



CICS Transaction Server V4.1

8514: CICS Explorer Update

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- Features and benefits
- System requirements
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Software > Host Transaction Processing > CICS family > CICS

CICS Explorer

Extend the CICS Explorer:
A better way to manage your CICS

→ Download Redbook

Overview

IBM CICS Explorer - New Face of CICS. Integrating data, methods.

Click here to get CICS Explorer
Free Product Download

Looking for new and best practices? Need to maintain Explorer and System?

IBM Software > Host Transaction Processing > CICS Family >

CICS Deployment Assistant for z/OS

Discover, Model, Visualize, Automate, Deploy

CICS Deployment Assistant

Now Available

CICS Transaction Gateway 8.0

Now available

Continuous Innovation Creates Success

Overview

CICS Transaction Gateway (CICS TG), is IBM's market-leading Enterprise connector, production proven in over a thousand customers for enterprise modernization of CICS assets..

CICS TG delivers a high-performing, security-rich, and scalable method of SOA access to CICS, requiring minimal changes to CICS and usually no changes to CICS applications. This allows easy connectivity from a wide variety of environments, including Java, C, Microsoft .NET and COBOL runtimes.

Download CICS Transaction Gateway Worksheet

- Features and benefits
- System requirements
- Deployment letter sheet (PDF, 952KB)
- Download CICS Explorer
- IBM CICS Explorer maintenance and certification
- IBM CICS Explorer Forum
- Subscribe here on z RSS feed

IBM Problem Determination Tools help modernize your application environment

IBM United States Software Announcement 210-308
October 5, 2010

ENUS210-308.PDF

Table of contents

- Overview
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IBM Software > Rational >

Rational Developer for System z

Modern development tools for mainframe application development

Reuse of existing CICS application services solutions hosted on z/OS. Utilizing the J2EE™ Connector Architecture and security. JEE standards-based access with no changes to existing CICS. .NET and COBOL runtime open integration for 3rd party channels and containers. IBM and further support for deployments made to high availability and improved integration with reliability with the CICS Explorer plug-in for the CICS Explorer.

Fast enterprise application development and maintenance at lower cost

IBM CICS Explorer V7.1 or later on any platform. CICS Explorer provides new views and customizations, plus integrated connection management and built-in test functions. The CICS Explorer plug-in replaces SupportPac™ (CS05).

CICS Explorer Milestones

- **July 2007 - Conception**
- **November 2008 – SupportPac**
 - The New Face of CICS
 - CICSplex SM connectivity
 - CICS Tools Integration
- **June 2009 – CICS TS V4.1 GA**
 - Full management capability with CICSplex SM
 - Operations management of SMSS
 - Free supported feature for CICS TS V3
 - Event Processing
 - Explorer SDK
- **September 2010 – CICS Explorer V1.0.1**
 - Management of selected z/OS resources
- **2011**
 - Watch this space!

CICS Explorer – Demonstration (SDK + Eclipse 3.6.1 + JRE)

CICS SM - /u/mqtest/jvmprofs/IYCWEFF1/DFHJVMPR - Eclipse SDK - /Users/matthew_webster/Workspaces/anaheim

System z/OS CICS SM

CICSplex Ex CICSplex Re

Server: EFCM

Regions Tasks ISC/MRO Connections Terminals Files Transactions

CNX0211I Context: CICSEXP2. Resource: CICSGRN. 6 records collected at 20-Feb-2011 13:34:11 Job Name:

Region	Job Name	MVS System ID	Task Count	CICS Status	CICS TS Level	Total CPU	Page In Count	Page Out Count	I/O Count
IYCWEFD1	IYCWEFD1	MV28	3	✓ ACTIVE	030100	0000:00:24.2259	0	0	5026:
IYCWEFE1	IYCWEFE1	MV28	3	✓ ACTIVE	030200	0000:00:25.4929	0	0	4934:
IYCWEFF1	IYCWEFF1	MV28	3	✓ ACTIVE	040100	0000:07:19.7956	34	0	1800:
IYCWEFF2	IYCWEFF2	MV28	3	✓ ACTIVE	040100	0000:00:26.0900	0	0	5039:
IYCWEFW1	IYCWEFW1	MV28	4	✓ ACTIVE	040100	0000:00:30.5840	0	0	61780:
IYCWEFW2	IYCWEFW2	MV28	7	✓ ACTIVE	040100	0000:01:21.2349	0	0	62248:

