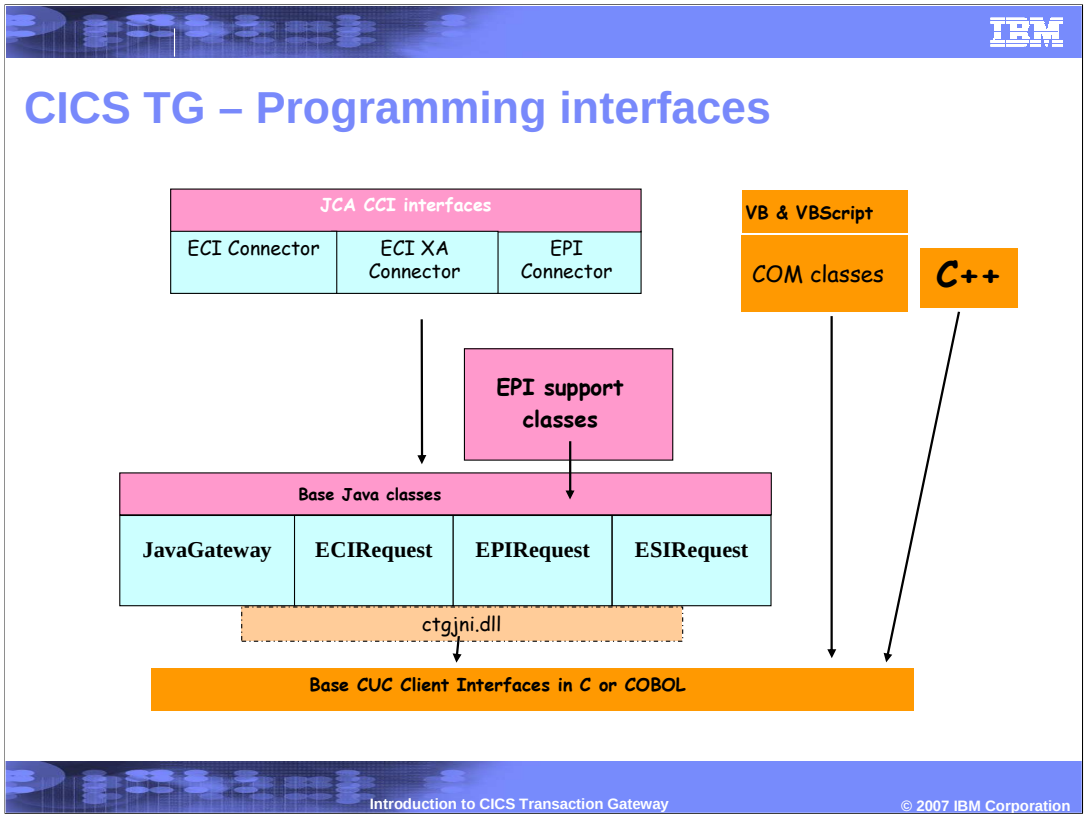
z/OS Parallel Sysplex®

CICS TG local mode – z/OS



Section

Application development



Various interfaces offered. Main theme is “integration”.

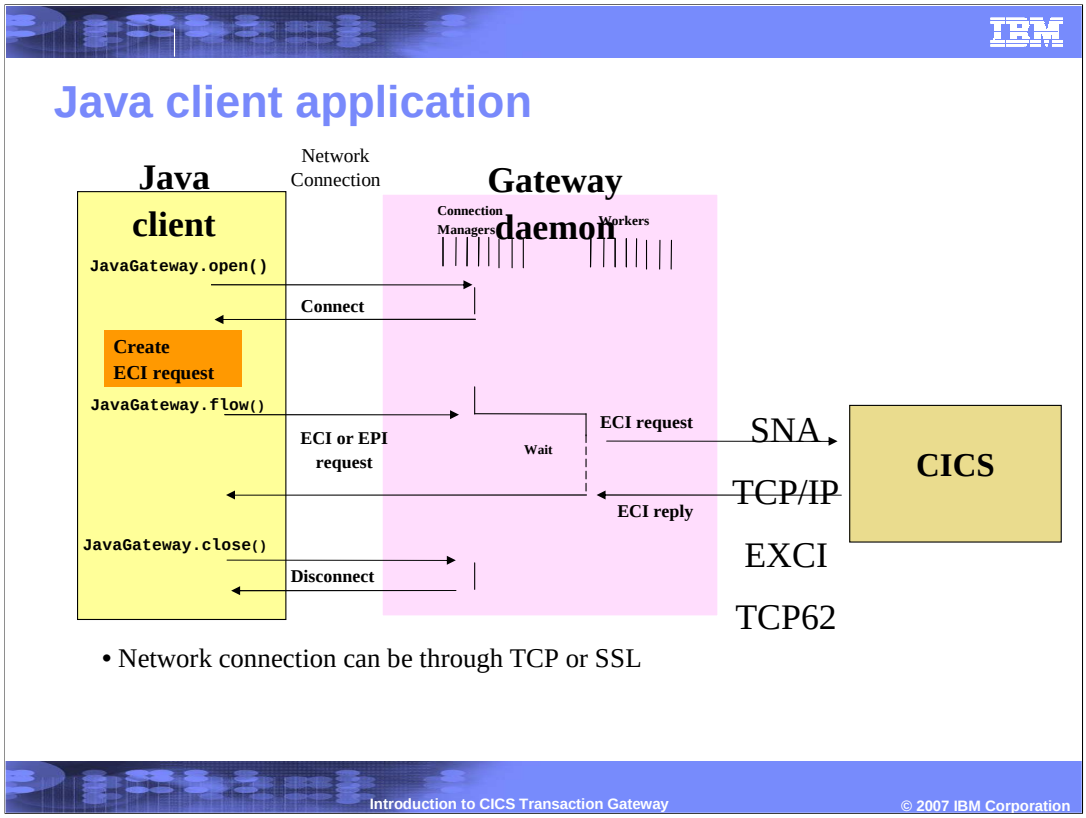
From bottom up, CUC interfaces – C, C++ Cobol, VBScript

