CICS Explorer - the new face of CICS

The future runs on System z

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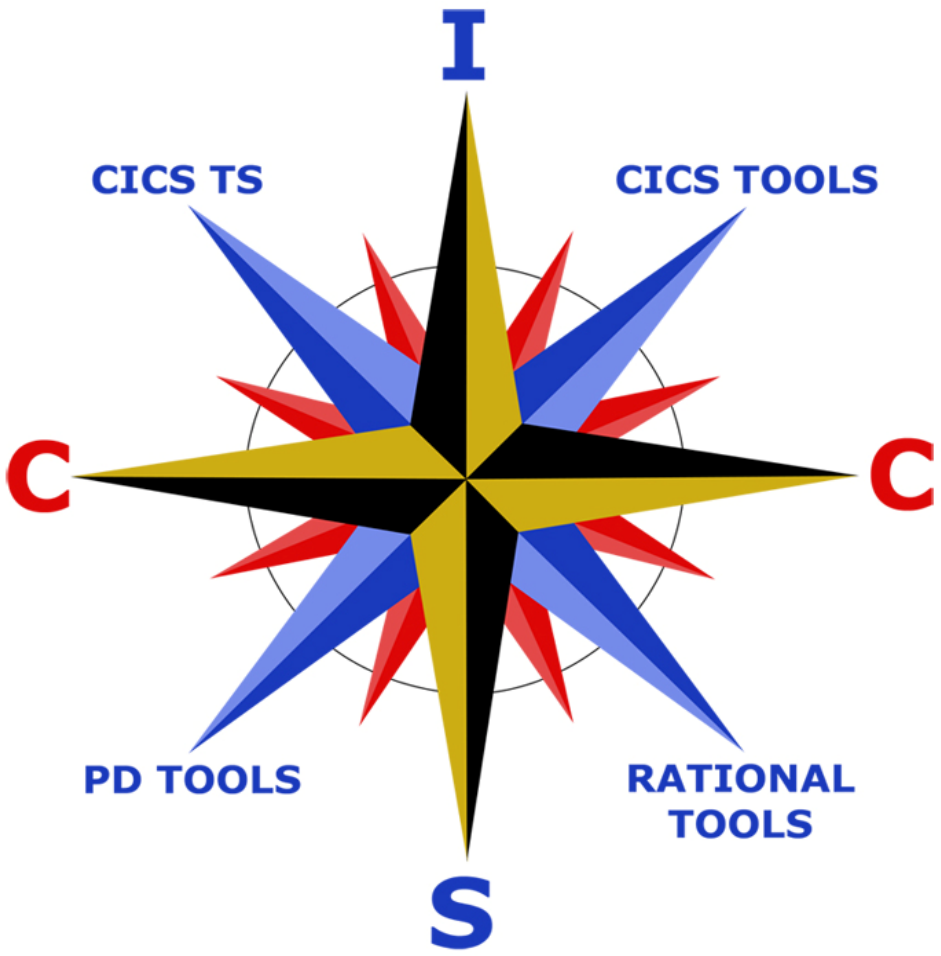
The New Face of CICS



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The changing world…….

- **First- and second-generation System z specialists exit the industry**
  - Enterprises must transfer skills, knowledge and best practice to new CICS technical staff
  - Productivity must be maintained, and service-levels protected
  - Experienced CICS systems programmers, developers, and support personnel are asked to do more with less

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The changing world (continued)…….

- **Opportunity to build new System z skill pool**
  - Specialists can collaborate with new developers and administrators to create new applications
  - Operational management of IT resources with consistent and consolidated views
  - 550 schools worldwide are offering coursework on IBM System z
- **CICS family committed to reducing skill barriers**
  - To the development of CICS systems
  - To the management of CICS systems

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Our Solution

- **Simplify CICS**
  - Single user interface for CICS & CICSPlex SM
    - Common, intuitive, Eclipse-based tooling environment for both new and experienced
      - Architects
      - Developers
      - System administrators
      - System programmers
      - Operators
- **Integration platform - Value of the sum exceeds the part**
  - First class cross tooling integration
  - Consistent views across tooling
  - Consolidated tooling with a central view into the CICS world
  - Supports CICS runtime, CICS tools, CICS connectors, plus other IBM and third-party software products
  - Integrated access to a broad range of data and control capabilities
- **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