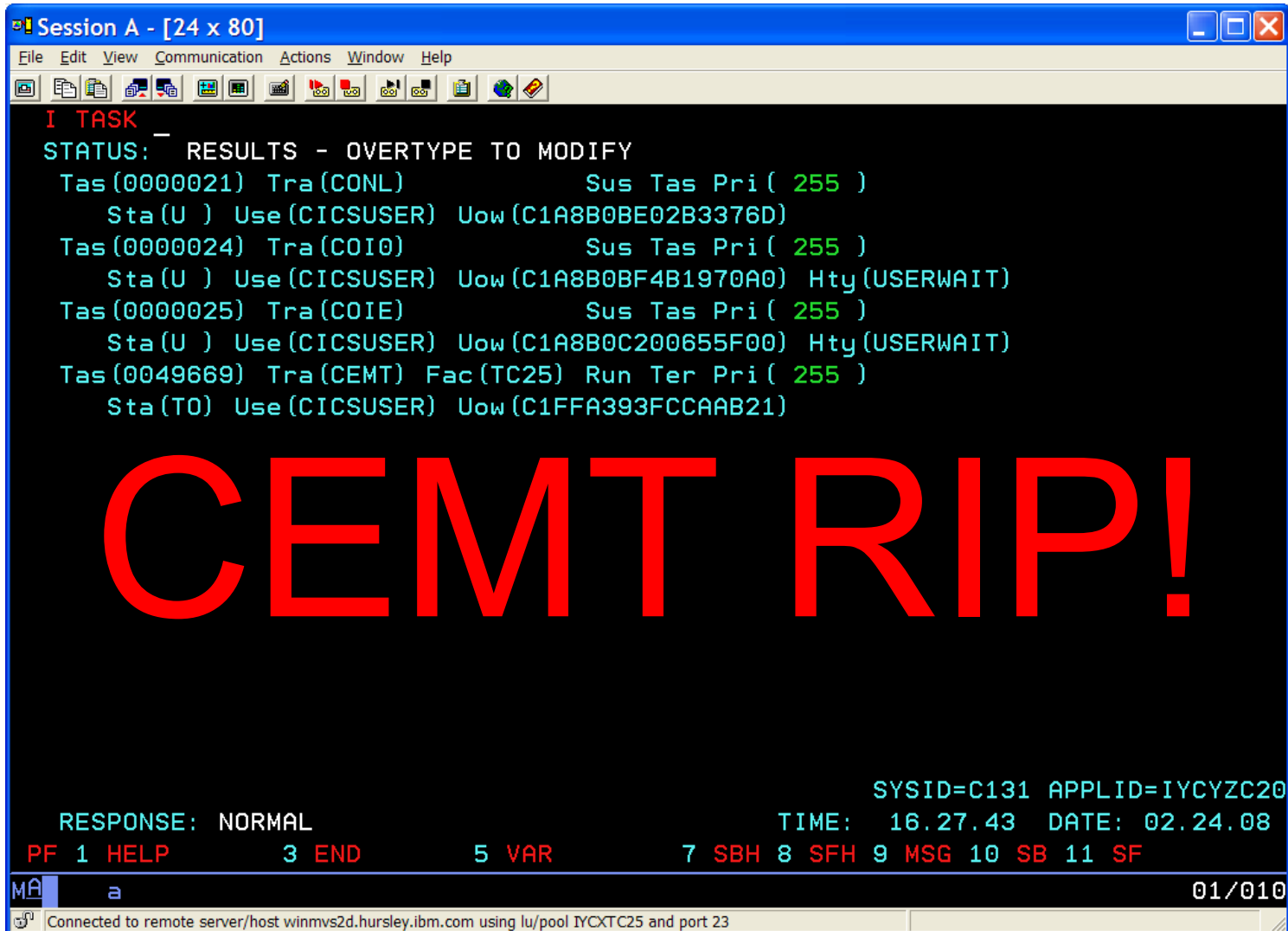
Events Properties Error Log

Property	Value
Settings	
Statistics	
TCB Details	
Current HP Pool TCB Count	N/A
Current JVM Pool TCB Count	0
Current JVM Server Thread TCB Count	0
Current Open Pool TCB Count	0
Current SSL Pool TCB Count	0
Current XP Link Pool TCB Count	0
Maximum HP Pool TCB Count	N/A
Maximum JVM Pool TCB Count	20
Maximum JVM Server Thread Count	0
Maximum Open TCB Count	50
Maximum SSL Pool TCB Count	8
Maximum XP Link Pool TCB Count	5
Trace	

