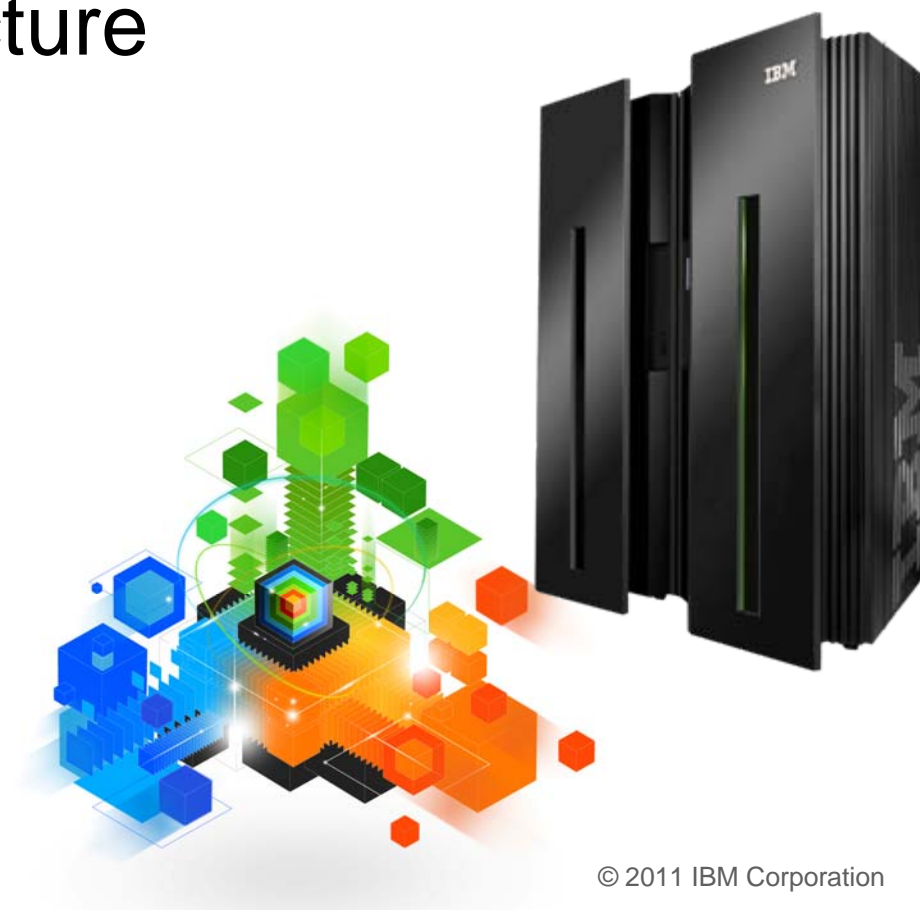


IBM System z Technology Summit



Simplify your infrastructure



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Session 4. Abstract

- **Looking for ways to accelerate the transfer of knowledge, skills, and best practice to the next generation of technical experts? Need to maintain productivity and protect service levels? CICS Explorer and zEnterprise lead the way to infrastructure simplification. In this session, you will learn how to identify and package applications in a more flexible way, increase your utilization of zAAP processors, reduce dependency on SNA, improve the throughput of your CICSplex, and simplify the authentication of distributed CICS users. You will also see how the CICS Explorer offers a much more powerful tooling environment that can improve the productivity with a more intuitive experience.**

Agenda

- **IP Connectivity in CICS**
- **ID Propagation**
- **CICSplex SM Workload Manager**
- **CICS Explorer**
- **Threadsafe optimization**
- **CICS Configuration Manager**
- **CICS Deployment Assistant**

CICS Support for IPv6

- **Allow for IPv4, IPv6 or host names in:**
 - Resource definitions
 - Application Programming Interface
 - Systems Programming Interface
 - User Replaceable Modules
 - Global User Exits
 - Monitoring Records

IP Interconnectivity

- **Continuation of the CICS IP interconnectivity strategy**
 - Provide a new transaction IP communications protocol for connectivity between and into CICS
 - Long term plan to provide CICS with IP choice for most of the CICS programming model
- **Enhancements to support 3270 transaction routing**
 - BMS, security and monitoring support
 - Shippable terminals supported
 - Restrictions
 - Routable(YES) on transaction definition
 - No EDF
 - No routing for APPC devices
- **Enhancements to Asynchronous Starts**
 - ATI over IPIC supported

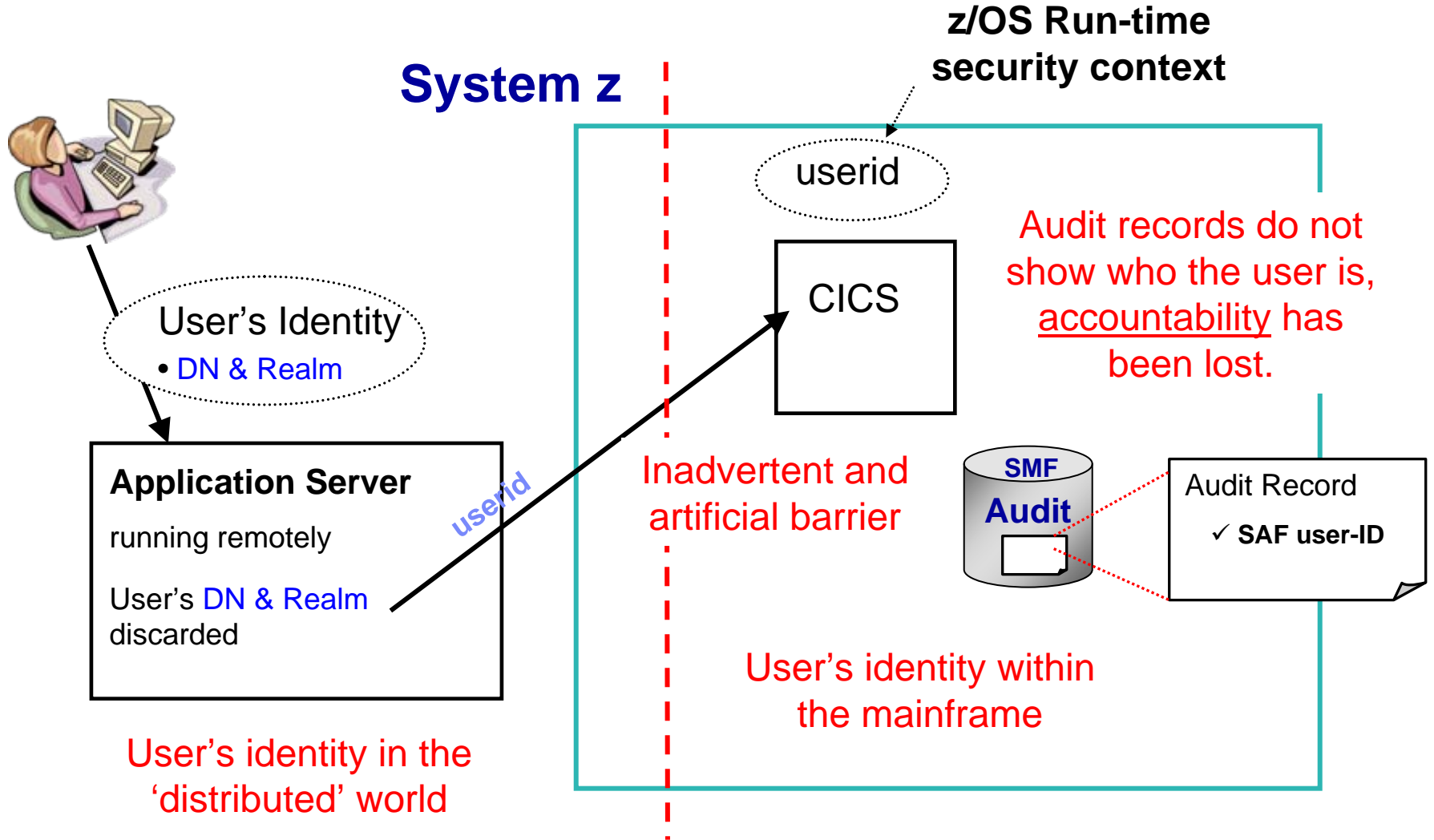
Identity Context Propagation

- **z/OS Identity Propagation initiative to provide asserted identity for end-to-end distributed security**
 - Logically tie together distributed end-user identities with z/OS userids
 - Enhance the ability for z/OS applications to participate centrally in SOA solutions
 - Function will require z/OS 1.11
- **ID Context Propagation allows an end user's identity to be propagated through to CICS**
 - Currently, the end users' identity is lost before the request gets to CICS

Identity Context Propagation...scenarios

- **Support for Inbound Web services, propagating on as Web Service provider**
 - Provides support for Web Services callers
- **Support for Inbound over IP Interconnectivity (IPIC)**
 - Used by CICS TG when operating as a WebSphere connector
 - Will require use of JCA resource adapter
- **Sysplex Support**
 - CICS will propagate on over MRO and IPIC Connections only

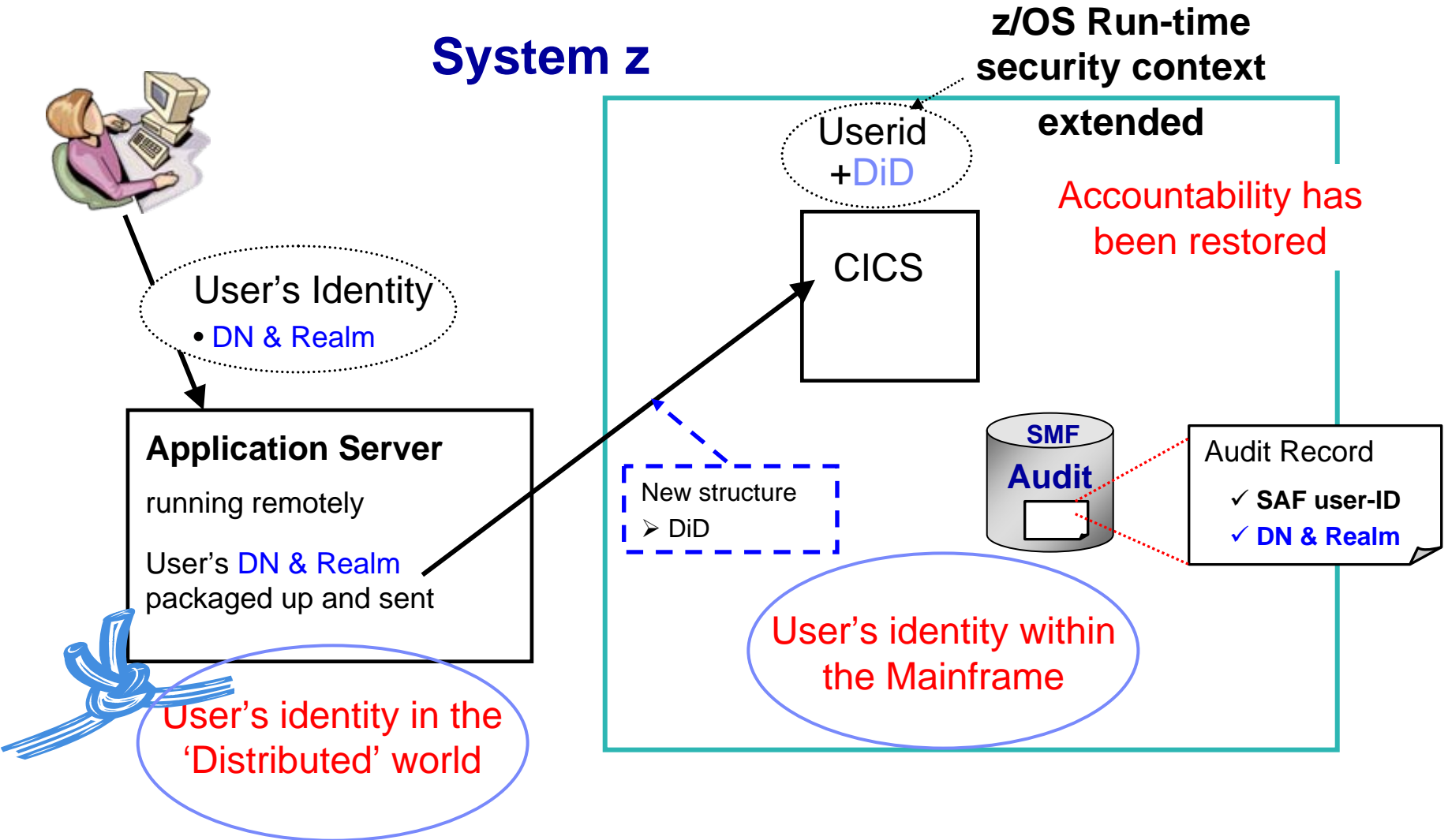
Identity Propagation – current problem



Remedy

- **Platform-architected Distributed Identity solution that subsystems participate in**
- **An asserted identity for end-to-end distributed security**
- **That logically ties together distributed end-user identities with userids on the host**
- **An Identity Context Reference that flows in a trusted way**
 - X.500 distinguished name of end-user
 - X.500 DN of original registry
 - Optional SAF userid

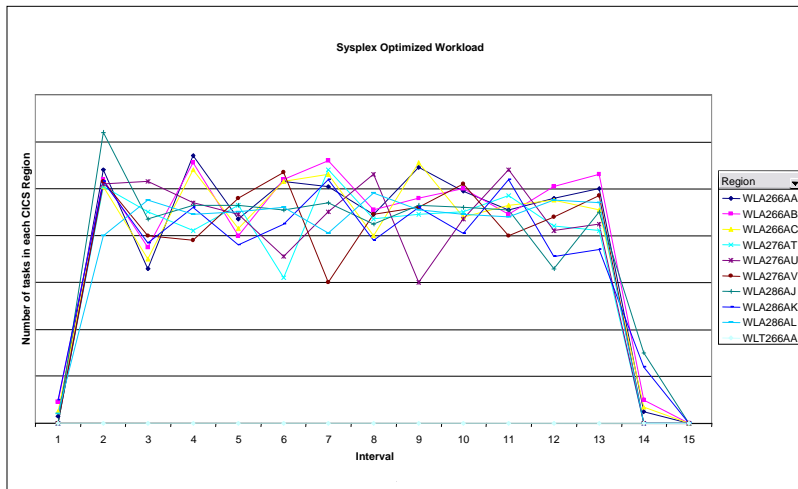
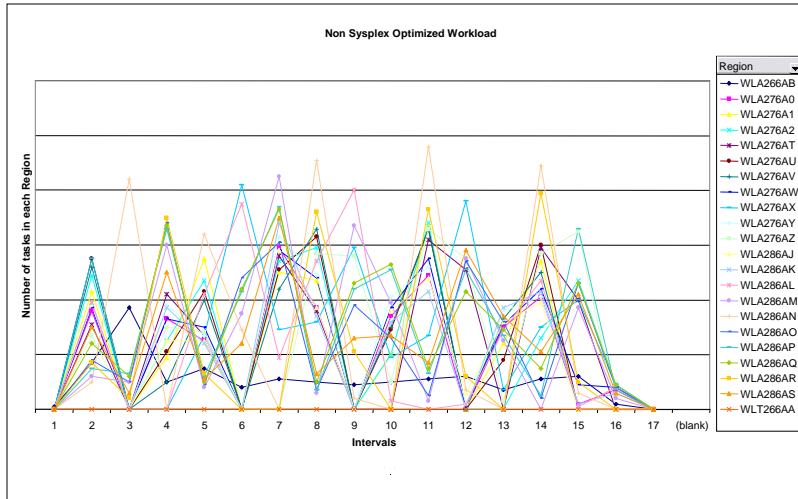
Identity Propagation – proposed solution