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CICS Explorer
The New Face of CICS

- Key features
  - Task-oriented views provide integrated access to broad range of data and control capabilities
  - Common, intuitive, Eclipse-based environment for architects, developers, administrators, system programmers, and operators
  - Integration point for CICS TS, CICS Tools, CICS TG, PD Tools, and Rational Tools
  - Extensible by ISVs, SIs, and customers

Currently in CICS Explorer

- **CICS TS - Real-time resource status**
- **CICS IA - Resource dependency views**
- **CICS CM - Manage and Control resource definitions**
- **CICS PA - Performance data drill-down, Threadsafe analysis**
- **RDz – Powerful, context-sensitive resource editors**
- **Coming soon - Plug-ins for CICS TG and OMEGAMON XE for CICS**

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Version to Version Comparison

- ***Version 3.n***
  - Operations and Administration – Read only viewers
  - Connection through CICSPlex SM WUI server

- ***Version 4.1***
  - Actions against RDO resources and CICSPlex SM BAS definitions – Read/Write
  - Connection to single region for RDO and CSD definitions
  - Support for V4.1 features - Event Processing, ATOM Feeds

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Capability Matrix (GA) – CICSPlex SM

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

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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**

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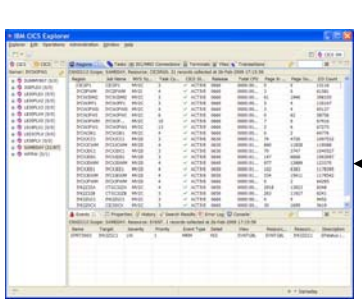
Connectivity



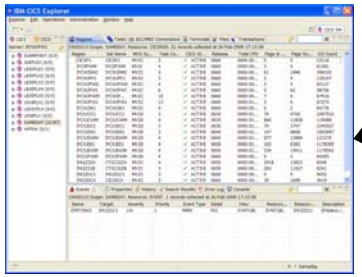
CPSM Data API (read-only)

V3.2 / V3.1

CICS1

CICS2

CICS3



CPSM Data API (read-only)

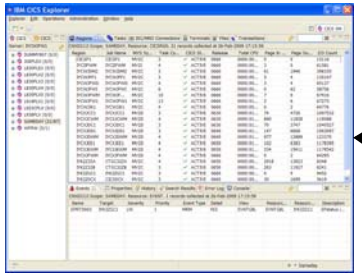
CICS SM Client API

V4.1

CICS1

CICS2

CICS3



CICS SM Client API

V4.1

CICS1

CICS2

CICS3

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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 SupportPac: November, December, February
- We intend to continue delivering updates to Explorer (and CICS Tools) at least every 90 days
  - Exploit Post-GA capability e.g. CSD access
  - Deliver remaining CICS/CPSM functionality
  - Usual bug fixes
- Each new code drop will supersede all previous and include both enhancements and service

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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

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Maintenance

- Each user can have a local installation
  - 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

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CICS Explorer – Integration Platform

- **CICS Tools**
  - CICS Configuration Manager (CM)
  - CICS Interdependency Analyzer (IA)
  - CICS Performance Analyzer (PA)
- **CICS Transaction Gateway**
- **Rational Developer for Z**
- **OMEGAMON XE for CICS PoC**

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CICS Configuration Manager for z/OS (CICS CM)

- **Key features**
  - Create, Update, Delete, Copy, Replicate CICS resource definitions
  - Resource comparisons
    - Compare resources
    - Compare groups
  - Change management through the life-cycle stages, e.g. development, test, production
  - Create customized reports to identify redundant definitions, show resource relationships and change management history
  - Audit, back-out and change authorization capabilities

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CICS Interdependency Analyzer for z/OS (CICS IA)