CNX0100I Connected user MATTHEW to hos...exp2host.hursley.ibm.com on port 27067

CICSEXP2 (CICSplex)

Single Server Access from Explorer (over CMCI)



The screenshot shows a terminal window titled "Session A - [24 x 80]". The window contains a list of tasks and their details. A large red "CEMT RIP!" message is overlaid on the terminal output. The terminal also shows system information and a command prompt.

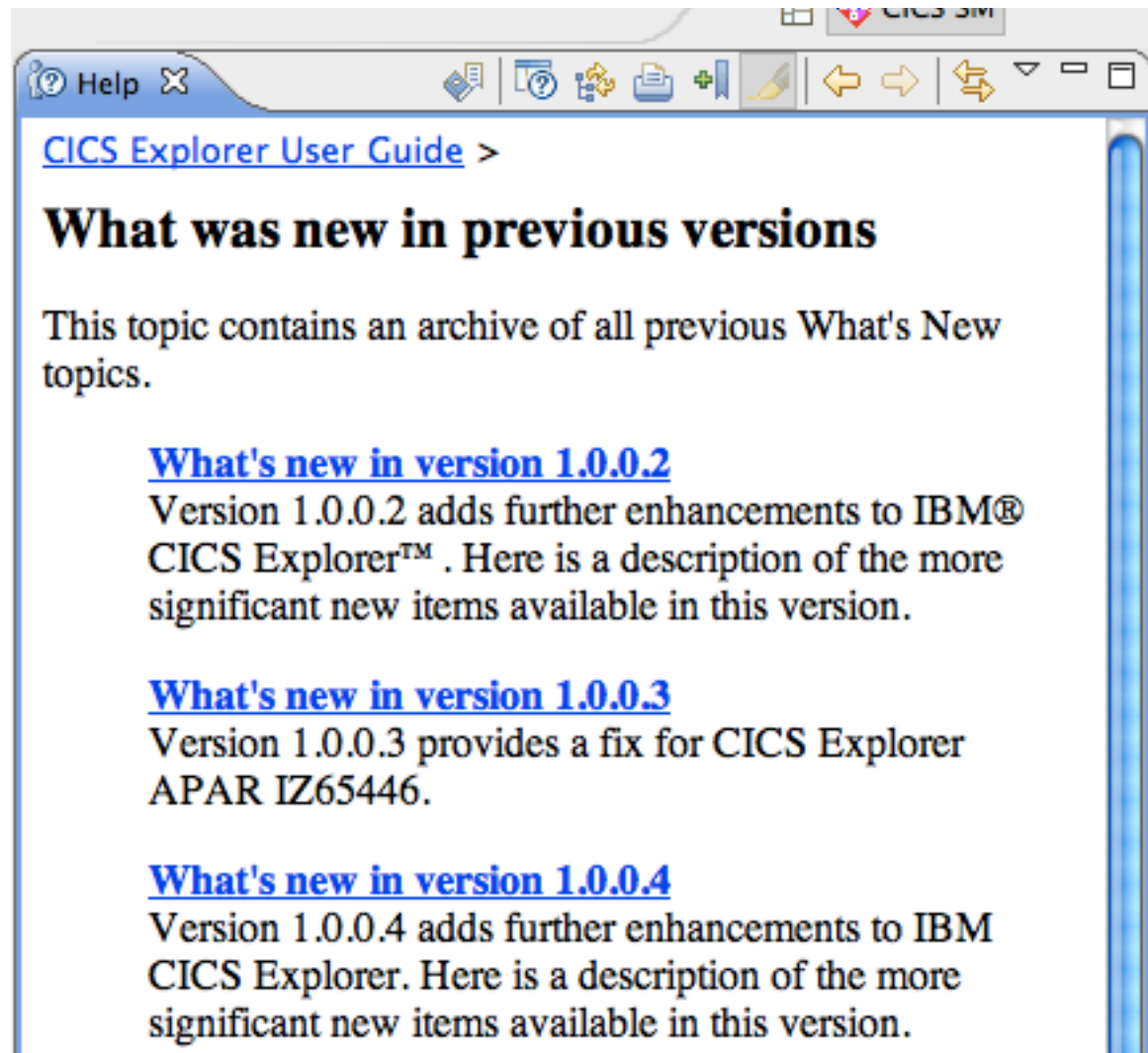
```
I TASK
STATUS: RESULTS - OVERTYPE TO MODIFY
Tas(0000021) Tra(CONL) Sus Tas Pri( 255 )
Sta(U ) Use(CICSUSER) Uow(C1A8B0BE02B3376D)
Tas(0000024) Tra(COI0) Sus Tas Pri( 255 )
Sta(U ) Use(CICSUSER) Uow(C1A8B0BF4B1970A0) Hty(USERWAIT)
Tas(0000025) Tra(COIE) Sus Tas Pri( 255 )
Sta(U ) Use(CICSUSER) Uow(C1A8B0C200655F00) Hty(USERWAIT)
Tas(0049669) Tra(CEMT) Fac(TC25) Run Ter Pri( 255 )
Sta(T0) Use(CICSUSER) Uow(C1FFA393FCCAAB21)

CEMT RIP!

SYSID=C131 APPLID=IYCYZC20
RESPONSE: NORMAL TIME: 16.27.43 DATE: 02.24.08
PF 1 HELP 3 END 5 VAR 7 SBH 8 SFH 9 MSG 10 SB 11 SF

MA a 01/010
Connected to remote server/host winmvs2d.hursley.ibm.com using lu/pool IYXTC25 and port 23
```