Workload Management and CICSplex SM

- **Sysplex-optimization to significantly reduce workload batching effects**
 - Exploitation of z/OS coupling facility
 - “Near real time” Sysplex-wide focus on target region status
 - No impact to “non-optimized” WLM
 - Optimized WLM routing enabled by configuring a Region Status Server
 - Uses CF Data Table to hold Region Status information
 - SOS, MaxTask, System or transaction dump in progress, Current Tasks?
 - Shared by all routing regions (in the Sysplex)
- **Percentile goals**
 - CICSplex SM WLM support for percentile goals
- **Support in CICSplex SM for all new resources, statistics, etc**

CICSplex SM WLM: Optimized versus Non-optimized Routing



- **Non-optimized Routing**
 - 27 CICS regions on 3 LPARs
- **Optimized Routing**
 - 9 CICS regions on 3 LPARs
- **Comparison**
 - Workload is 10K started transactions
 - Number of tasks in each region measured every 10 second interval
- **Results**
 - Non-optimized environment shows “batching effects
 - Optimized results shows smoother distribution of work and higher throughput

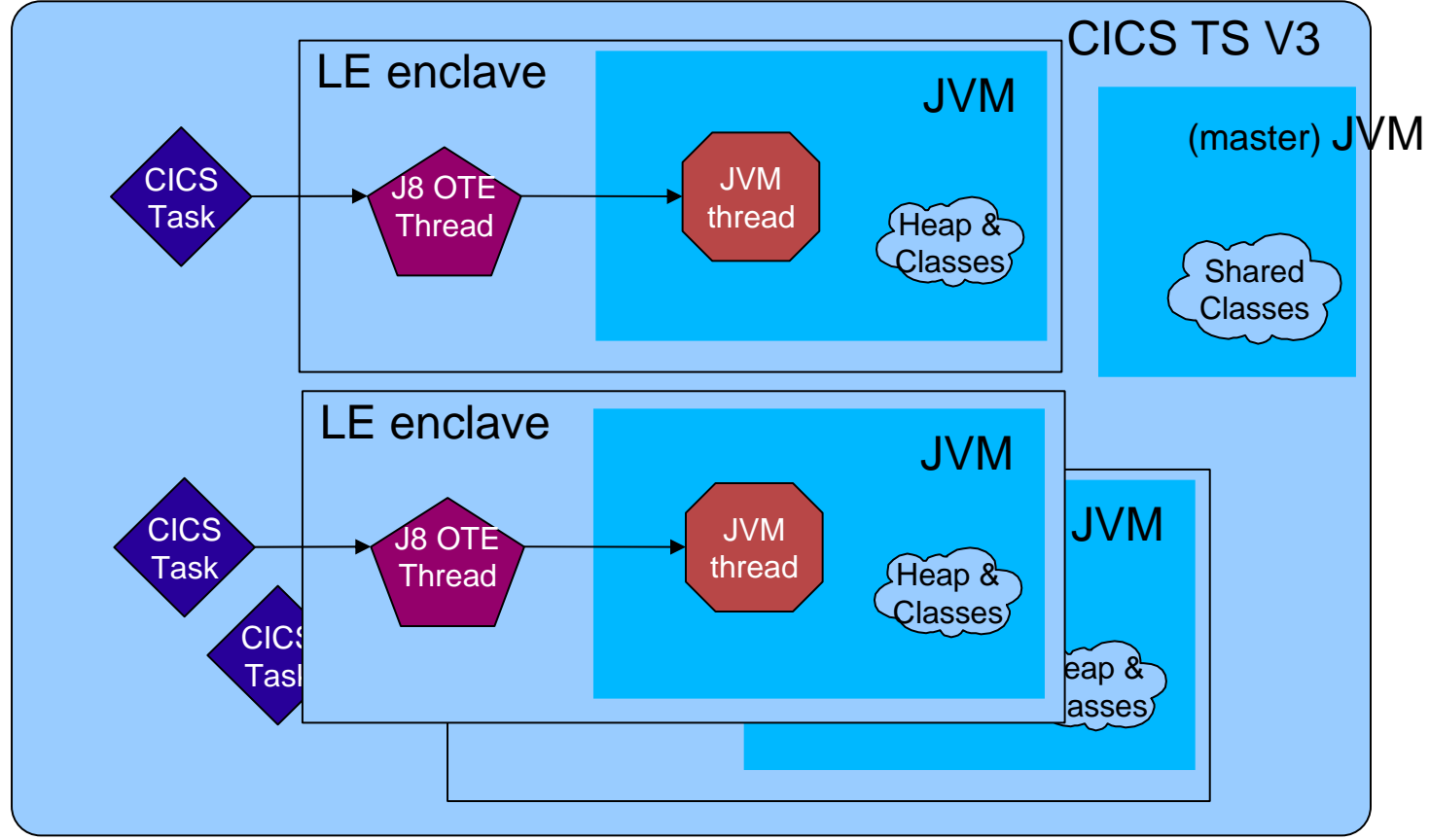
Java and JVMServers

- **JVM implementation in CICS continues to evolve**
 - JDK 1.1.8, HPJ and Hotpooling, IBM Persistent Reusable JVM, Continuous mode, Java 5, Java 6, ...
- **JVMs in CICS TS V2 and V3**
 - Single task, serial reuse
 - Large memory footprint
 - Excellent isolation characteristics
- **JVMServers in CICS TS V4.1**
 - Multiple tasks (threads) in a JVM concurrently
 - Larger capacity
 - Risk of collateral damage
 - Not for customer application use in V4.1

JVMPool Architecture - CICS TS V3 (and V2)

Single CICS task dispatched into a JVM in the pool at a time. So concurrent task count limited to the number of JVMs that can fit in the region.

Result is about 20 tasks/JVMs concurrently in each region.

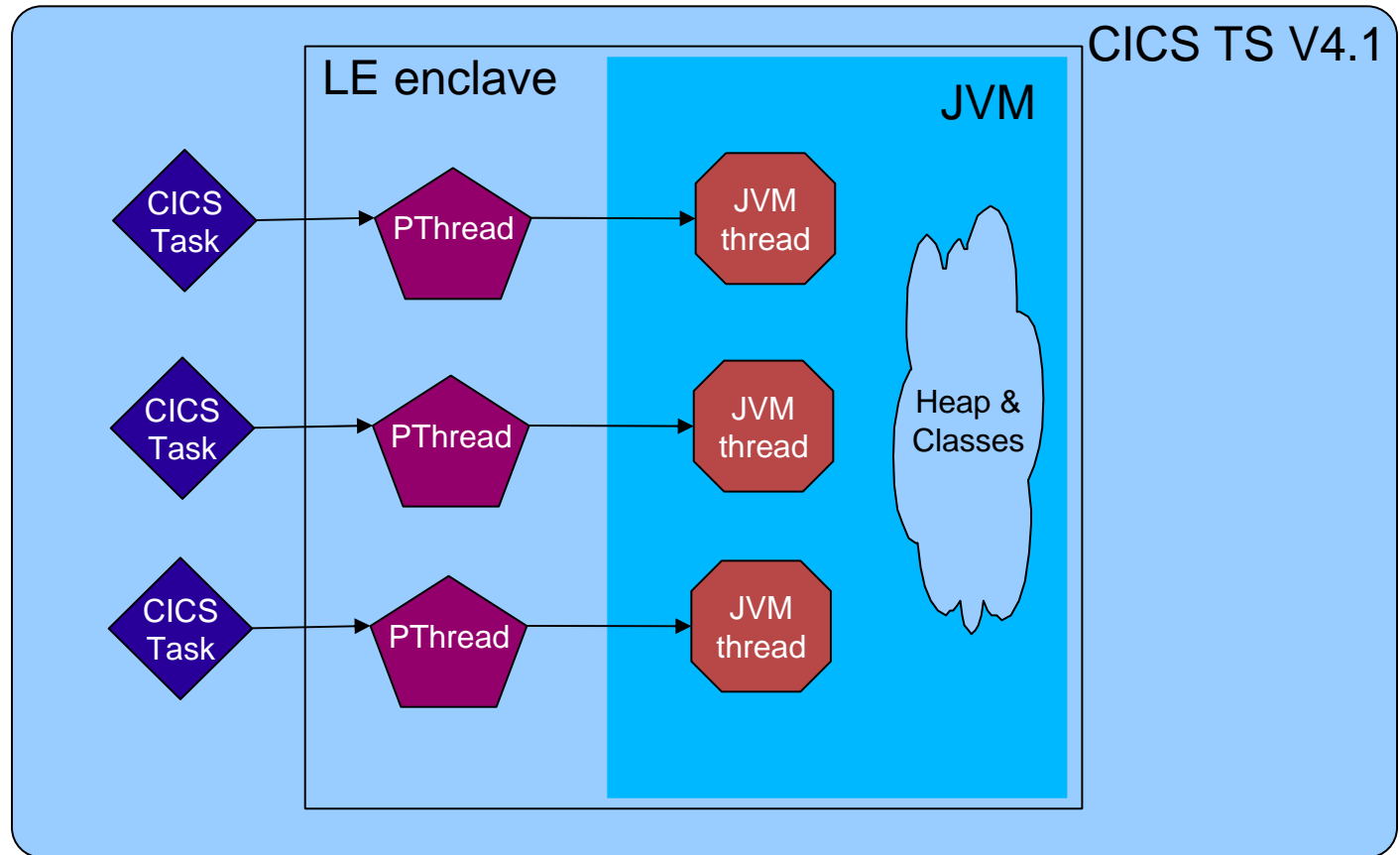


JVMServer Architecture

Can attach multiple pthread/T8/CICS tasks to the JVM at the same time.

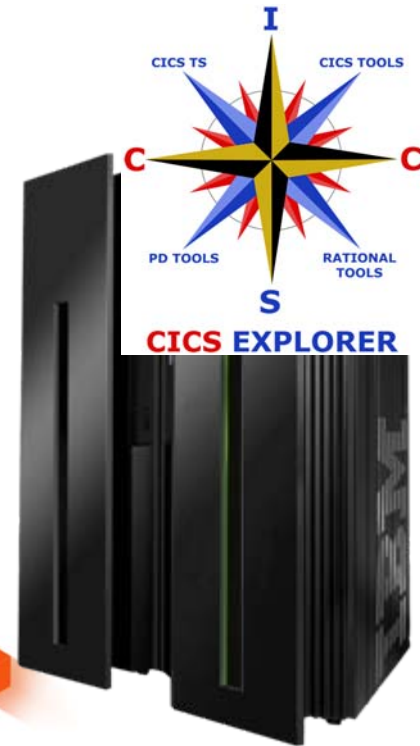
Therefore serve more requests using a single JVM.

Result is 100s tasks per region.





IBM CICS Explorer™ - The New Face of CICS

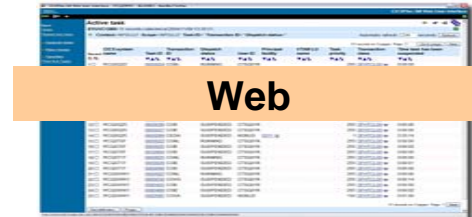


The changing face of CICS tooling

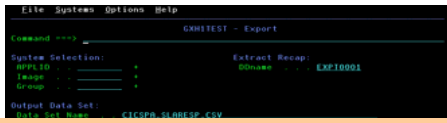
CICS Explorer reduces need for multiple interfaces

Previously...

Now ...



Web



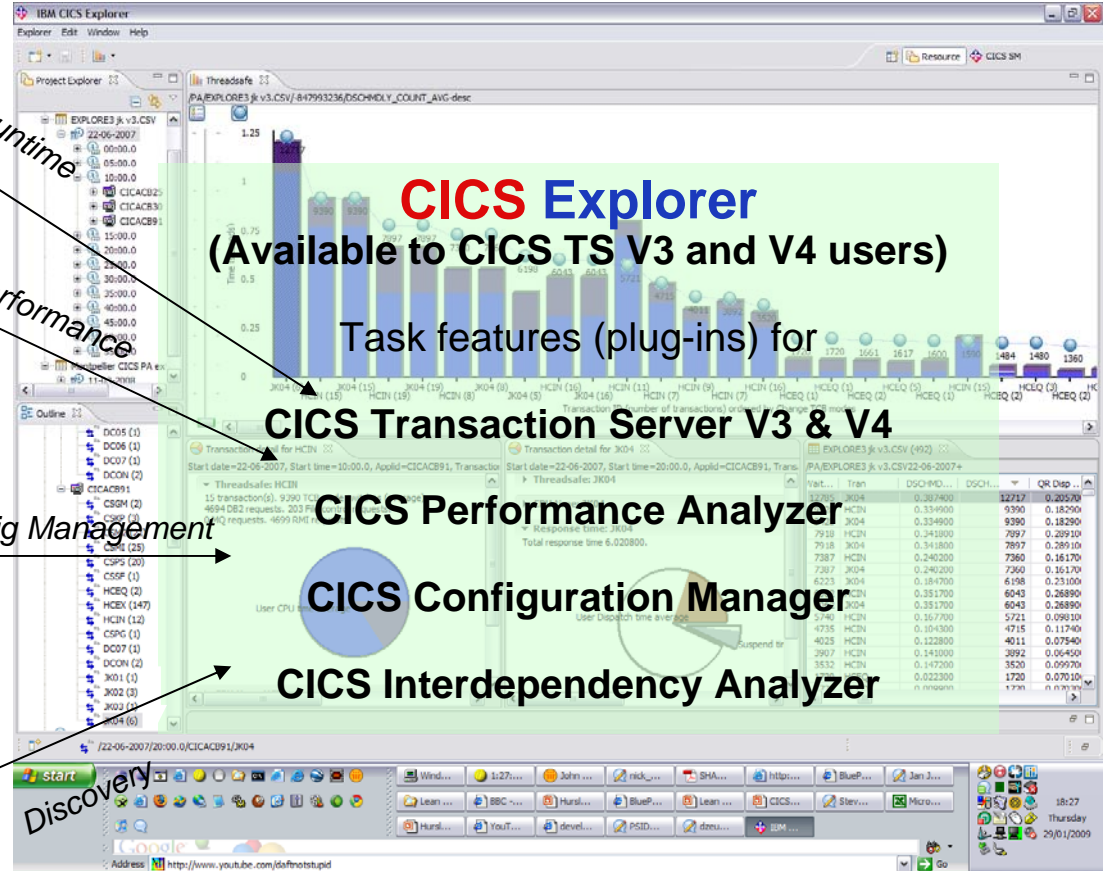
ISPF



CICS 3270



Eclipse



Runtime

Performance

Config Management

Discovery

CICS Explorer
(Available to CICS TS V3 and V4 users)

Task features (plug-ins) for

CICS Transaction Server V3 & V4

CICS Performance Analyzer

CICS Configuration Manager

CICS Interdependency Analyzer

IBM CICS Explorer™



New!