- **Key features**
  - Captures resource relationships such as
    - Programs with potential affinities
    - Resources used by a transaction - Programs, Files, TSQs, TDQs plus DB2, MQ and IMS DB
    - Rsources no longer used
    - Transactions with affinities to other transactions and the type and lifetimes of these affinities
    - Sequencing of transactions within an application
    - Transactions with affinities to particular CICS regions
    - Program characteristics used in threadsafe analysis
  - Run-time and batch reporting tool
  - Relationship data loaded onto a DB2 data base
    - Query interface and sample queries provided for comprehensive analysis

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CICS Performance Analyzer for z/OS (CICS PA)

- **Key features**
  - Comprehensive Performance Reporting and Analysis for CICS
    - Analyzes SMF records created by CICS monitoring and statisics
    - Including DB2, WebSphere MQ, and MVS System Logger
  - Extensive Tabular Reports and Extract Data Sets
  - Historical Database (HDB)
  - Trending and Capacity Planning
  - ISPF Dialog to build, maintain, and submit reports and extracts
  - Comprehensive reporting of CICS Statistics data
  - Alert Reporting

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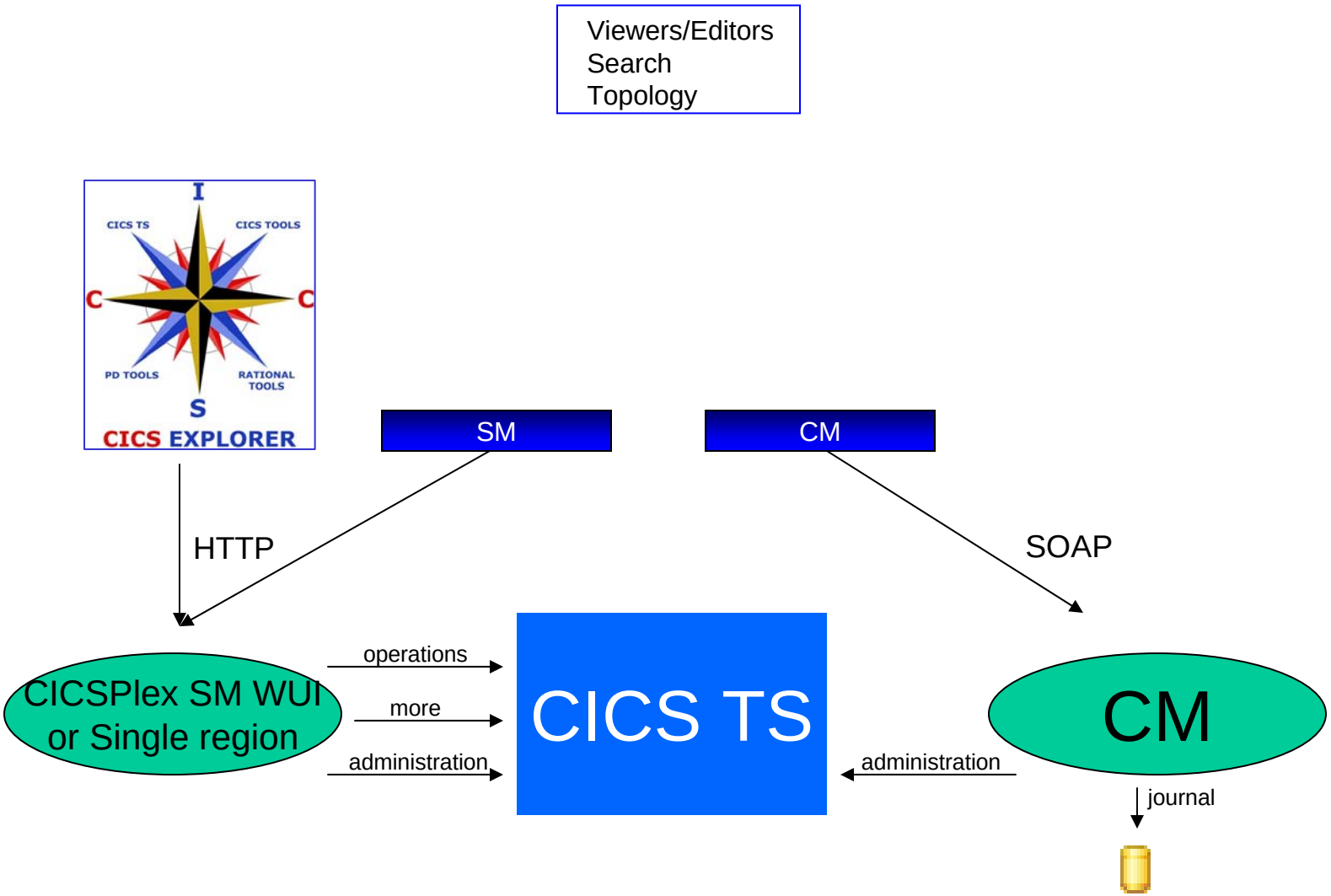
The whole exceeds the sum of the parts – CICS & CICS CM