CICS Explorer – What's New



CICS Explorer – What's New

- **Version 1.0.0.2 & 1.0.0.4**
 - Ability to display resources in a CICS CSD file
 - Ability to create resource definitions in a single CICS region
 - Ability to copy and paste resource definitions
 - Ability to add a group to, or remove a group from, a list
 - Ability to append one list to another list
- **Version 1.0.0.5**
 - Workload management support
 - Task associations
- **Version 1.0.0.7**
 - New Connection Credentials page in the Preferences view
- **Version 1.0.1**
 - New System z/OS perspective
 - Ability to export and import system connection details
 - Ability to view SIT parameters

CSD Access from Explorer (over CMCI)

The screenshot displays the IBM CICS Explorer application window. The interface is divided into several panes:

- Left Pane:** A tree view showing the CICSplex structure. Under 'CICSEXP1 (6/6)', there are several sub-entries for IYCWEGW1 and IYCWEGW2, along with a 'DUMMY907 (0/0)' entry.
- Top Center Pane:** A table listing transaction definitions. The columns include Region, Name, Status, Use Count, Program, Priority, Transac..., Purgeab..., Dumping, and Routin... The table shows several transactions for the IYCWEGW2 region, such as CADP, CATA, CATD, CATR, CBAM, CB03, and CB04.
- Bottom Center Pane:** A table titled 'Transaction Definitions' showing details for a specific transaction. The columns include Name, CSDGroup, Program Name, Create Time, Change Time, Description, and Change User ID. The table lists multiple instances of transactions like DFHDP1, DFHCP1, DFHSP1, and DFHCP3.
- Bottom Right Pane:** A 'Properties' pane showing details for a resource group. The 'Definition Signature' section includes fields for Change Agent (CSDBATCH), Change Release (0660), Change Time (17-Aug-2009 09:55:21), Change User ID (MQTEST), and Create Time (17-Aug-2009 09:55:21). The 'Details' section shows the 'Brexit' property.

A large, semi-transparent red watermark with the text 'CANCELED ARRIP?' is overlaid across the center of the screenshot, partially obscuring the transaction definition tables.