Threadsafe, File, CPU,
Response Time analysis
Graphical and
Sheet views
PA

Daemon &
Connection
Status & Test
TG

Configuration
Status
Control, Test
MQ

Status
Situations
Topology
XE

Develop
Test
Etc
RDz

CICS, IMS, DB2,
& z/OS
Abend Reporting
& Diagnosis
FA

Execution Tree
Dependencies
Queries
Command Flow
IA

Deployment
Discovery,
Visualization,
Automation & Control
DA

CICS, IMS,
DB2, & z/OS
Application
Debugging
DT

CICS, IMS, DB2,
& z/OS
Observation Requests
& Reporting
APA

CRUD/Install
History, Audit
Backout
Search, Compare
CM

CRUD/Install
Control, Filter
Topology
Events, ATOM
SM

ibm.com/cics/tools
ibm.com/cics/explorer
ibm.com/cics/explorer/download

SM	CICS Transaction Server
IA	CICS Interdependency Analyzer
PA	CICS Performance Analyzer
CM	CICS Configuration Manager
DA	CICS Deployment Assistant
TG	CICS Transaction Gateway

CICS TS

APA	Application Performance Analyzer
FA	Fault Analyzer
DT	Debug Tool
MQ	WebSphere MQ
XE	OMEGAMON XE for CICS
RDz	Rational Developer for System z

CICS Explorer - Program Definition editor – CICSplex SM

The screenshot shows the IBM CICS Explorer interface. The main window displays the 'Program Definition (IMPACT9)' editor. The interface is mostly greyed out, indicating that the user does not have write access to the program definition. The 'Overview' tab is active, showing details for the program 'IMPACT9'.

Name	Version	Created	Changed	Description
IMPACT9	1	Wed Apr 0...	Wed May ...	Lets chan...
JOE	1	Tue Sep 2...	Thu May 2...	Go on baby
JOE1	1	Thu Jul 19...	Thu May 2...	
PEPSIONE	1	Wed Apr 0...	Wed Apr 0...	And chang...

The 'Overview' tab shows the following details:

- Name: IMPACT9 Description: Lets change this today
- Version: 1 Created: 09-Apr-2008 19:47:50
- Enabled: Changed: 28-May-2008 18:19:44
- Language: COBOL Non-CICS (Open) API
- Threadsafe (use task TCB) Display EDI
- Storage:
 - Accept addresses above 16MB line Use from LPA
 - Storage key CICS gives control to the program
 - User (Can only read CICS-key storage)
 - CICS (Can read and modify CICS-key storage)
- Program reuse:
 - Always remain in memory for subsequent re-use
 - Never re-use: A new copy is loaded each time
- A Program in memory for re-use is Unloaded at either:
 - The next dynamic memory compression
 - When the use count of the Program is zero
- User Data:
 - 1: 2: 3:

The status bar at the bottom indicates 'Satish 3.1'.

Everything greyed out because ...

... it's a 3.1 system that uses the CICSplex SM WUI server that is read only.

CICS Explorer - Program Definition editor - CICS CM

Program Definition (IMPACT9) Lets change this today

Name	Version	Created	Changed	Description	Status
IMPACT9	1	Wed Apr 09 ...	Wed May 28...	Lets change ...	ENABLED
PEPSIONE	1	Wed Apr 09 ...	Wed Apr 09 ...	And change ...	ENABLED
JOE	1	Tue Sep 26 ...	Thu May 29 ...	Go on baby	DISABLED
JOE1	1	Thu Jul 19 1...	Thu May 22 ...		ENABLED

Resource History For IMPACT9

Revision Time	User Name	Attributes
2008/05/17 23:40:59	CICSUSER	USELPACOPY YES NO RESIDENT YES NO EXECKEY USER CICS
2008/04/25 16:16:30	CICSUSER	
2008/04/24 11:40:25	CICSUSER	
2008/04/23 22:50:04	CICSUSER	
2008/04/23 22:46:29	CICSUSER	

Program Definition (IMPACT9) Lets change this today

Overview This is just for your information

Details

Name: IMPACT9 Description: Lets change this today

Version: 1 Created: 09-Apr-2008 19:47:50

Enabled Changed: 28-May-2008 18:19:44

Language: COBOL Non-CICS (Open) API

Threadsafe (use task TCB) PDF screens

Storage

Accept addresses above 16MB line

Storage key CICS gives control to the

User (Can only read CICS-key

CICS (Can read and modify CI

Program reuse

Always remain in memory for s

Never re-use: A new copy is loaded each time

A Program in memory for re-use is Unloaded at either:

The next dynamic memory compression

When the use count of the Program is zero

User Data

1: 2: 3:

Overview Remote Java™ Attributes

Dispose PROGDEF

Satish (CM)

The history view shows who made changes, when changed, by attribute

The editor is input capable (i.e. fields aren't grey) and changes can be made

...because same system connected to using CM

CICS Explorer - Powerful, context-sensitive resource editors

The screenshot displays the IBM CICS Explorer interface. The main window shows the configuration for a Transient Data Queue (TDQ) named EXIB. The left pane shows the resource tree for server IYCYZC23, including TOOLPLX1 and TSTPLEX. The central pane shows a table of resources with columns for Name, Version, Created, Changed, Description, and Type. The right pane shows the configuration details for the selected TDQ, including Name, Description, Version, Created, Changed, Data set name, and Number of Buffers.

Name	Version	Created	Changed	Description	Type
EXIB	1	Sun May 18 ...	Sun May 18 ...	Input Data s...	EXTRA
EXIN	1	Sun May 18 ...	Sun May 18 ...	EXTRA type ...	EXTRA
EXO	1	Sun May 18 ...	Sun May 18 ...	Extra Output	EXTRA
EXSY	1	Tue May 20 ...	Tue May 20 ...	EXTRA with ...	EXTRA
INDT	1	Sun May 18 ...	Sun May 18 ...	Indirect Queue	INDIRECT
IND2	1	Sun May 18 ...	Sun May 18 ...	Indirect and ...	INDIRECT
INT1	1	Wed May 21...	Wed May 21...	Intra for Ter...	INTRA
RMT1	1	Sun May 18 ...	Wed May 21...	This is Remote	REMOTE
RMT2	1	Sun May 18 ...	Sun May 18 ...	Remote syst...	EXTRA
TDQD	1	Wed Oct 10 ...	Fri Jan 04 1...	Matthews T...	EXTRA
XTRA	1	Sun May 18 ...	Sun May 18 ...	Extra Queue	EXTRA

The right pane shows the configuration for the selected TDQ (EXIB). The configuration includes the following details:

- Name:** EXIB **Description:** Input Data set read backwards
- Version:** 1 **Created:** 18-May-2008 23:37:50 **Changed:** 18-May-2008 23:38:17
- Data set name defined in JCL:** FOOBAR
- Rewind tape data set to start Defer data set open
- The data set may or may not exist when the queue is created
 - Must exist Can be read by other concurrent jobs
 - Use existing data set if present, otherwise create one
- The data set type is to be used for
 - Input Read backwards
 - Output
- Number of Buffers:**
 - Use default environment value
 - Specific value (0 to 255)
- User Data:** 1: 2: 3:

The bottom pane shows the Resource History for EXIB, which is currently disabled due to a non-Configuration Manager connection. A green callout box highlights this message: "This shows how for a non-CM connection the history view just gracefully says that the function isn't available."

Another green callout box highlights the configuration options: "Editors only show applicable attributes and tabs - overview/runtime/printer are all specific for a TDQ of type 'Extra Partition'".

The bottom status bar shows "16M of 18M" and "Satish 3.1".

CICS Explorer - No "magic" values - File definition editor

Operations

Add option	<input type="checkbox"/> No
Browse option	<input type="checkbox"/> No
Delete option	<input type="checkbox"/> No
Read option	<input type="checkbox"/> Yes
Update option	<input type="checkbox"/> No

Auto journaling

Journal number	<input type="checkbox"/> NO
Read operations recorded on journal	<input type="checkbox"/> None
Synchronous auto journaling for input	<input type="checkbox"/> No
Rewrite/delete operations recorded on journal	<input type="checkbox"/> No
Add operations recorded on journal	<input type="checkbox"/> None
Synchronous auto journaling for output	<input type="checkbox"/> Yes

(NO, 1-99, blank)

Specifying which attributes to log in a journal for a file is very involved in CEDA and the WUI

File_Definition (FC02)

File_Definition (FC02) Joe's test file

Runtime

Usage

The kind of operations that can be performed by programs against the file can be controlled to only a subset of allowable CICS functions

<input checked="" type="checkbox"/> Read	Records can be read
<input type="checkbox"/> Browse	Records can be read sequentially
<input type="checkbox"/> Add	Records can be added
<input checked="" type="checkbox"/> Delete	Records can be deleted
<input checked="" type="checkbox"/> Update	Records can be updated

Auto Journal

CICS journal names are of the form DFHJnn, where nn is in the range 1 through 99

Do not use auto journaling

CICS journal name:

Synchronously auto-journal records for Input Output

Operations to be recorded in the journal

<input type="checkbox"/> Read only
<input checked="" type="checkbox"/> Read update
<input type="checkbox"/> Rewrite and delete
<input checked="" type="checkbox"/> Add write operation before the VSAM I/O operation
<input checked="" type="checkbox"/> Add write operation after the VSAM I/O operation

Compare again the CICS Explorer with the WUI

CICS Explorer - Editor validation

The screenshot shows the 'Pipeline Definition (PIPELINE)' editor window. At the top, a red 'X' icon and the text '2 errors detected' are visible. The 'Details' section shows the pipeline name 'PIPELINE' and description 'Frog'. The 'Response Wait' section has a radio button selected for 'Number of seconds: 20p', which is highlighted with a yellow tooltip that reads 'Invalid character 'p' entered. Valid characters are A-Z a-z 0-9 . / _ 10'. Below this, the 'HFS Details' section has a dropdown menu for 'Configuration file name on HFS for this pipeline' with a red 'X' icon next to it. The 'User Data' section shows three input fields: '1: EAT', '2: SOME', and '3: TODAY'. At the bottom, there are tabs for 'Foo Bar', 'Overview', and 'Attributes'.

An advantage of an Eclipse client over a browser/TSO/ISPF interface which is that keystroke by keystroke client validation occurs making the GUI more responsive (no server roundtrips) and less errors get sent down the wire to CICS making it faster.

The pipeline definition below has two errors - 20p is not a valid number ...

... and the configuration file name has an invalid character entered.

Each error field has a **red X next to it to show it's bad, and hovering over the **red X** bring up a tooltip with the error. All errors can be seen by hovering over the **red X** at the top of the screen.**

CICS PA plug-in to the CICS Explorer

- **Provides numerous methods of visualizing historical transaction performance summary data**
- **Access to performance data summaries and reporting scenarios using CICS PA created ...**
 - CSV files from SMF 110 performance data
 - CSV files or database (DB2) from HDB performance data
- **Integrates with the strategic CICS Explorer and other tooling plug-ins**
- **Evolutionary and responsive solution**

CICS PA - Visualizing the summary data

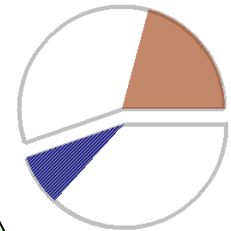
See extracts of the raw data in the Sheet view

The screenshot displays the IBM CICS Explorer interface with several key components:

- Table View:** A large table showing transaction details with columns for Start date, Start time, Applid, Transacti..., Task ser..., Respons..., R..., User Dep..., User CPU..., Suspend..., and Suspend... The table lists various transactions like PDQVARI, HELM.CK, PDQQR, etc.
- Transaction Detail Window:** A window titled "Transaction detail for: 2007-01-11, 23.50.00, IYCYZC24, CRTP" showing an overview with four pie charts for Threadsafe, CPU time, Response time, and Storage. Below this is a "Response time" table:

Response measurement	Time (avg)	Count	%Overall	%Relative
Response time:	0.002937	-	-	-
User Dispatch time	0.001620	2	55%	55%
User CPU time	0.000612	2	21%	38%
CICS Key 8 TCB CPU time	0	0	-	-
J8 TCB CPU time	0	0	-	-
L8 TCB CPU time	0	0	-	-
S8 TCB CPU time	0	0	-	-
T8 TCB CPU time	0	0	-	-
X8 TCB CPU time	0	0	-	-
CICS Key 9 TCB CPU time	0	0	-	-
J9 TCB CPU time	0	0	-	-
L9 TCB CPU time	0	0	-	-
X9 TCB CPU time	0	0	-	-
Miscellaneous TCB CPU tir	0	0	-	-
RO TCB CPU time	0	0	-	-
QR TCB CPU time	0.000612	2	21%	100%
Suspend wait time	0.001317	2	45%	45%
Dispatch wait time	0.000238	1	8%	18%
- Bar Chart:** A bar chart at the bottom showing "Time (seconds)" for various transaction IDs. The highest bars are for HPHH (3) and OVSW (2). A callout points to the HPHH bar with the text "CICS Key 8 TCB CPU time average=0.169700".
- Project Explorer:** A tree view on the left showing the project structure with folders like X-Files, Sample, Temp1, Test23, Cols Machines, Cruiser.cpa, Oakwood.cpa, special, Derby.cpa, winmsz2e.cpa, and Wizard.
- Sheet View:** A callout points to a table view showing raw data extracts.

Powerful active outline view speeds selection



Flexibility in what you want to see

..or follow Analysis Scenarios like Threadsafe to highlight issues

Drill into data files using the explorer view

CICS and threadsafe (OTE) – what is it ?