ECI/EPI/ESIRequest API – base level, proprietary API, building the support classes on top of that

Terminal Servlet

CCF interfaces

JCA Connectors



Each connection to the Java Gateway (from a client) gets a ConnectionManager assigned to it. Worker threads do the work as it comes in.

Additional information

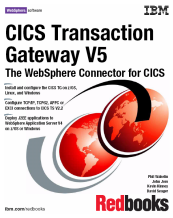
- Whitepapers
  - Integrating WebSphere Application Server and CICS using the JCA, G224-7218
    http://www.elink.ibmlink.ibm.com/public/applications/publications/cgibin/pbi.cgi
  - Transactional integration of WebSphere Application Server and CICS with the JCA
    http://www.ibm.com/developerworks/websphere/techjournal/0607_wakelin/0607_wakelin.html
- CICS TG support page
  http://www.ibm.com/software/htp/cics/ctg/support
- CICS TG software requirements page
  http://www.ibm.com/support/docview.wss?uid=swg21239203
- CICS TG on-line information center
  http://publib.boulder.ibm.com/infocenter/cicstg70/index.jsp

Additional information

- CICS TG support packs
  http://www.ibm.com/software/htp/cics/ctg/support/
  - **CC03** - CICS JCA 1.0 resource adapters for use with WAS v5
  - **CE51** - CICS Transaction Gateway Security Exit Samples
  - **CE52** - CCF compatibility JAR for CICS Transaction Gateway V6.0
  - **CC12** - CICS Transaction Gateway for z/OS environment health check

Redbooks®

- CICS TG V6.1, SG24-6171
- CICS TG V5, The WebSphere Connector for CICS, SG24-6133-01
- Java Connectors for CICS, SG24-6401
- Exploring WSAD-IE V5, SG24-6200-00



Trademarks, copyrights, and disclaimers

The following terms are trademarks or registered trademarks of International Business Machines Corporation in the United States, other countries, or both:

AIX	AS/400	CICS	CICS/VSE	IBM	iSeries	Parallel Sysplex
RACF	Redbooks	WebSphere	z/OS			

Win32, Windows, and the Windows logo are registered trademarks of Microsoft Corporation in the United States, other countries, or both.

J2EE, Java, JNI, and all Java-based trademarks are trademarks of Sun Microsystems, Inc. in the United States, other countries, or both.

Linux is a registered trademark of Linus Torvalds in the United States, other countries, or both.

Product data has been reviewed for accuracy as of the date of initial publication. Product data is subject to change without notice. This document could include technical inaccuracies or typographical errors. IBM may make improvements or changes in the products or programs described herein at any time without notice. Any statements regarding IBM's future direction and intent are subject to change or withdrawal without notice, and represent goals and objectives only. References in this document to IBM products, programs, or services does not imply that IBM intends to make such products, programs or services available in all countries in which IBM operates or does business. Any reference to an IBM Program Product in this document is not intended to state or imply that only that program product may be used. Any functionally equivalent program, that does not infringe IBM's intellectual property rights, may be used instead.

Information is provided "AS IS" without warranty of any kind. THE INFORMATION PROVIDED IN THIS DOCUMENT IS DISTRIBUTED "AS IS" WITHOUT ANY WARRANTY, EITHER EXPRESS OR IMPLIED. IBM EXPRESSLY DISCLAIMS ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NONINFRINGEMENT. IBM shall have no responsibility to update this information. IBM products are warranted, if at all, according to the terms and conditions of the agreements (for example, IBM Customer Agreement, Statement of Limited Warranty, International Program License Agreement, etc.) under which they are provided. Information concerning non-IBM products was obtained from the suppliers of those products, their published announcements or other publicly available sources. IBM has not tested those products in connection with this publication and cannot confirm the accuracy of performance, compatibility or any other claims related to non-IBM products.

IBM makes no representations or warranties, express or implied, regarding non-IBM products and services.

The provision of the information contained herein is not intended to, and does not, grant any right or license under any IBM patents or copyrights. Inquiries regarding patent or copyright licenses should be made, in writing, to:

IBM Director of Licensing
IBM Corporation
North Castle Drive
Armonk, NY 10504-1785
U.S.A.

Performance is based on measurements and projections using standard IBM benchmarks in a controlled environment. All customer examples described are presented as illustrations of how those customers have used IBM products and the results they may have achieved. The actual throughput or performance that any user will experience will vary depending upon considerations such as the amount of multiprogramming in the user's job stream, the I/O configuration, the storage configuration, and the workload processed. Therefore, no assurance can be given that an individual user will achieve throughput or performance improvements equivalent to the ratios stated here.