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CICS Explorer – System z/OS Perspective

The screenshot displays the Eclipse IDE interface for CICS Explorer in the System z/OS perspective. The main window is divided into several panes:

- Left Pane (Data Sets):** Shows the file system structure for the path `/u/mqtest/jvmprofs/IYCWEFF1/`. It contains two sub-directories: `DFHJVMCD` and `DFHJVMPR`.
- Right Pane (Console):** Displays the contents of the `DFHJVMPR` directory, which is a dynamic Java profile for CICS. The profile includes the following parameters:


```
#Dynamic Java Profile for CICS
***** CICS-specific parameters *****
CICS_HOME=/cics/cics660
JAVA_HOME=/java/java6_31/J6.0
***** Paths *****
CLASSPATH_SUFFIX=.
***** Options *****
CLASSCACHE=YES
IDLE_TIMEOUT=30
GC_HEAP_THRESHOLD=85
REUSE=YES
STDIN=DFHJVMIN
STDOUT=/u/mqtest/jvmprofs/IYCWEFF1/DFHJVMOUT
STDERR=/u/mqtest/jvmprofs/IYCWEFF1/DFHJVMERR
***** Unix System Services Environment Variables *****
JAVA_DUMP_TDUMP_PATTERN=ST.TESTS.T0175424.&APPLID;.&JVM_NUM;
***** JVM options *****
-Xms16M
-Xmx16M
-Xoss512K
```
- Bottom Left Pane (Jobs):** Shows a list of jobs. The selected job is `IYCWEFE1 - JOB85191`. Other jobs include `IYCWEFD1 - JOB85192`, `IYCWEFF2 - JOB85190`, and several JES jobs (`JESMSG`, `JESJCL`, `JESYSMSG`, `DFHCXRF`, `MSGUSR`).
- Bottom Right Pane (Properties):** Displays the properties for the selected job. The table below summarizes the data shown in this pane.

Property	Value
Class	A
Completion	NORMAL
Completion Code	
ID	JOB85191
Name	IYCWEFE1
Status	OUTPUT
User	MQTEST

The status bar at the bottom indicates the connection: `CNX0100I Connected user...sley.ibm.com on port 21` and the current system: `WINMVS2C`.

CICS Explorer – System z/OS Perspective

winmvs2c.hursley.ibm.com

Display Filter View Print Options Help

SDSF JOB DATA SET DISPLAY - JOB IYCWEED1 (JOB73100) LINE 1-15 (15)

COMMAND INPUT ===> _ SCROLL ===> PAGE

NP	DDNAME	StepName	ProcStep	DSID	Owner	C	Dest	Rec-Cnt	Page
	JESMSGLG	JES2		2	MQTEST	H		4	
	JESJCL	JES2		3	MQTEST	H		126	
	JESYSMSG	JES2		4	MQTEST	H		0	
	STDOUT	CICSRUN		108	MQTEST	H		0	
	PLIMSG	CICSRUN		109	MQTEST	H		0	
	DFHCXAF	CICSRUN		112	MQTEST	H		0	
	STATS	CICSRUN		116	MQTEST	H		0	
	MQMSG	CICSRUN		117	MQTEST	H		0	
	ZMONMSG	CICSRUN		118	MQTEST	H		0	
	STTRACE	CICSRUN		120	MQTEST	H		0	
	COU	CICSRUN		123	MQTEST	H		0	
	CEEMSG	CICSRUN		124	MQTEST	H		0	
	CEEOUT	CICSRUN		125	MQTEST	H		0	
	CRPO	CICSRUN		126	MQTEST	H		0	
	MSGUSR	CICSRUN		127	MQTEST	H		3,263	

F1=HELP F2=SPLIT F3=END F4=RETURN F5=IFIND F6=BOOK
F7=UP F8=DOWN F9=SWAP F10=LEFT F11=RIGHT F12=RETRIEVE

Mon 21 Feb 03:18

Capability Matrix (GA) – CICSplex SM

	Example	Views	Actions
Operations	Regions	Large subset (40+)	Enable / Disable, Discard, ...
Administration	Transaction Definitions	All Basic	Create, Update, Install, Delete, Add/Remove
Topology	CICSplex	Subset	Create
RTA Events	RTA Outstanding Events	Small subset	No
WLM	Active Workloads	Small subset	No
Monitoring	Active Monitor Specifications	N/A	N/A

Capability Matrix (GA) – CICS (Single Server)

	Example	Views	Actions
Operations	Regions	Large subset (40+)	Enable / Disable, Discard, ...
Administration (Post-GA)	Transaction Definitions	All Basic	Create, Update, Install, Delete, Add/Remove
Topology	CICSplex	Subset	N/A
RTA Events	N/A	N/A	N/A
WLM	N/A	N/A	N/A
Monitoring	N/A	N/A	N/A