- **Threadsafe allows introduction of extreme parallelism into CICS application serving of legacy workloads**
 - Significant CPU reduction is possible which allows cost reduction for existing applications
 - This cost savings - thru technology - should also be positioned as a means to introduce new workloads onto CICS at reduced TCO
 - These new workloads can be managed more efficiently using tools targeted for both old and new workloads running under CICS
 - These multiple benefits will allow the driving of new workloads to System z leveraging new SOA capabilities of CICS
 - This is part of the overall System z strategy to protect client application assets while improving the operational efficiency of the platform

Customer Threadsafe experiences

▪ **Danske Bank**

- Threadsafe conversion MIPS saving of about 300 MIPS during the peak processing period – directly attributed to reduced TCB switching
- Customer looking forward to CICS Transaction Server Version 3.2 where WMQ, local File Control, and VSAM RLS are threadsafe, promising even greater improvements

▪ **“Large financial services organization in the US“**

- Estimated \$32M per year in savings based on data center chargeback reduction
- Estimated 10-15% of their total available savings
- Public domain information, delivered at Impact 2008
- The above is based on 1 non-dedicated systems person for 6-7 months without using tools
- Can easily cost-justify tools to speed the process
- Savings may be difficult to quantify beforehand

▪ **“Major US bank”**

- Saved 700 MIPS by making one major application threadsafe

▪ **Savings we have seen with other similar projects**

- CICS CPU savings of 2-15%
- Reduced VSAM Transparency product overhead by over 12%

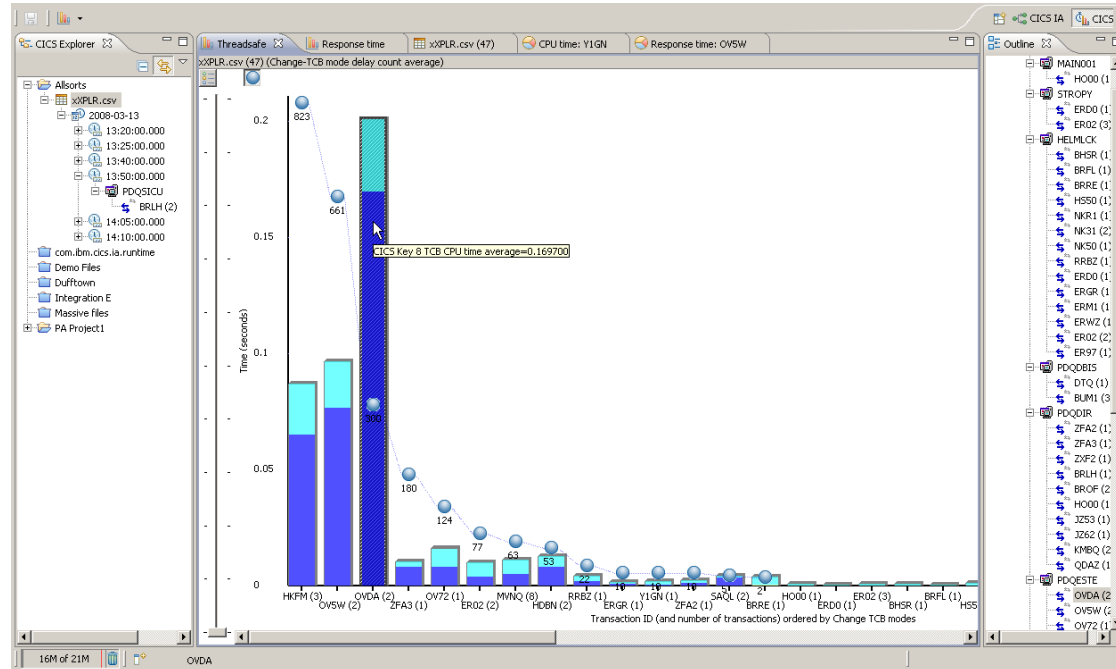
CICS PA finds the best candidates for threadsafe optimization

Problem

- Identifying the best candidates for threadsafe optimization and knowing when to stop - you've achieved your goals

Solution

- Performance summary, list, and list extended reports plus metrics like TCB use by transaction, dispatch and CPU time, number of TCB switches and change mode delay time and Getmain usage help zero-in on the programs with most to gain



Value

- CICS PA easily helps improve CICS threadsafe performance, validate savings and track service levels

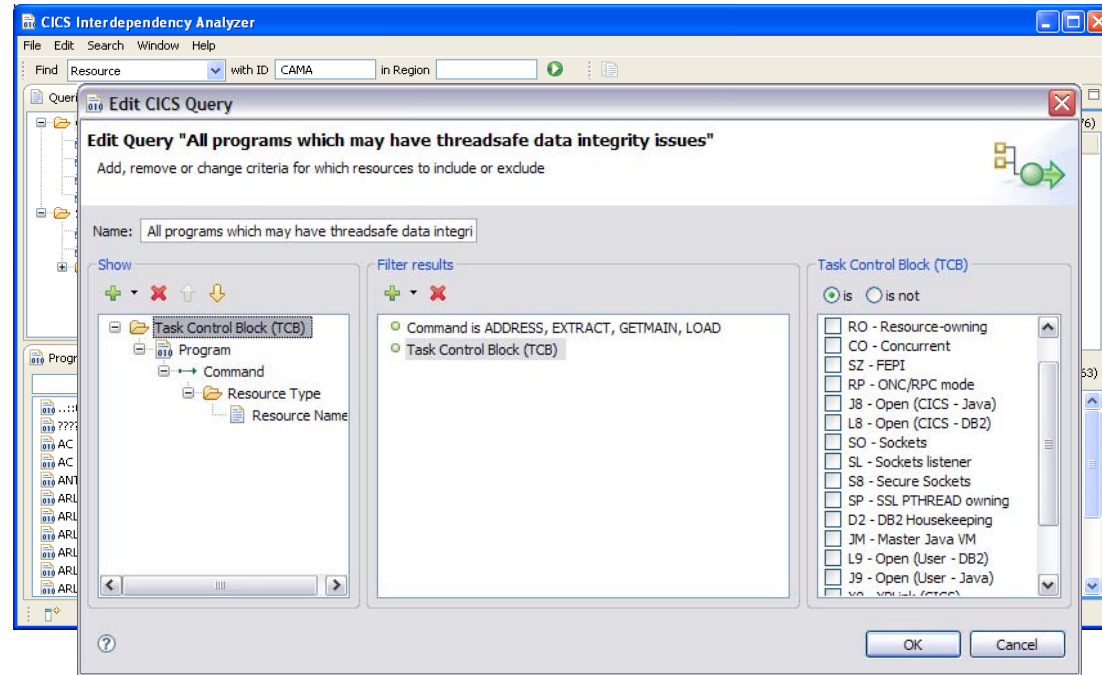
CICS IA helps get the best out of threadsafe CICS TS V3.2

Problem

- Migrating large number of complex CICS applications without retesting entire portfolio
- Identifying suitable candidates for thread-safe optimization

Solution

- CICS IA identifies programs most sensitive to CICS API changes enabling more focussed testing
- CICS IA shows non-threadsafe programs and highlights what's needed to optimize them



Value

- Helps customers under time pressure to migrate to latest versions with reduced risk
- Even without deep CICS skills, you can optimize your portfolio and benefit from threadsafe

CICS PA - Comparison views

IBM CICS Explorer

Explorer Edit Window Help

CICS PA CICS IA CICS CM

PA Explorer XPLR_C.csv (58)

/PA Data/XPLR_C.csv/2008-03-13/14-10-00.000+

Start date	Start time	Appid	Tr...	Task ter...	Respons...	Respons...	Dispatch...	User Dis...	User Dis...	User CP...	Suspend...	Suspend...	Dispatch...	
2008-03-13	14:10:00...	PDQHP20	HDBN		2	1.308100	2.010900	53	1.307600	54	0.012700	0.000500	54	0.000100
2008-03-13	14:10:00...	PDQWTC1	HDBN		2	1.309100	2.011800	1	0.001100	2	0.000900	1.308000	2	0
2008-03-13	14:10:00...	PDQHP20	HKFM		3	0.614500	0.703700	823	0.604500	824	0.087000	0.010000	824	0.005200
2008-03-13	14:10:00...	PDQWTC1	HKFM		3	0.615400	0.704500	1	0.001200	2	0.000900	0.614300	2	0
2008-03-13	14:10:00...	MAIN001	HO00		1	0.002300	0.002300	4	0.000900	5	0.000900	0.001300	5	0
2008-03-13	14:10:00...	PDQDIR	HO00		1	0.002700	0.002700	1	0.000800	2	0.000600	0.001900	2	0
2008-03-13	14:10:00...	HELMCLK	HSS0		1	0.038600	0.038600	6	0.001100	7	0.001100	0.037400	7	0
2008-03-13	14:10:00...	BEERPLUM									0.006500	5.210900	116	0.009500
2008-03-13	14:10:00...	BEERPLUM									0.111600	4.942800	215	0.008300
2008-03-13	14:10:00...	PDQDIR									0.000700	5.077900	6	0
2008-03-13	14:10:00...	BEERPLUM									0.006200	3.203600	66	0.000100
2008-03-13	14:10:00...	PDQDIR									0.000700	3.210300	4	0
2008-03-13	14:10:00...	PDQDIR									0.000600	0.267400	2	0
2008-03-13	14:10:00...	BEERPLUM									0.299800	0.198300	5880	0.160800
2008-03-13	14:10:00...	PDQHP20	MVWQ				0.154800			64	0.011200	0.016000	64	0.010200
2008-03-13	14:10:00...	HELMCLK	NK31			0.025400	0.027100			11	0.001700	0.023400	11	0.000100
2008-03-13	14:10:00...	HELMCLK	NK50			0.051700	0.051700			18	0.003000	0.047600	18	0.000400
2008-03-13	14:10:00...	HELMCLK	NKR1			1.524100	1.524100	6		7	0.001100	1.522300	7	0
2008-03-13	14:10:00...	PDQESTE	OV5W		2	0.422400	0.672600	665		666	0.096600	0.012200	666	0.007500
2008-03-13	14:10:00...	PDQESTE	OV7Z		1	0.043200	0.043200	127	0.000000	128	0.016000	0.003100	128	0.001800
2008-03-13	14:10:00...	PDQESTE	OVD		2	0.316500	0.555900	304	0.306400	305	0.200800	0.010100	305	0.007000
2008-03-13	14:10:00...	PDQDIR	OV		1	0.021500	0.021500	1	0.000000	2	0.000700	0.020700	2	0

Comparison between "before" and "after" situations

Threadsafte XPLR_C.csv (58) (Change-TCB mode delay count average)

Threadsafte XPLR_C.csv (1368) (Change-TCB mode delay count average)

CICS PA - Integration with CICS IA

The screenshot displays the IBM CICS Explorer interface. The main window shows a response time bar chart for the transaction `/CPA/EXPLORER_SUMMARY/IYCYZC20/CRTP`. The Y-axis represents 'Time (seconds)' ranging from 0 to 0.0075. The X-axis shows time intervals from 2007-01-11 23:40:00 to 2007-01-12 11:20:00. Below the chart, the 'Transaction detail for: CRTP' is shown for the start date 2007-01-12, start time 04:00:00, application IYCYZC20, and transaction ID CRTP.

The 'Overview' section includes several gauges: Threadsafe, CPU time, Response time, Storage, and File usage. Below these is a table titled 'Threadsafe (averages)' showing performance metrics for 3 transactions.

Measurement	Time (avg)	Count	%Overall	%Relative
Threadsafe:				
User CPU time	0.000672	2	100%	100%
CICS Key 8 TCB CPU time	0	0	-	-
J8 TCB CPU time	0	0	-	-
L8 TCB CPU time	0	0	-	-
S8 TCB CPU time	0	0	-	-
T8 TCB CPU time	0	0	-	-
X8 TCB CPU time	0	0	-	-
CICS Key 9 TCB CPU time	0	0	-	-
J9 TCB CPU time	0	0	-	-
L9 TCB CPU time	0	0	-	-
X9 TCB CPU time	0	0	-	-
Miscellaneous TCB CPU time	0	0	-	-
R0 TCB CPU time	0	0	-	-
QR TCB CPU time	0.000672	2	100%	100%

A large pie chart on the right side of the overview section is almost entirely filled with a blue color, representing the 'QR TCB CPU time' category.

CICS PA - Integration with CICSplex SM perspective

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

- Tree View:** Shows the CICSplex structure for server IYCYZC23, including regions like TOOLPLX1 (3/4), CICSplex SM (CICSC131, CICSC231, etc.), and TSTPLEX (11/12).
- Table:** Lists CICSplex SM regions with columns for Region, Name, Status, and Use C. The row for CICSC231 CRTP is highlighted, showing a Use C of 250.
- Context Menu:** A menu is open over the CRTP row, with 'Performance history' selected. The 'CPU time' option is circled in orange.
- CPU time Chart:** A bar chart showing CPU time in seconds over a timeline from 2007-01-11 to 2007-01-12. An orange arrow points from the 'CPU time' menu option to the chart.
- Transaction Detail:** Shows details for transaction CRTP, including start date (2007-01-12), start time (02.05.00), and applid (IYCYZC21). It includes an overview section with gauges for Threadsafe, CPU time, Response time, Storage, and File usage.

CICS TG in CICS Explorer

The screenshot displays the IBM CICS Explorer interface. The left pane shows a tree view of CICSplex components for server IYCWJFW1, including DUMMY907 (0/0) and various L830PLX and L938PLX instances. The main pane shows a table of Gateway daemons for scope DUMMY907, with 8 records collected on 24-Apr-2009 at 10:29:22. The table columns include Name, Status, Version, GatewayID, Netname, UpTime, Health, MaxPipes, InUsePipes, Hostname, TCP, and Clients. The selected record is CTGRED1, which is RUNNING (version 7.2.0.0) with GatewayID MV24.CTGRED1 and Netname RED1EXCI. The Properties pane below the table shows details for this gateway daemon, including its default (IY24CTGU), GatewayID (MV24.CTGRED1), Health (100), InUsePipes (0), MaxPipes (250), Name (CTGRED1), Netname (RED1EXCI), Platform (z/OS), Status (RUNNING), UpTime (3 days 18:09:30), and Version (7.2.0.0). Network details show 0 Clients, Hostname WINMVS24, and TCP port 4148.