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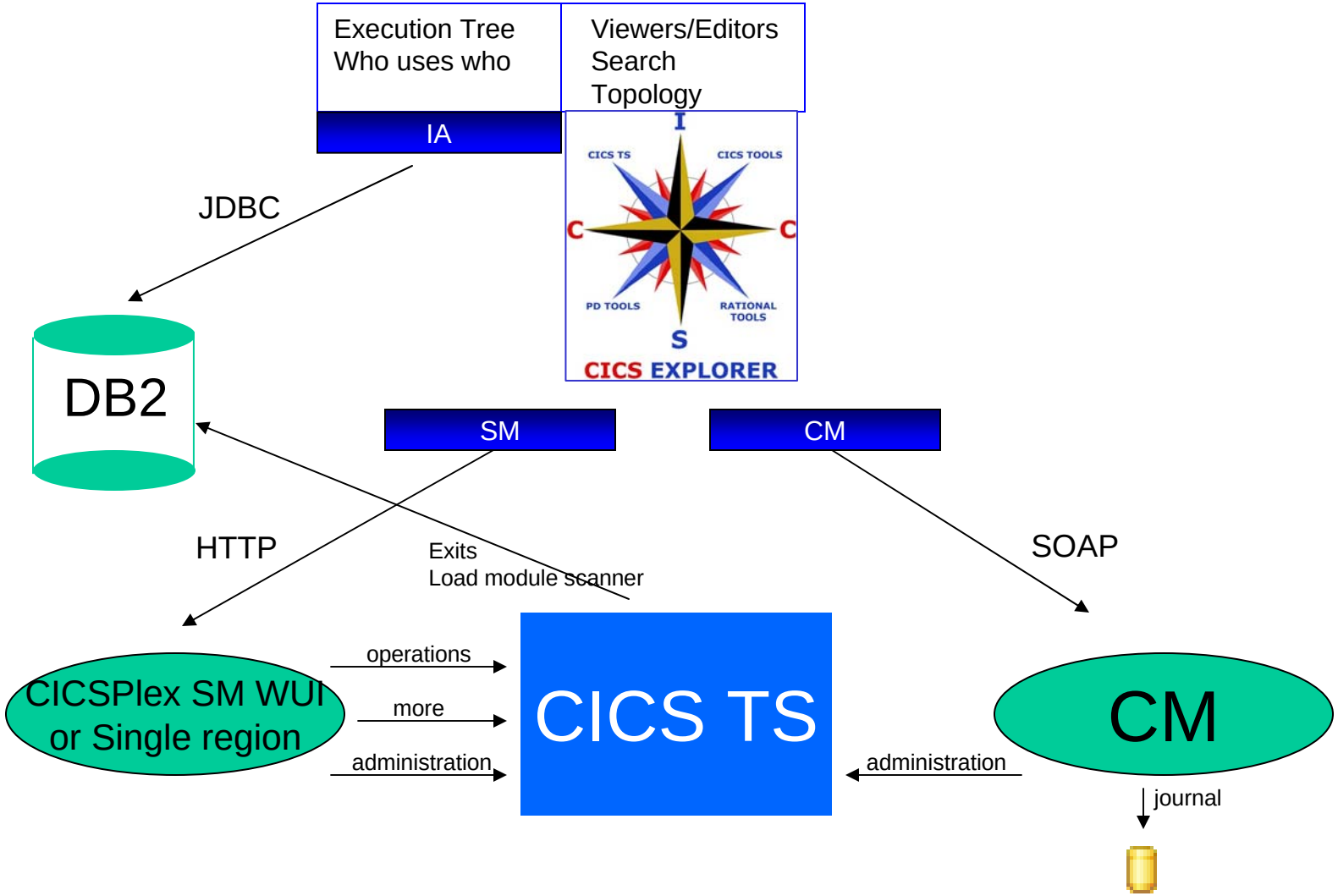
The “single new face of CICS” – with CICS IA