Service and Update

- **Explorer has been delivered at regular intervals to surface new capability and solicit feedback**
 - CICS TS / CICS Explorer Beta: every 2 months
 - CICS Explorer Updates: September 2009, January 2010, October 2010
- **We intend to continue delivering updates to Explorer (and CICS Tools) at least every 90 days**
 - Exploit Post-GA capability e.g. CSD access
 - Surface capability for the broader platform
 - Usual bug fixes
- **Each new code drop will supersede all previous and include both enhancements and service**

Distribution and Maintenance

- **Distribution**

- ZIP (100MB) download for Windows & Linux
 - Includes Explorer, Eclipse RCP & JRE (IBM Java 6)
 - Used for new version/releases and initial install
 - Not ideal for large groups (see below) but great for getting started
- ZIP update site (10MB)
 - Explorer
 - Used to update initial install
 - Great for systems not Internet-connected and updates can be backed-out
- Update site
 - Explorer
 - Used to update initial install
 - Can be configured to happen automatically

- **Maintenance**

- Each user can have a local installation e.g. C:\Program Files\CICS_Explorer
- Multiple users can share a single installation from a read-only network drive
- Either installation can be managed using any mechanism above
- User settings and customizations are held locally
- More information about restricted user environments in a future white paper

A Concept Realized

- **Single user interface for CICS & CICSplex SM**
 - Provides enhanced (possibly complete) subset of existing CPSM Web UI functionality as well as CEMT, CEDA, ...
 - Aimed at CICS system programmer, operator and application developer
 - Designed for both new and experienced CICS users
- **Integration platform**
 - Enables consistent experience for users of CICS Tools, customer contributions and 3rd party applications
 - Includes common set of icons, views and server access (including logon configuration) as well as integration framework for shared use cases
 - Centrally managed and distributed using Eclipse Update Manager or shared network drive
- **Software Development Kit (SDK)**
 - Provides separately packaged plug-ins for any Eclipse-based environment including RDz
 - API allows 3rd parties to extend or integration existing capability
 - Layered architecture allows Eclipse-independent components to be used in any environment
- **Embracing, extending and enhancing capability of the CICSplex SM WUI**
 - Familiar appearance & workflow for administration and operational tasks
 - Leveraging Eclipse platform for customization and task-oriented interface
 - Consistent definition repository access (DREP & CSD)
- **Reducing dependence on a 3270 interface**
 - CEMT capability for single server
 - CEDA capability for single server and CICSplex
 - TSO/ISPF capability via FTP for all users

CICS Explorer – Integration Platform

- **CICS Tools**
 - CICS Interdependency Analyzer (IA)
 - CICS Configuration Manager (CM)
 - CICS Performance Analyzer (PA)
 - CICS Deployment Assistant (DA)
- **CICS PD Tools**
 - IBM Application Performance Analyzer
 - IBM Debug Tool
 - IBM Fault Analyzer
- **CICS Transaction Gateway**
- **CS1Q: WebSphere MQ Explorer**
- **Tivoli OMEGAMON XE for CICS**

CICS Transaction Gateway Plug-in

The screenshot displays the IBM CICS Explorer BETA interface with the following components:

- CICSplex Explorer:** Shows a tree view for Server: EFCM with components like EXPWRK1 (ACTIVE), EXPWRK2 (ACTIVE), and several IYCWEF* (IYCWEFD1, IYCWEFF1, IYCWEFW1, IYCWEFW2) and DUMMY907 (0/0).
- Regions:** A table showing IP Connections for CNX0211I Context: IYCWEFE1. Resource: IPCONN. 1 records collected at 10-Feb-2010 14:33:22.

Region	Name	Port	TCP/IP Se...	Appl ID	Host	Connectio...	Service St...
IYCWEFE1	72L1	-1	LUK1	CTG72L1	9.20.138.199	ACQUIRED	✓ INSERV...
- TCP/IP Services:** A table showing TCPIPS for CNX0211I Context: IYCWEFE1. Resource: TCPIPS. 1 records collected at 10-Feb-2010 14:33:20.