Name	Status	Version	GatewayID	Netname	UpTime	Health	MaxPi...	InUse...	Hostname	TCP	Clients
CTGRED1	RUNNING	7.2.0.0	MV24.CTGRED1	RED1EXCI	3 days 18:09:30	100	250	0	WINMVS24	4148	0
CTGRED2	RUNNING	7.2.0.0	MV24.CTGRED2	RED2EXCI	3 days 17:57:52	100	250	0	WINMVS24	4150	0
ANS720	RUNNING	7.2.0.0	SMITHSON.GATEWAY	CTGEXCI	17 days 21:07:30	100	250	0	WINMVS24	6483	0
ANS720A	RUNNING	7.2.0.0	SMITHSON.CTG720A	CTGEXCI	17 days 21:07:49	100	250	0	WINMVS24	6485	0
ANS710	RUNNING	7.1.0.0	-	-Generic-	14 days 22:53:25	100	250	0	WINMVS24	6486	0
ANS710A	RUNNING	7.1.0.0	710A	-Generic-	17 days 21:07:45	100	250	0	WINMVS24	6487	0
CTGBLU1	RUNNING	7.2.0.0	MV24.CTGBLU1	-Generic-	3 days 17:57:57	100	250	0	WINMVS24	4149	0
CTGBLU2	RUNNING	7.2.0.0	MV24.CTGBLU2	BLU2EXCI	3 days 17:58:13	100	250	0	WINMVS24	4151	0

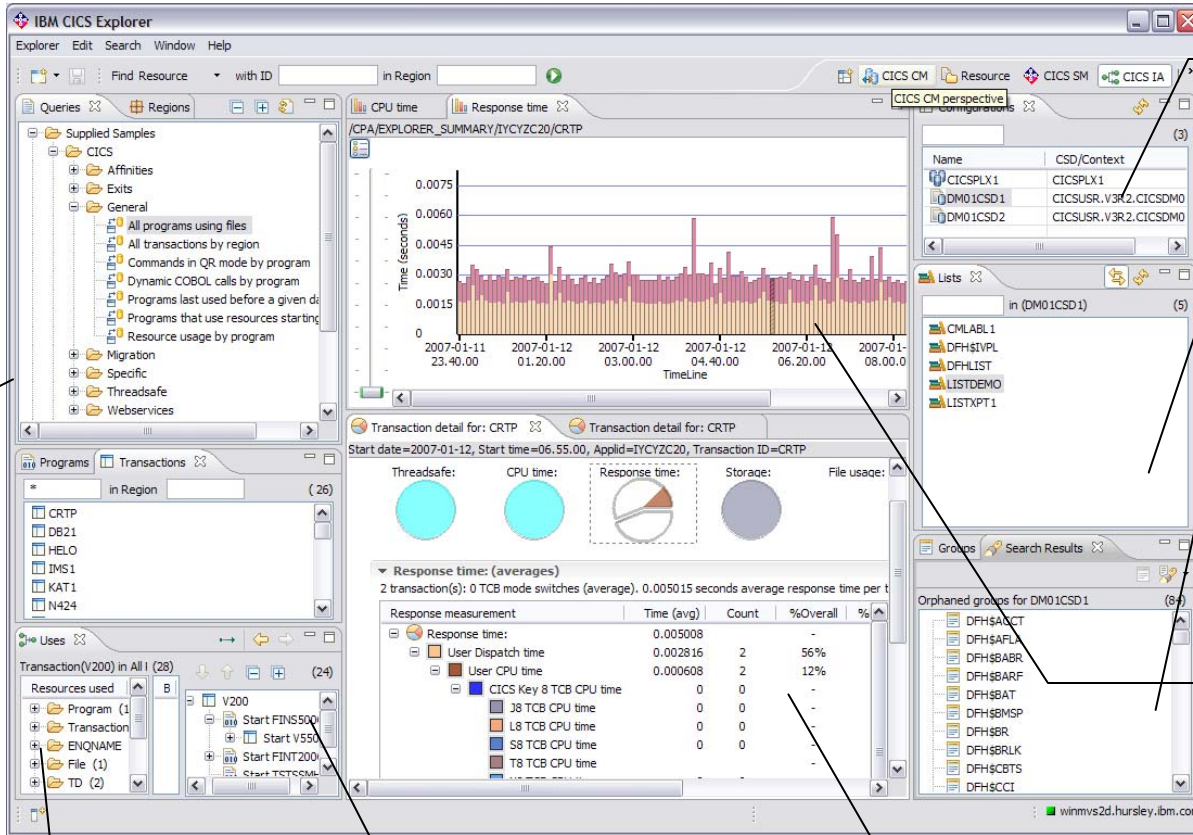
Property	Value
Gateway daemon	
Default	IY24CTGU
GatewayID	MV24.CTGRED1
Health	100
InUsePipes	0
MaxPipes	250
Name	CTGRED1
Netname	RED1EXCI
Platform	z/OS
Status	RUNNING
UpTime	3 days 18:09:30
Version	7.2.0.0
Network details	
Clients	0
Hostname	WINMVS24
SSL	-
TCP	4148

CICS Explorer & CICS Tools: Putting it all Together

Interdependency
Analyzer

Performance
Analyzer

Configuration
Manager



Single point of control for CSDs and DREPs

Lists and ResDescs

Search for Orphaned groups

Timeline of response times

Shipped Sample Queries

View tree of resources used

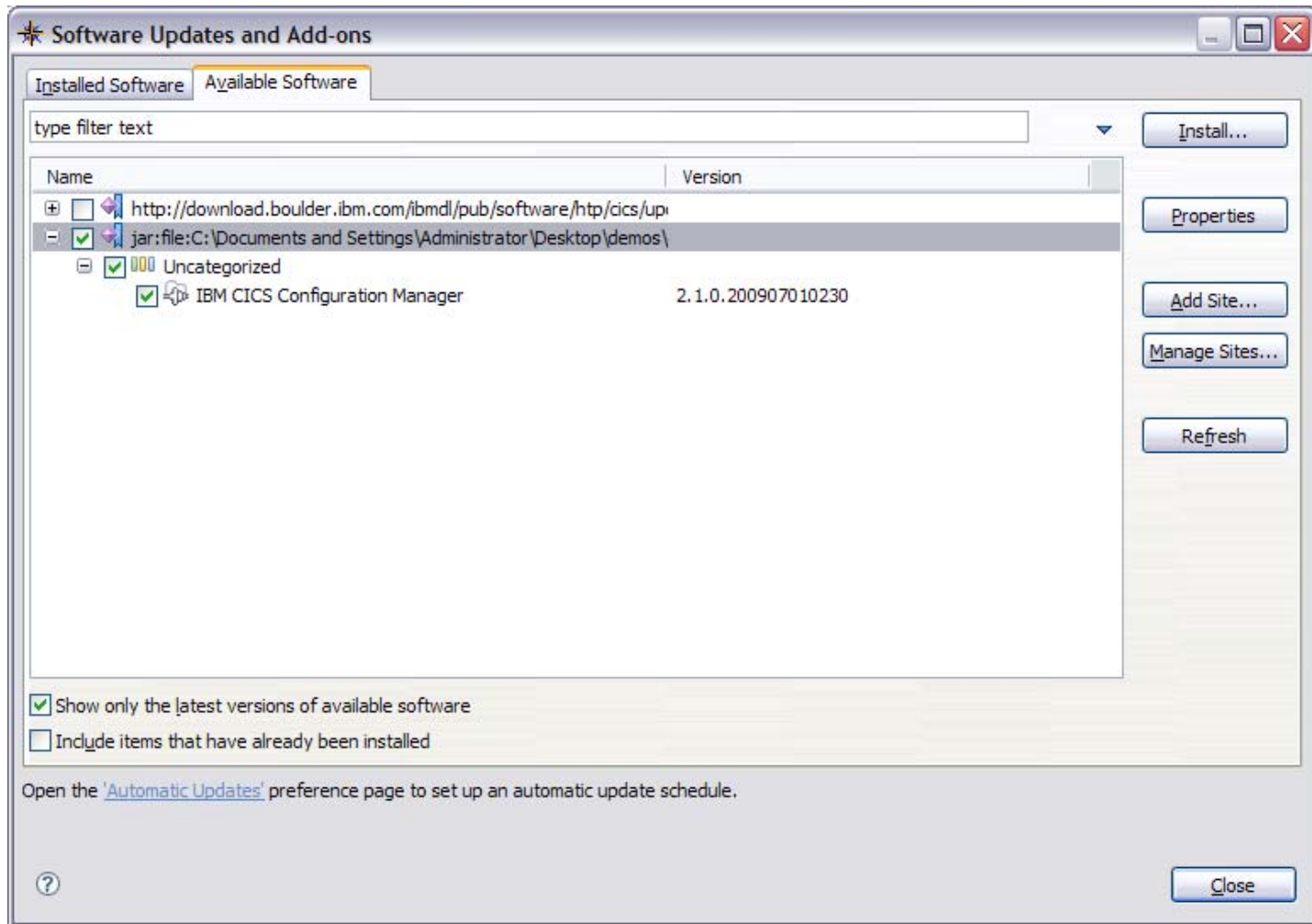
Resources used by a transaction

Drilldown into transaction

CICS administration problems solved using CICS CM

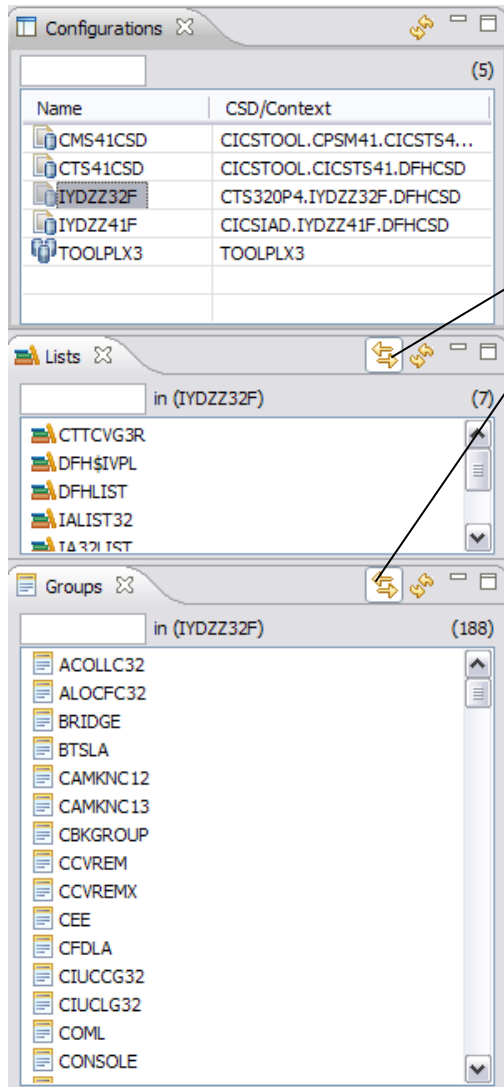
- **Working with multiple CSDs**
- **Working with CSD files and CICSplex SM DREPs**
- **Migrating changes between environments**
- **Delegating and approving changes**
- **Changes across LPAR boundaries**
- **Backout**
- **Audit compliance**
- **Cleanup and analysis**
- **Comparisons and exception analysis**
- **Cold start analysis**

Installation



CICS CM Explorer plug-in installs through the update site mechanism in the CICS Explorer

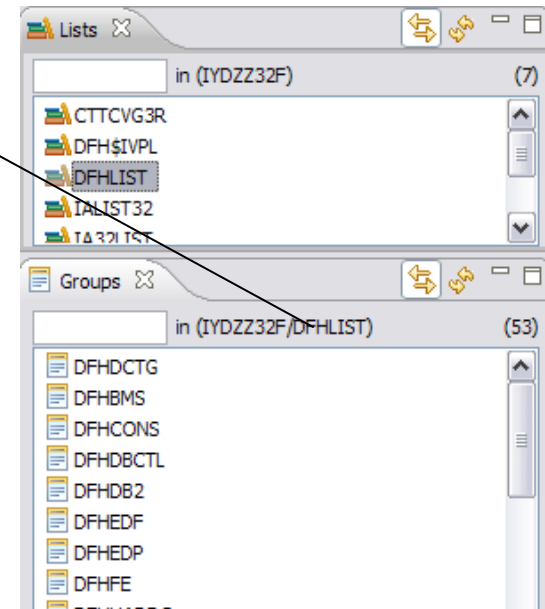
CM - Configurations, Lists, Groups



Views display configurations, lists and groups

Linked to selection – the lists and groups are displayed for the currently selected configuration. Can be toggled on and off.

Groups can also be displayed for the currently selected list



CM - Creating, editing and deleting a resource definition

Transaction Definitions | Program Definitions | File Definitions | TD Queue Definitions

CNX0211I Context: BEP. Resource: TRANDEF. 5 records collected at 09-Jul-2009 13:07:43

Name	Version	Program Name	Create Time	Change Time	Description	Status
ab	N/A	C	N/A	16-Jun-2009 1...		✓ ENABLED
BEPM	N/A	CBMCMNDS	N/A	03-Apr-2009 1...	BEP COMMAND...	✓ ENABLED
FC02	N/A	YEAH	N/A	07-May-2009 1...		✓ ENABLED
FOO9	N/A		N/A	07-May-2009 1...		✓ ENABLED
WXYZ	N/A		N/A	28-May-2009 1...	changes by Satish	✓ ENABLED

Context Menu:

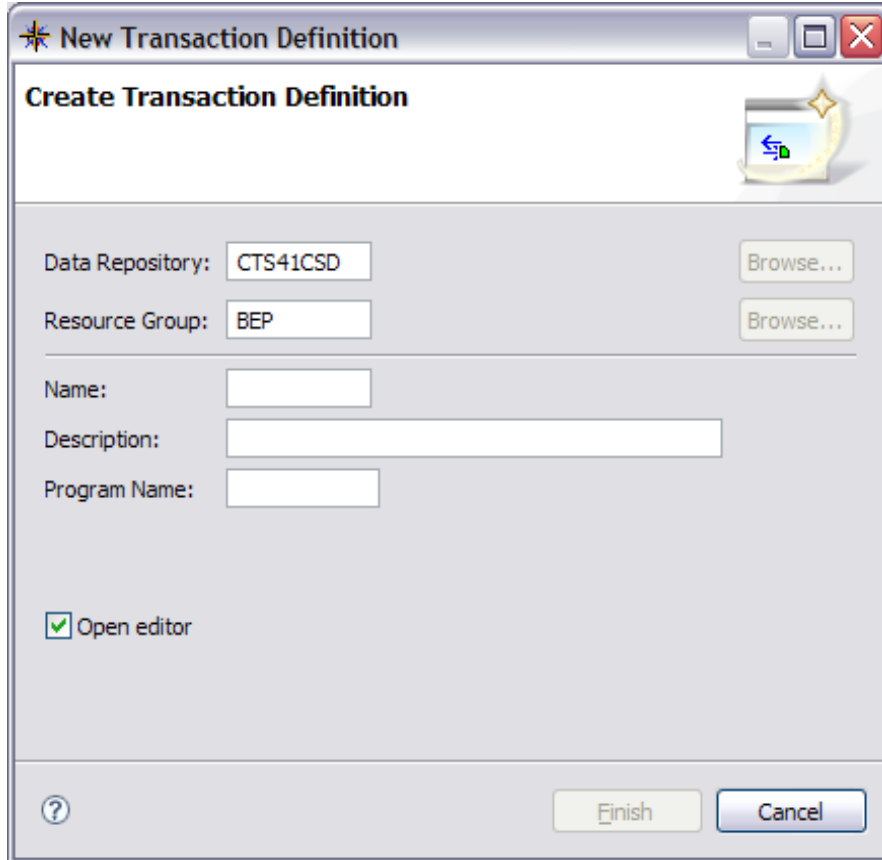
- New...
- Open
- Install...
- Add to Group...
- Remove from Group
- ✗ Delete
- Find

Can open a creation wizard from different paths.

Within a definitional view select the “New...” menu.

Select a group and select an option from the “New...” menu.