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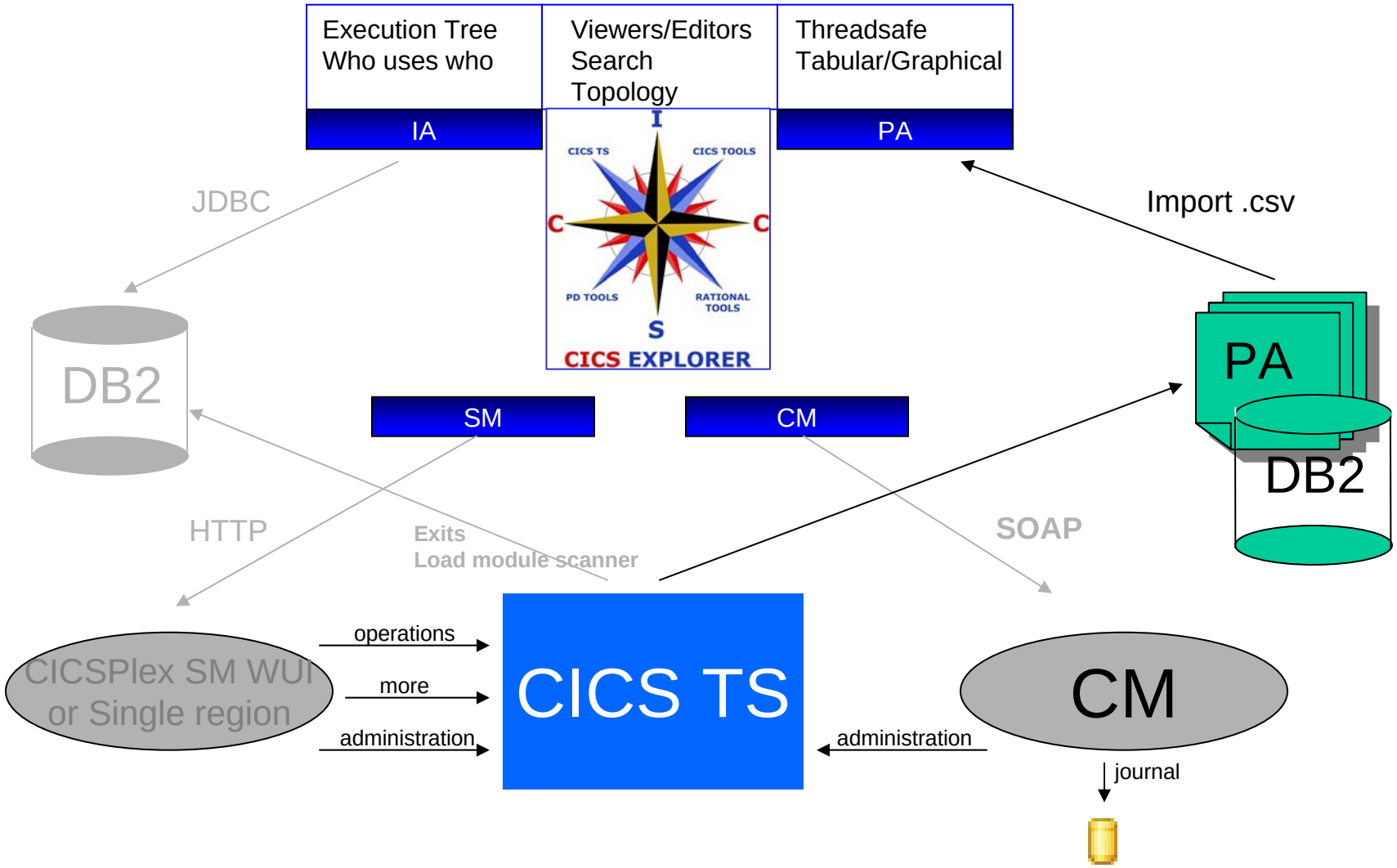
CICS PA completes the story (for now)