Region	Name	Port	Service Status	Num Of Con...	Backlog	IP Address	TS Queue P...	Socket Clos...
IYCWEFE1	LUK1	1982	OPEN	1	1	9.20.138.199		WAIT
- Gateway daemons:** A table showing CICS connections for CNX0211I Context: CTG720L1. Resource: Connection. 2 records collected at 10-Feb-2010 14:18:46.

Server	Gateway	Protocol	Target	Default	AllocSess	FailSess	Comms...	Requests	Respo
IPICSRV1	CTG720L1	IPIC	winmvs2c.hursley.ibm.com:1972		0	0	0	2	19 ms
IPICSRV2	CTG720L1	IPIC	winmvs2c.hursley.ibm.com:1982		0	0	0	2	21 ms
- Properties:** A table showing the configuration for the selected gateway.

Property	Value
AllocSess	0
Applid	N/A
ApplidQ	N/A
CommsFail	0
ConnFail	0
Default	
FailSess	0
Gateway	CTG720L1
Idle	0
Lost	0

CICS Explorer and CICS Tools using CICS Explorer SDK

By using the CICS Explorer SDK in conjunction with simple Eclipse extension mechanisms such as selection listeners and pop-up menu contributions the CICS Tools are able to integrate with a live CICS model and allow the user to create rich information perspectives.

Rational Developer for System z

The screenshot displays the IBM Rational Developer for System z interface. On the left, the 'CICS TS Explorer Region tree' shows a project structure with folders like 'SFMPproject', 'XSEproject', and 'ManifestADMn.admr'. The main window is the 'Resource Definition Editor' for 'ADMICSEditor', showing a 'Resource Definition' for 'Region NQA17C01'. It lists resources such as SFMFlow, SFMPPIPE, FLOWPROC, STOCKFLO, and STFL. Below this, the 'Export Definition' section is visible. At the bottom, the 'CICS TS Explorer program list' is shown, displaying a table of programs and their status.

name	Status
ACCTCHAN	ENABLED
ACCTTEST	ENABLED
ADNCRDR	ENABLED
ADNCRDS	ENABLED
ADNTMSGH	ENABLED
BACEDALP	ENABLED
BACEDAP	ENABLED
BALAB6P	ENABLED
BAWYMQ	ENABLED
BAWYMQP	ENABLED
BA1DPLP	ENABLED
CBCDEBUB	ENABLED
CHANELLE	ENABLED