CM - Creating, editing and deleting a resource definition



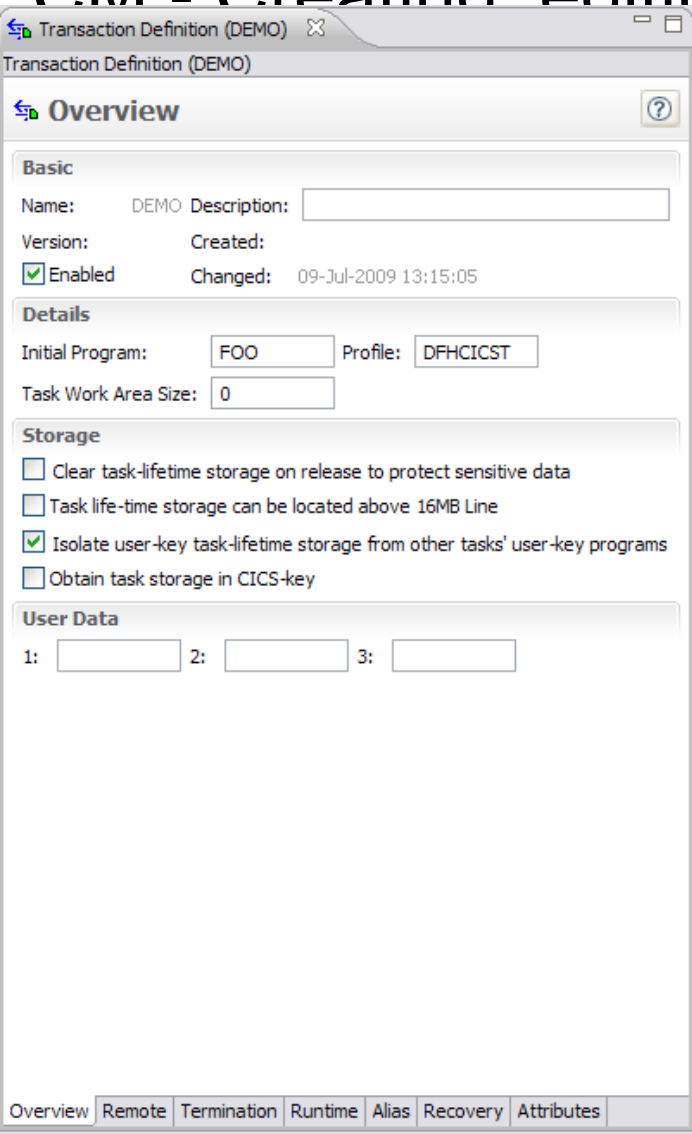
The screenshot shows a dialog box titled "New Transaction Definition" with the subtitle "Create Transaction Definition". It features a wizard icon in the top right corner. The dialog contains the following fields and controls:

- Data Repository:** A text box containing "CTS41CSD" and a "Browse..." button.
- Resource Group:** A text box containing "BEP" and a "Browse..." button.
- Name:** An empty text box.
- Description:** An empty text box.
- Program Name:** An empty text box.
- Open editor:** A checked checkbox.
- Buttons:** A help icon (?), a "Finish" button, and a "Cancel" button.

Different resource types have slightly different creation wizards.

Only the basic attributes need to be entered at this point. Others are defaulted.

CM - Creating, editing and deleting a resource definition



The screenshot shows the 'Transaction Definition (DEMO)' dialog box with the 'Overview' tab selected. The dialog is divided into several sections:

- Basic:** Name: DEMO, Description: (empty), Version: (empty), Created: (empty), Enabled, Changed: 09-Jul-2009 13:15:05.
- Details:** Initial Program: FOO, Profile: DFHCICST, Task Work Area Size: 0.
- Storage:** Clear task-lifetime storage on release to protect sensitive data, Task life-time storage can be located above 16MB Line, Isolate user-key task-lifetime storage from other tasks' user-key programs, Obtain task storage in CICS-key.
- User Data:** 1: (empty), 2: (empty), 3: (empty).

At the bottom, there are tabs for Overview, Remote, Termination, Runtime, Alias, Recovery, and Attributes.

Once create completes the resource is opened in an editor, where further changes can be made.

The resource has been created at this point.

These editors are the same as those used for the CICS Explorer, they inherit the validation and embedded help framework.

CM - History

Display by date groupings

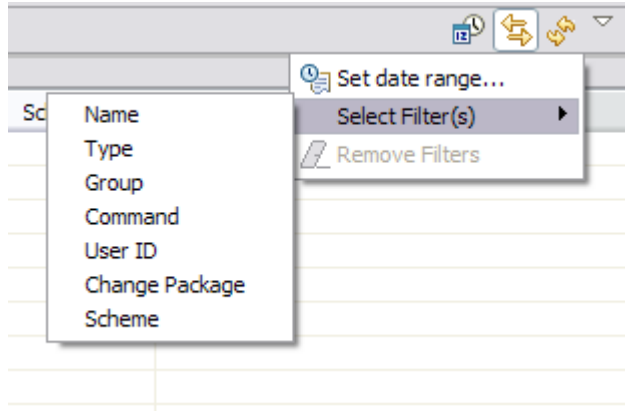
Revision Time	Resource Name/After	Resource Type/Before	Group	User Name	Command	Change P...	Scheme
Today							
2009/07/09 13:43	FOO9	TRANDEF	BEP	CICSUSER	UPDATE		
Older Than This Month							
2009/05/07 17:52	FOO9	TRANDEF	BEP	CICSUSER	CREATE		

Sort by columns by clicking on column header

Revision Time	Resource Name/...	Resource Type/Before	Group	User Name	Command	Change P...	Sch
2009/05/27 09:31:41	A	ATOMDEF	BEP	CICSUSER	DELETE		
2009/05/27 09:31:37	A	ATOMDEF	BEP	CICSUSER	CREATE		
2009/07/09 13:18:35	DEMO	TRANDEF	BEP	CICSUSER	DELETE		
2009/07/09 13:15:28	DEMO	TRANDEF	BEP	CICSUSER	CREATE		
2009/05/07 17:53:37	FC02	TRANDEF	BEP	CICSUSER	CREATE		
2009/07/09 13:43:41	FOO9	TRANDEF	BEP	CICSUSER	UPDATE		
2009/05/07 17:53:19	FOO9	TRANDEF	BEP	CICSUSER	CREATE		
2009/05/18 14:40:28	FOOOO	TCPDEF	BEP	CICSUSER	CREATE		
2009/06/05 15:27:20	J000	CONNDEF	BEP	CICSUSER	DELETE		

CM - History

Select Filters to apply to history entries

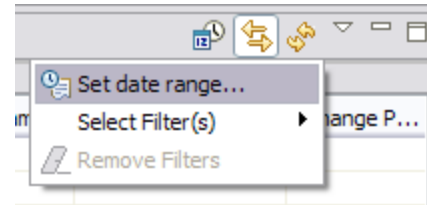


Once filters have been selected you can populate the values, choose “equals” or “not equals” and apply the filters

Revision Time	Resource Name/After	Resource Type/Before	Group	User Name	Command	Change P...
2009/07/09 13:15:28	DEMO	TRANDEF	BEP	CICSUSER	CREATE	

CM - History

Set Date range to apply to history entries



Select the range using the dialog box

This range will then be used to limit the results displayed to changes within these times

Set Date Range
Set date range to apply to History entries.

From

Earliest entry
 Select a date:

April 2009						
Mon	Tue	Wed	Thu	Fri	Sat	Sun
30	31	1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	1	2	3
4	5	6	7	8	9	10

09/04/2009 13:07:41

To

Latest entry
 Select a date:

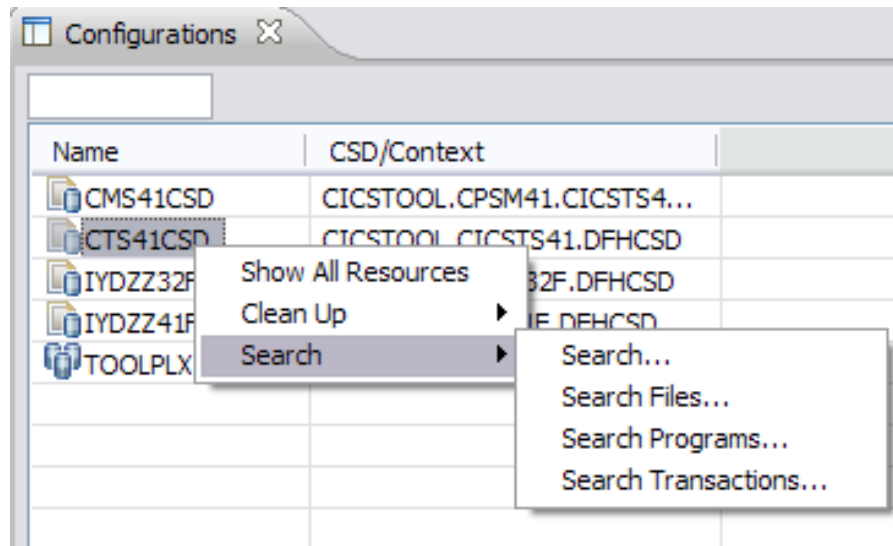
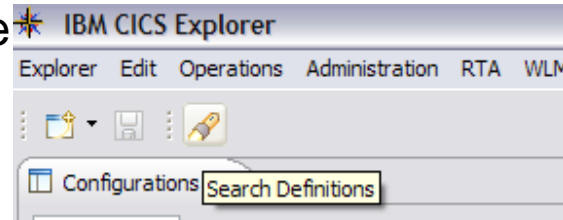
July 2009						
Mon	Tue	Wed	Thu	Fri	Sat	Sun
29	30	1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31	1	2
3	4	5	6	7	8	9

09/07/2009 14:17:46

OK Cancel

CM - Searching

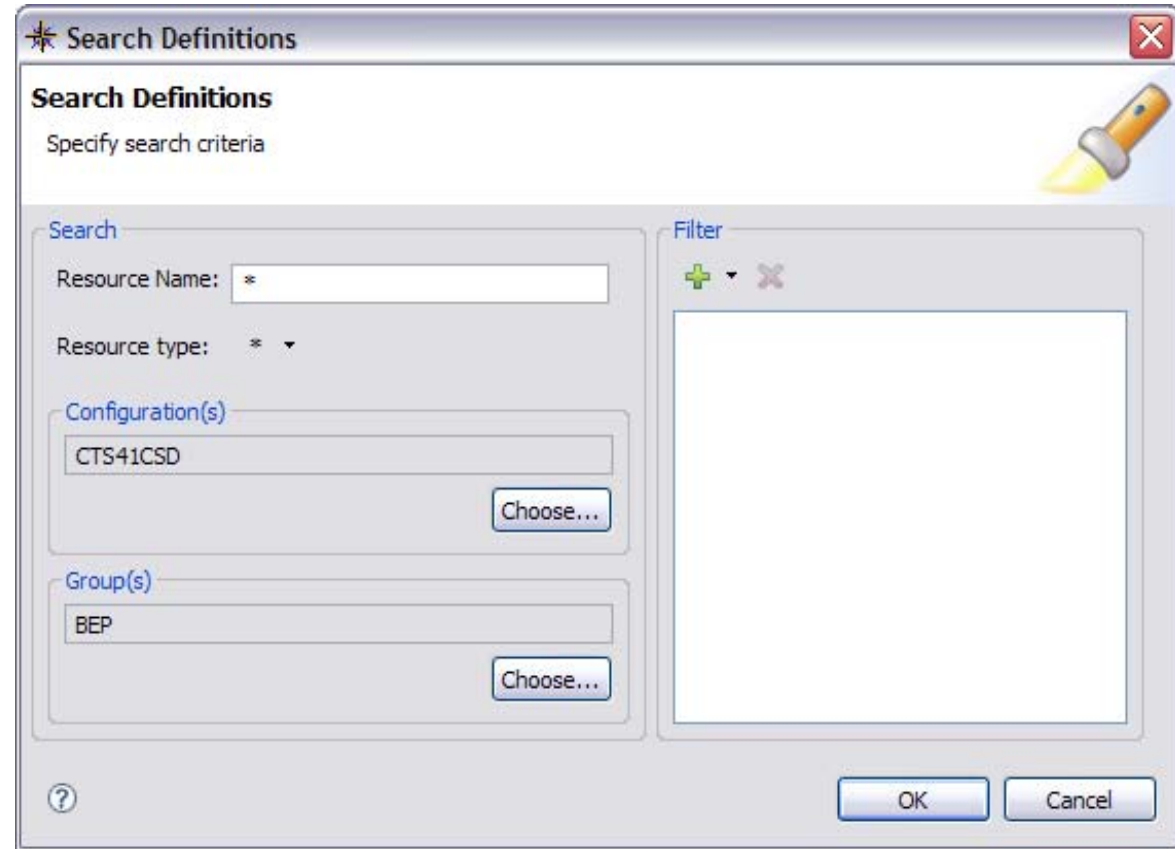
You can drive the search dialog from the toolbar



Or from one of the search options on a configuration or group

CM - Searching

From the search dialog you can specify name, type, configurations(s) and groups within a particular configuration



The screenshot shows the "Search Definitions" dialog box. The title bar includes a search icon and the text "Search Definitions" with a close button. The main area is titled "Search Definitions" and contains the instruction "Specify search criteria". A flashlight icon is in the top right corner. The dialog is divided into two main sections: "Search" and "Filter".

Search Section:

- Resource Name:** A text input field containing an asterisk (*).
- Resource type:** A dropdown menu showing an asterisk (*) and a downward arrow.
- Configuration(s):** A text input field containing "CTS41CSD" and a "Choose..." button to its right.
- Group(s):** A text input field containing "BEP" and a "Choose..." button to its right.

Filter Section:

- A large empty rectangular area for defining filters.
- At the top left of this area are a green plus sign (+), a dropdown arrow, and a red X.

At the bottom of the dialog, there is a help icon (question mark in a circle) on the left and "OK" and "Cancel" buttons on the right.

CM - Searching

Search Definitions
Specify search criteria

Search
Resource Name: *

Resource type: File Definitions

Configuration(s)
CTS41CSD
Choose...

Group(s)
BEP
Choose...