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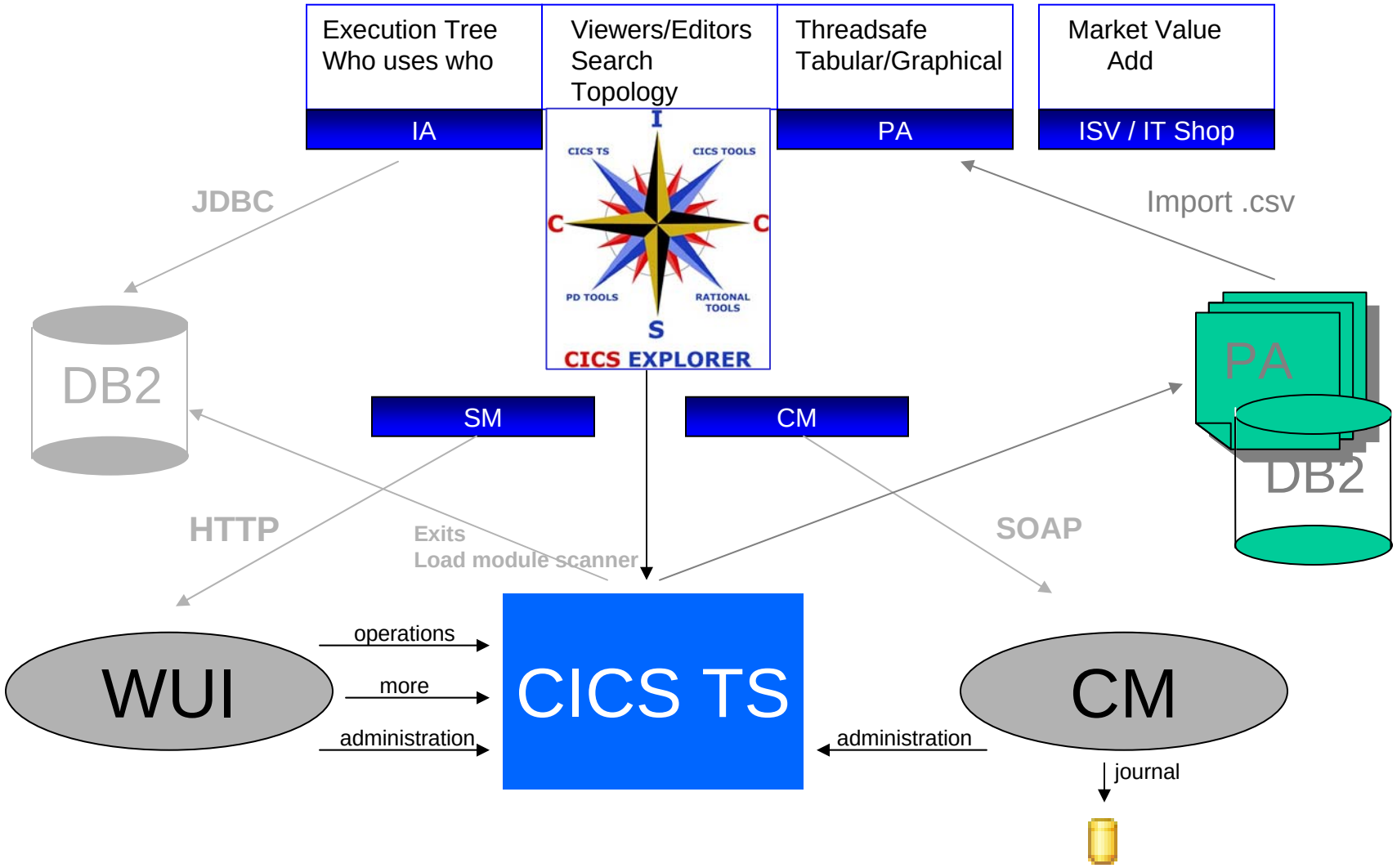
CICS Explorer SDK