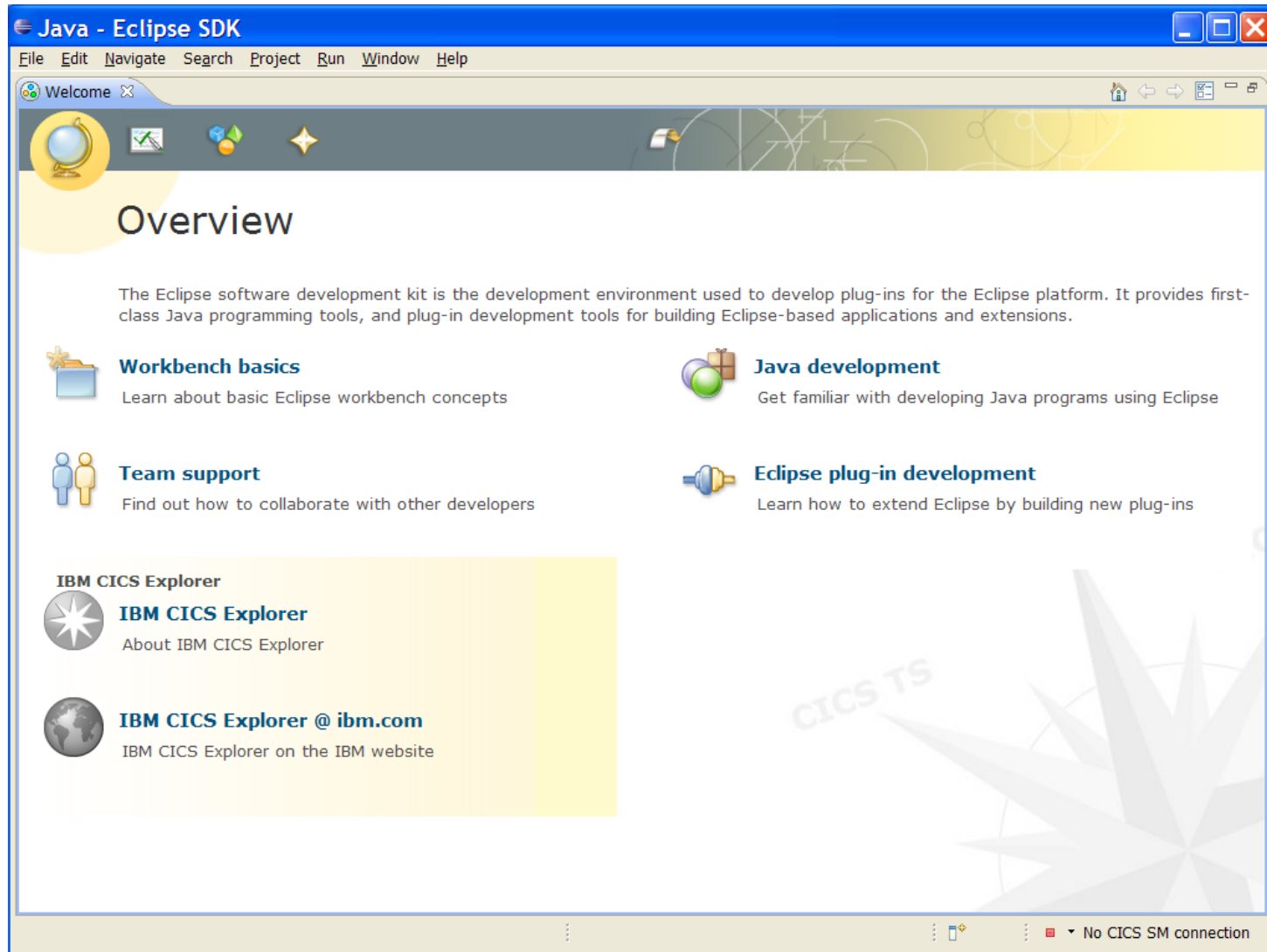
CICS TS Explorer Region tree

CICS TS Explorer Resource types

- programs
- transactions
- files
- RPL list

CICS TS Explorer program list

CICS Explorer SDK



CICS Explorer – Something for Everyone

- **Unified interface for larger V4 customers**
 - Consistent access to CICS for SMSS, CICSplex and CICS CM
 - Management of selected z/OS resources
- **Modern interface for smaller V4 customers**
 - Full management capability without CICSplex SM
 - Management of selected z/OS resources
- **Supported experience for V3 customers**
 - Read-only access to CICSplex
 - Management of selected z/OS resources
- **Integrated environment for CICS Tools customers**
 - Seamless transition between views
- **Extensible platform for 3rd parties**
 - Extend Explorer or integrate existing capability with the SDK
- **System Programmer or Application Developer**
 - Systems Management and Operations
 - Event Processing
 - RDz integration
- **Windows, Linux or Mac OS**

Questions

Other Sessions

■ **Monday**

- 8262: [CICS TS 4.1 Technical Overview](#)

■ **Tuesday**

- 8265: [CICS JVM Server](#)

■ **Wednesday**

- 8277: [CICS and VSAM RLS User Experience](#)
- 8276: [CICS High Availability](#)

■ **Thursday**

- 8272: [Best Practices for CICS Systems Management](#)
- Lunch & Learn 207B: [CICS Requirements and strategic directions](#)
- 8514: [CICS Explorer Update](#)
- 8280: [CICS Question Box and Pot Luck](#)

■ **Friday**

- 8281: [TCP/IP for CICS Systems Programmers](#)
- 8263: [Testing Through the Eyes of CICS System and Application Programmers](#)
- 8294: [CICS Systems Management - Hands on Lab](#)

More Information

- **IBM CICS Explorer**

- <http://www.ibm.com/software/htp/cics/explorer/>

- **CICS Family News**

- <http://www.ibm.com/software/htp/cics/enews/index.html>

- **Podcasts**

- <http://itunes.apple.com/us/podcast/did-you-say-mainframe/id275831334>

- **Blog**

- <http://masterterminal.wordpress.com/>

- **developerWorks Forum**

- <http://www.ibm.com/developerworks/forums/forum.jspa?forumID=1475>