Filter
+ - x
Change Agent is DREPAPI

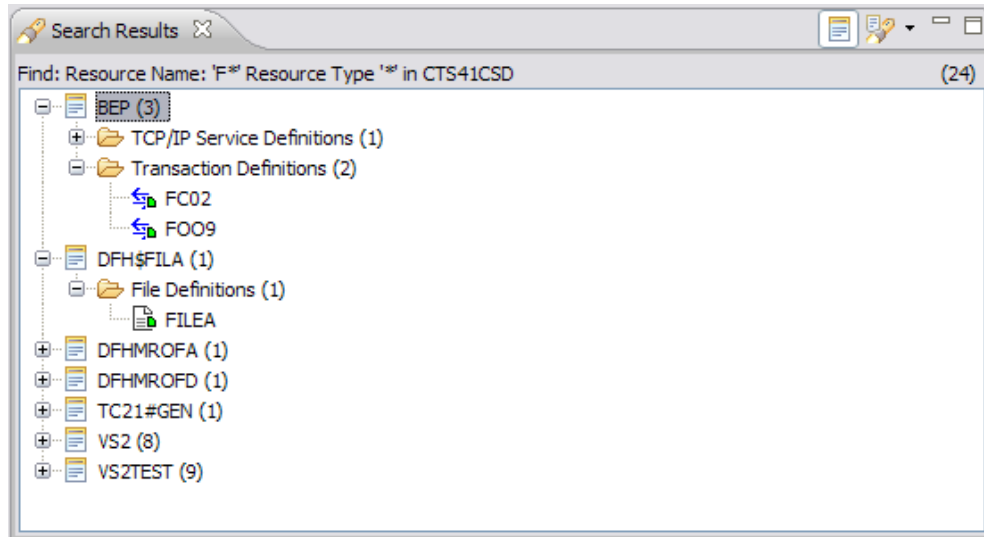
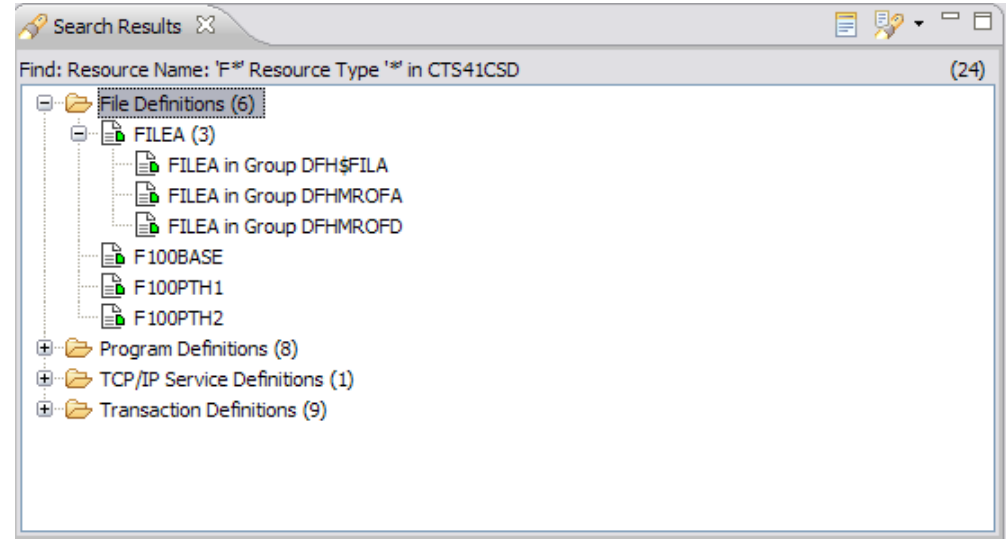
Last modification agent
is
 DREPAPI
 DREPBATCH
 N_A

OK Cancel

If a resource type is specified further filtering can be done on attribute values

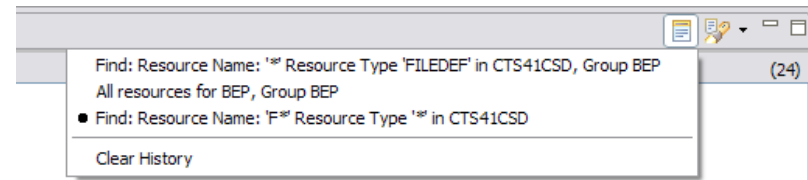
CM - Searching

Results are displayed in the Search results view

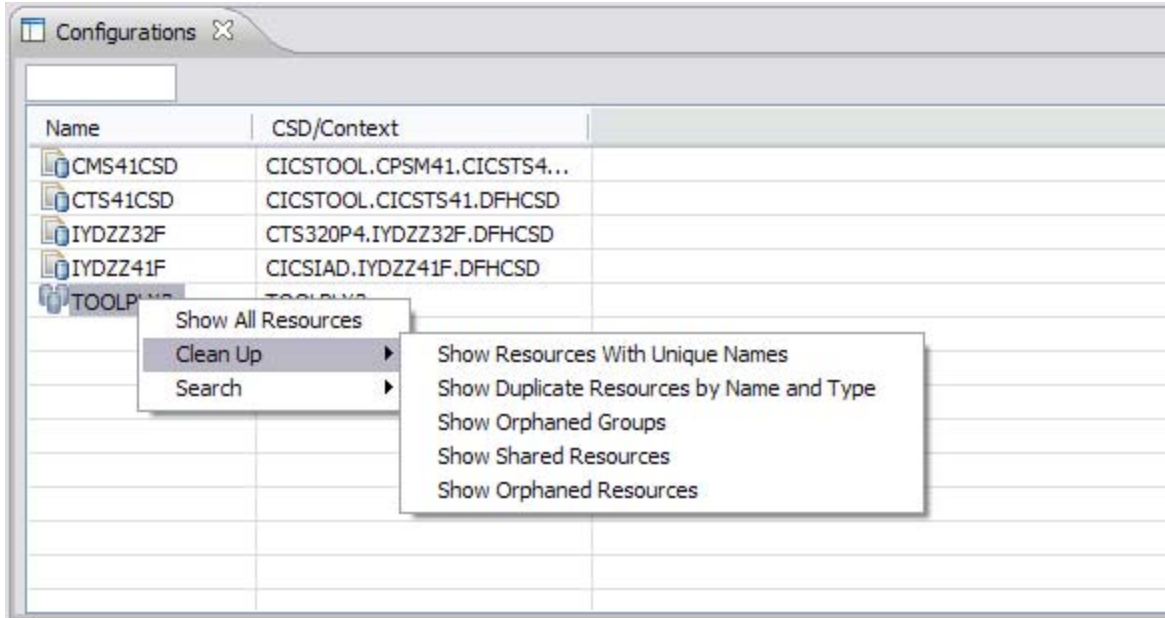


Results can be arranged by group

Result history

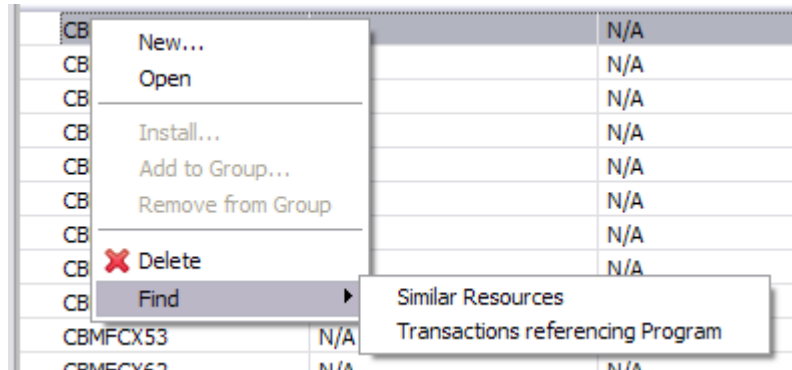


CM - Clean Up – Specific Searches



Some searches to aid in resource and CSD clean up have been provided

Some specific searches on certain resource types:
LSRPool
Program



CM - Operational Definitions

The screenshot shows the 'Preferences' dialog box with the 'Connections' tab selected. The left sidebar contains a tree view with 'Connections' highlighted. The main area is divided into several sections:

- Connection:** Type: Configuration Manager, Name: CM 2.1 Connection. Buttons: New, Connect, Delete.
- Location:** Host name: WINMVS2E.HURSLEY.IBM.COM, Port number: 8990.
- Authentication:** User ID: KAT, Password: [masked]. A warning icon and text state: 'Saved passwords are stored on your computer in a file that is difficult, but not impossible, for an intruder to read.'
- CICS Connection:** A table with columns 'Name' and 'Type'.

Name	Type
<input checked="" type="checkbox"/> 4.1 Connection	CICS Management Interface
<input type="checkbox"/> Old data connection to 4.1	CICSplex SM Data Interface

Buttons at the bottom: Restore Defaults, Apply, OK, Cancel.

You can associate a CMCI or a CICSplex SM Data connection with your CM connection, to allow management of operational resources alongside use of CM

CM - Operational Definitions

The screenshot displays the IBM CM console interface. The top panel, 'Transaction Definitions', shows a table with columns: Name, Version, Create Time, Change Time, and De... The table contains four records: ASILLY, FC02, TESTDIS, and UNITTEST. A context menu is open over this table, listing options: New..., Open, Install..., Add to Group..., Remove from Group, Delete, and Find. The 'Install...' option is highlighted.

The bottom panel, 'Files', shows a table with columns: Region, Name, status, Add, Browse, Delete, and Read. The table contains ten records for various regions (CICSC141) and names (ACCTFIL, ACCTFIL@, ACCTNAM, ACCUNTD, ACINUSE, BRQFILOD, CIUCNTL, CIUINT1, CIUINT2). A context menu is also open over this table, listing options: Delete and Find. The 'Delete' option is highlighted.

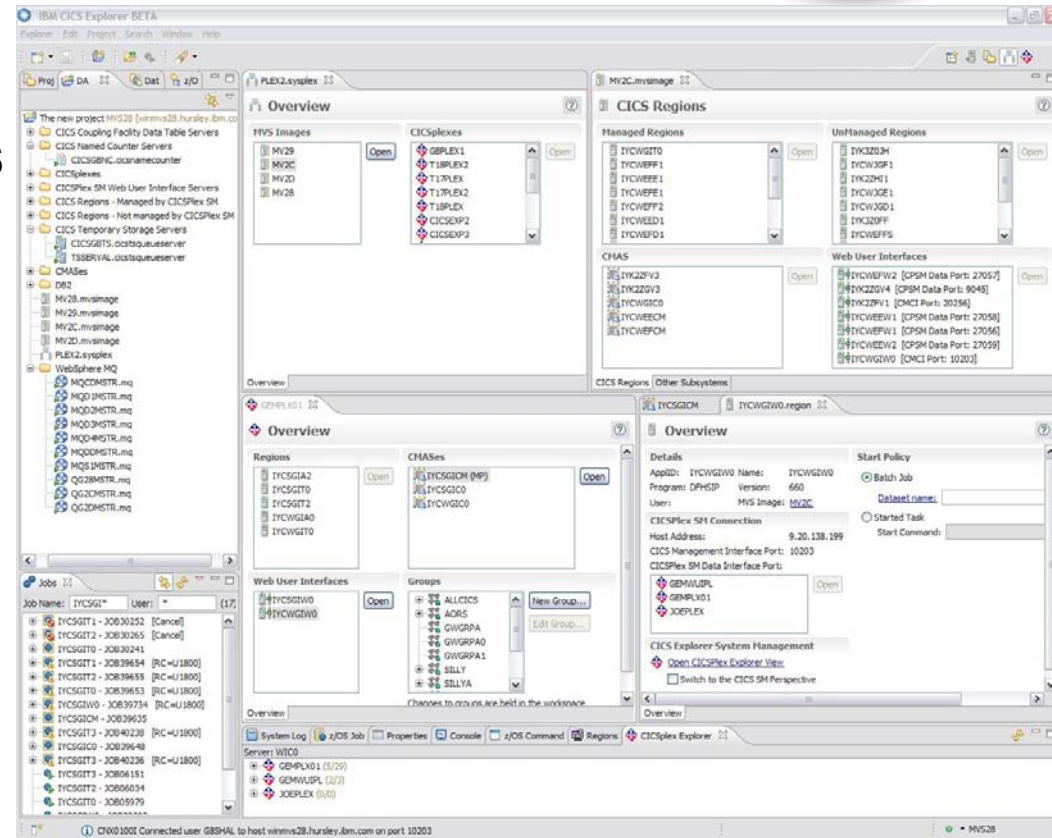
This enables you to manage any regions connected to the WUI server and install CICSPlex SM definitions into those regions

Accelerating return on your CICS investments

IBM CICS Deployment Assistant for z/OS

New!

- New Deployment perspective integrates with CICS Explorer
- Discovery, Modelling and cloning CICS Systems
- Topology Visualization
- Automated creation, deployment, customization, and control of CICS regions
- Edit files, submit JCL, view output
- Simplify tasks, save time, and reduce risk
- More info at <http://ibm.com/software/http/cics/deployment/>
 - Features and benefits, data sheet, announcement letter ...



Discovery – 5 simple steps

Step 1: New Project
 Select a wizard: CICS Deployment Assistant

Step 2: Create CICS Deployment Assistant Project
 Project name: MVS2Ca
 Location: C:\Documents and Settings\username\cicsexplorer101\MVS2Ca

Step 3: Specify a connection to use for discovery
 Connection: MVS2C

Step 4: Discover Sysplex

Name	JES Member
MV26	MV26
MV27	MV27
MV28	MV28
MV29	MV29
MV2D	MV2D
MV2G	MV2G
MV2H	MV2H
MV2I	MV2I

Step 5: Discover MVS Images

- CICS Coupling Facility Data Table Servers (3)
 - CFSEVRVC_MV2C.cicscfdatatable
 - DFHCF2C4_MV2C.cicscfdatatable
 - DFHCF2C6_MV2C.cicscfdatatable
- CICS Named Counter Servers
- CICSplexes (16)
 - CICSplex SM Web User Interface Servers (6)
 - IYCWEW1.region [CPSM Data Port: 27058]
 - IYCWEW2.region [CPSM Data Port: 27059]
 - IYCWEFW1.region [CMCI Port: 27066,CPSM]
 - IYCWEFW2.region [CMCI Port: 27067,CPSM]
 - IYCWGIW0.region [CMCI Port: 10203,CPSM]
 - IYK2ZGV4.region [CPSM Data Port: 9045]
 - CICS Regions - Managed by CICSplex SM (10)
 - AKATDEMO.region [JTPLEX2]
 - IYCWEED1.region [CICSEXP3]
 - IYCWEED2.region [CICSEXP3]
 - IYCWEFD1.region [CICSEXP2]
 - IYCWEFE1.region [CICSEXP2]
 - IYCWEFF1.region [CICSEXP2]
 - IYCWEFF2.region [CICSEXP2]
 - IYCWGIT0.region [GEMPLX01]
 - IYCWGIT1.region [GEMPLX01]
 - IYK2ZGV1.region [JTPLEX2]
- CICS Regions - Unmanaged (13)
- CICS Temporary Storage Servers
- CMASeS (4)
 - IYCWEECM.cmas
 - IYCWEFCM.cmas
 - IYCWGIC0.cmas
 - IYK2ZGV3.cmas
- DB2 (9)
- WebSphere MQ (4)
 - MQD1MSTR.mq
 - MQDDMSTR.mq
 - QG2CMSTR.mq
 - RQ34MSTR.mq
- MV2C.mvsimage
- PLEX2.sysplex

Visualization - Sysplex

Sysplex view shows all MVS images and CICSplexes in the LPAR

CICSplex views managed regions and groups, CMASes and WUIs

The screenshot displays the IBM CICS Explorer interface. On the left, a tree view shows the project structure, including MVS Images, CICSplexes, CICS Regions, CMASes, and WebSphere MQ. The main window is divided into two panes. The top pane, titled 'Sysplex', shows a list of MVS Images (including MV2C) and CICSplexes (including CICSSEXP2). The bottom pane, titled 'CICSplex', shows details for a selected CICSplex, including Groups (ALLGRP, EXPGRP1, etc.), CMASes (IYCWFCM), and Web User Interface servers (IYCWFPW1, IYCWFPW2). A console window at the bottom displays XML output for the CICSplex configuration, including system and subsystem information.

Visualization - CICSplex

Navigate from CICSplex to Managed region, CMAS, and WUI

The screenshot displays the IBM CICS Explorer interface with several panels. A green callout box on the left contains the text "Navigate from CICSplex to Managed region, CMAS, and WUI". Three orange arrows originate from this box and point to specific elements in the interface:

- The top arrow points to the "Regions" table in the "CICSplex" panel.
- The middle arrow points to the "IYCWEFCM (MP)" entry in the "CMASes" panel.
- The bottom arrow points to the "IYCWEF1: WUI" panel.

The interface shows the following panels and data:

- CICSplex Panel:**
 - Groups:** ALLGRP, EXPGRP1, FOOBAR12, FRED, LMASGRP, Niced, ROUTERS1.
 - Regions Table:**

AppID	MAS
IYCWEFD1	IYCWEFD1
IYCWEFE1	IYCWEFE1
IYCWEFF1	IYCWEFF1
IYCWEFF2	IYCWEFF2
IYCWEFW1	IYCWEFW1
IYCWEFW2	IYCWEFW2
 - Web User Interface servers:** IYCWEF1, IYCWEF2.
- IYCWEFCM: CMAS Panel:**
 - tails:** IYCWEFCM Job: IYCWEFCM, Version: 660, User: MQTEST, MVS Image: MV2C, CPMSM Version: 0410.
 - Start Policy:** Batch Job (selected), Started Task.
 - Directly Linked CMASes:** ICSEXP2 (MP), UMMY907 (MP).
 - Regions Table:** (Same as CICSplex panel).
- IYCWEF1: WUI Panel:**
 - Details:** Applid: IYCWEF1, Job: IYCWEF1, Program: DFHSIP, Version: 660, User: MQTEST, MVS Image: MV2C, MAS: IYCWEF1.
 - Start Policy:** Batch Job (selected), Started Task.
 - CICSplex System Management:** Host Address: winmys2c.hursley.ibm.com, CICS Management Interface: 27066, CICSplex SM Data Interface: 27056.
 - CICSplexes:** ICSEXP2, DUMMY907.
 - Groups:** FRED, ROUTERS1.
- IYCWEFD1: Region Panel:**
 - Managed CICS Region Details:** Applid: IYCWEFD1, Job: IYCWEFD1, Program: DFHSIP, Version: 640, User: MQTEST, MVS Image: MV2C, DB2: MQ, IMS:.
 - Start Policy:** Batch Job (selected), Started Task.

Visualization – MVS image

The screenshot displays the IBM CICS Regions console for the MVS2C system. The interface is organized into several sections:

- Details:** Shows System Name (MV2C), SMF System ID (MV2C), and JES Member Name (MV2C).
- Unmanaged Regions:** A list of regions including IYCWEBSC, IYCWEFFS, IYCWEGD1, IYCWEGE1, IYCWEGF1, IYCWJGD1, and IYCWJGE1.
- Managed Regions:** A table with columns for ApplID and MAS, listing various application instances like AKATDEMO, IYCWEED1, IYCWEEE1, IYCWEPD1, IYCWEPF1, and IYCWEPF1.
- CMAS:** A list of CMAS entries including IYCWEECM, IYCWFCM, IYCWGIC0, and IYK2ZGV3.
- Web User Interfaces:** A table showing connection details for various application instances, such as IYCWEEW1, IYCWEEW2, IYCWFEW1, and IYCWFEW2.
- Other Subsystems:** This section is expanded to show:
 - DB2:** A list of DB2 subsystems like DF2CDBM1, DF2CDIST, DF2CMSTR, DG2CDBM1, DG2CDIST, DG2CMSTR, and DH2CDBM1.
 - WebSphere MQ:** A list of MQ subsystems like MQD1MSTR, MQDDMSTR, QG2CMSTR, and RQ34MSTR.
 - Named Counter Servers:** An empty list.
 - Coupling Facility Data Tables:** A list of CFDTs like CFSERVRC, DFHCF2C4, and DFHCF2C6.

Navigate from MVS image to all CICS regions and other sub-systems

Automated SM connection set-up

DB2, WMQ, and other CICS sub-systems

Visualization – Managed and Unmanaged regions

Clone region

Managed CICS Region

Details
 Applid: IYCWEFF2 Job: IYCWEFF2
 Program: DFHSIP Version: 660
 User: MQTEST [MVS Image: MV2C](#)
[DB2:](#) [MQ:](#)
 IMS:

Start Policy
 Batch Job
 Data set name: [Browse...](#)
 Started Task
 Start Command: s IYCWEFF2
[Start Region](#) [Stop Region](#)

CICSplex System Management
[CICSplex: CICSEXP2](#)
[CMAS: IYCWEFCM](#)
 MAS: IYCWEFF2
 To Clone the CICS region use the:
[Clone CICS Region Wizard](#)

ApplID	MAS	
IYCWEFE1	IYCWEFE1	Open
IYCWEFF1	IYCWEFF1	

Groups

Add to CICSplex

Unmanaged CICS Region

Details
 Applid: IYCWEFFS Job: IYCWEFFS
 Program: DFHSIP Version: 660
 User: MQTEST [MVS Image: MV2C](#)
[DB2:](#) [MQ:](#)
 IMS:

Start Policy
 Batch Job
 Data set name: [Browse...](#)
 Started Task
 Start Command:
[Start Region](#) [Stop Region](#)

CICSplex System Management
 The CICS Region is not part of a CICSplex.
[Add to CICSplex](#)

Clone – 3 simple steps

Specify new names

New dataset names chosen automatically - edit if required

Cloned region added to model

Console view shows all cloning actions and list of outstanding manual tasks

DD Name	Share	Existing Data set	New Data set
DFHXRMMSG	<input type="checkbox"/>	MQTST.SUBSYS.IYCWEFF2.DFHXRMSG	MQTST.SUBSYS.IYCWEFFA.DFHXRMSG
DFHEJDIR	<input checked="" type="checkbox"/>	MQTST.SUBSYS.IYCWEFF2.DFHEJDIR	MQTST.SUBSYS.IYCWEFF2.DFHEJDIR
DFHGCD	<input type="checkbox"/>	MQTST.SUBSYS.IYCWEFF2.GCD	MQTST.SUBSYS.IYCWEFFA.GCD

ApplID	MAS	

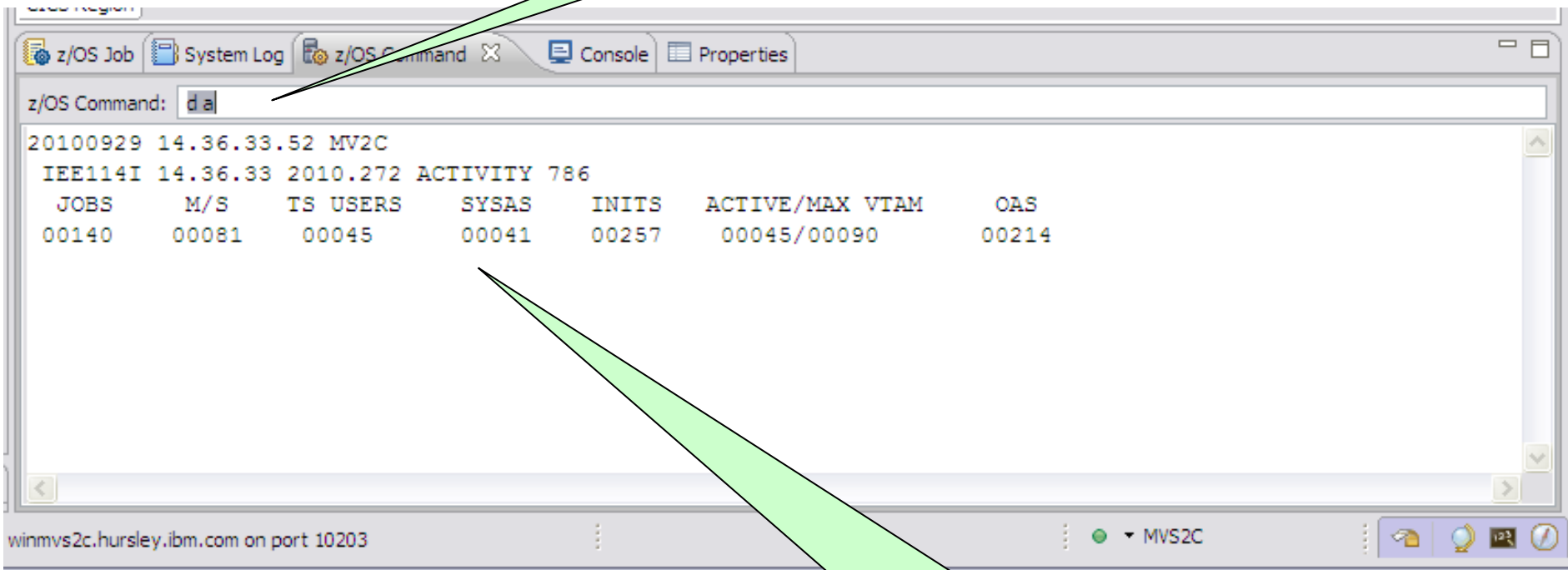
```

z/OS Job System Log z/OS Command Console Properties
System z/OS
Cloning of CICS region IYCWEFF2 to create CICS region IYCWEFFA completed successfully.

The following data sets were allocated and are ready to be used by the new CICS region:
MQTST.SUBSYS.IYCWEFFA.DUMPA
MQTST.SUBSYS.IYCWEFFA.DUMPB
MQTST.SUBSYS.IYCWEFFA.DFHXRMSG
MQTST.SUBSYS.IYCWEFFA.GCD
MQTST.SUBSYS.IYCWEFFA.DFHLRO
  
```

z/OS Command Line

*Type in any authorized
z/OS command*



The screenshot shows a terminal window titled 'z/OS Command' with a command prompt 'z/OS Command: d a'. The output is as follows:

```
20100929 14.36.33.52 MV2C
IEE114I 14.36.33 2010.272 ACTIVITY 786
  JOBS      M/S      TS USERS    SYSAS      INITS      ACTIVE/MAX VTAM      OAS
00140      00081     00045      00041      00257      00045/00090      00214
```

The window title bar includes 'z/OS Job', 'System Log', 'z/OS Command', 'Console', and 'Properties'. The status bar at the bottom shows 'winmvs2c.hursley.ibm.com on port 10203' and 'MVS2C'.

Command output shown below

Cheat Sheets

Cheat Sheet Selection

Select the cheat sheet to open:

Select a cheat sheet from the list:

- CICS Deployment Assistant
 - CICSplex SM Setup
 - Upgrade to CICS TS 4.1 from CICS TS 3.x

Select a cheat sheet from a file:

Browse...

Enter the URL of a cheat sheet:

OK Cancel

CICSPlex SM Setup

- Deploy CICSPlex SM
 - Prepare the z/OS System
 - Load CICSPlex SM Configuration Dataset
 - Prepare CICSPlex SM

z/OS Configuration

Introduction

By default, the CICSPlex SM component of CICS Transaction Server is installed alongside the CICS component using SMP/E. This Cheat Sheet assumes that this has been completed successfully.

If CICSPlex SM has not been previously used, additional post tasks may be outstanding. The first part of this Cheat Sheet covers the necessary checks.

Note that these checks should be performed on each MVS system running CICSPlex SM.

There are some MVS Parmlib related settings that should be reviewed when using CICSPlex SM. These tasks are to check that those settings are correct. It may be necessary to work with your z/OS systems programmer to make the required changes that are suitable for your installation.

Click to Begin

Prepare the Workspace

To execute these tasks, you will be using the z/OS Command Shell. You must be using the CICS DA perspective and have an active CICS DA connection.

- Open the CICS DA perspective
- Open the z/OS Command Shell

Connect to CICS DA

If the 'z/OS Command Shell' view indicates 'Only available with a Deployment Assistant connection' then the CICS DA connection is not active. This Cheat Sheet will take you through the steps to activate the DA connection.

Upgrade to CICS TS 4.1 from CICS TS 3.x

Introduction

- Review System requirements
- Upgrading CICS: Information Center documentation**

Definitive information on upgrading CICS is found in the CICS Information Center.

This step will open the Upgrading sections of the CICS Information Center.

Note: You will require access to the internet for the CICS Information Center to be opened.

- For CICS TS 3.1 Users, Click to open the 'Upgrading from CICS TS 3.1' section of the CICS Information Center
- For CICS TS 3.2 Users, Click to open the 'Upgrading from CICS TS 3.2' section of the CICS Information Center

Redefine CICS Local and Global catalogs

CSD Considerations

Review SIT options/overrides

The CICS SIT options/overrides need to be reviewed.

- If you are upgrading from CICS TS 3.1, remove the redundant MNSUBSYS option if present.
- If not already removed in a previous task, remove the WebSphere MQ connection program (CSQCPARM or DFHMQPRM) INITPARM option.
- If you are upgrading from CICS TS 3.1, review the CICS APPLID option. CICS APPLIDs must be unique within the sysplex.
- If you are upgrading from CICS TS 3.1 and are using the SEC=YES option, then the new SIT options XFHS and XRES should be reviewed as new security checks may occur.
- Review the JVMPROFILEDIR option. The default JVMPROFILE option has changed, based upon the value of the new CICS_HOME option.
- Review the USSHOME option. The directory specified or defaulted by the USSHOME option must be available in the

MVS2C

Summary

- **Revitalize your infrastructure ...**
 - Simplify network set-up moving to IP
 - Manage distributed security with ID Propagation
 - Improve workload balancing with CICSplex SM
 - Reduce skills costs with CICS Explorer
 - Save money with Threadsafe optimization
 - Ease management burden with CICS Configuration Manager
 - Discover and clone complex environments with CICS Deployment Assistant

Resources



For more information



CICS Development Technical Services

Engage the IBM Hursley CICS development team to ensure that you get the maximum value from your CICS investments.

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- For more information please contact: CICSSTS@uk.ibm.com



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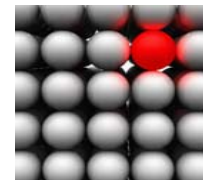
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Targeted at AD, System Programmers and Architects at customers' own location

Demonstrates how to use the new features in the latest releases to leverage existing solutions

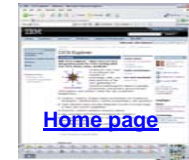
Can be tailored to customers interests

- For more information please contact: cicssem@uk.ibm.com



CICS Communities and Information

- **CICS Transaction Server V4.1**
 - <http://ibm.com/cics/tserver/v41/>
- **CICS Explorer**
 - Home page ibm.com/cics/explorer
 - Forum <http://tinyurl.com/68bndw>
- **Twitter**
 - Subscribe to the [IBM_System_z channel](#) & [CICSfluff](#) channel to get CICS news flashes
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 - TheMasterTerminal.com
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Thank You !