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CICS Explorer and CICS Tools

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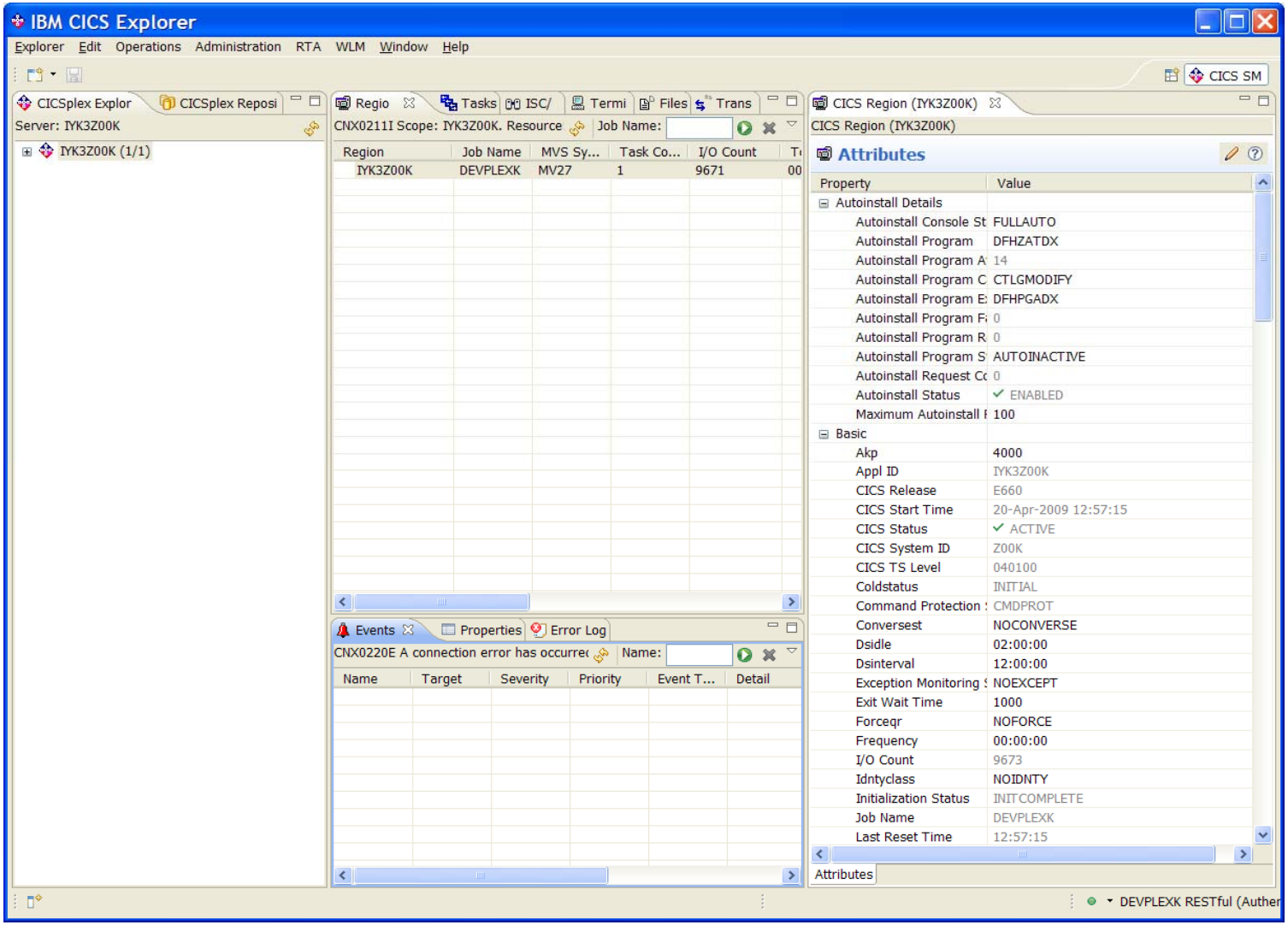
Explorer with CICS Single Server



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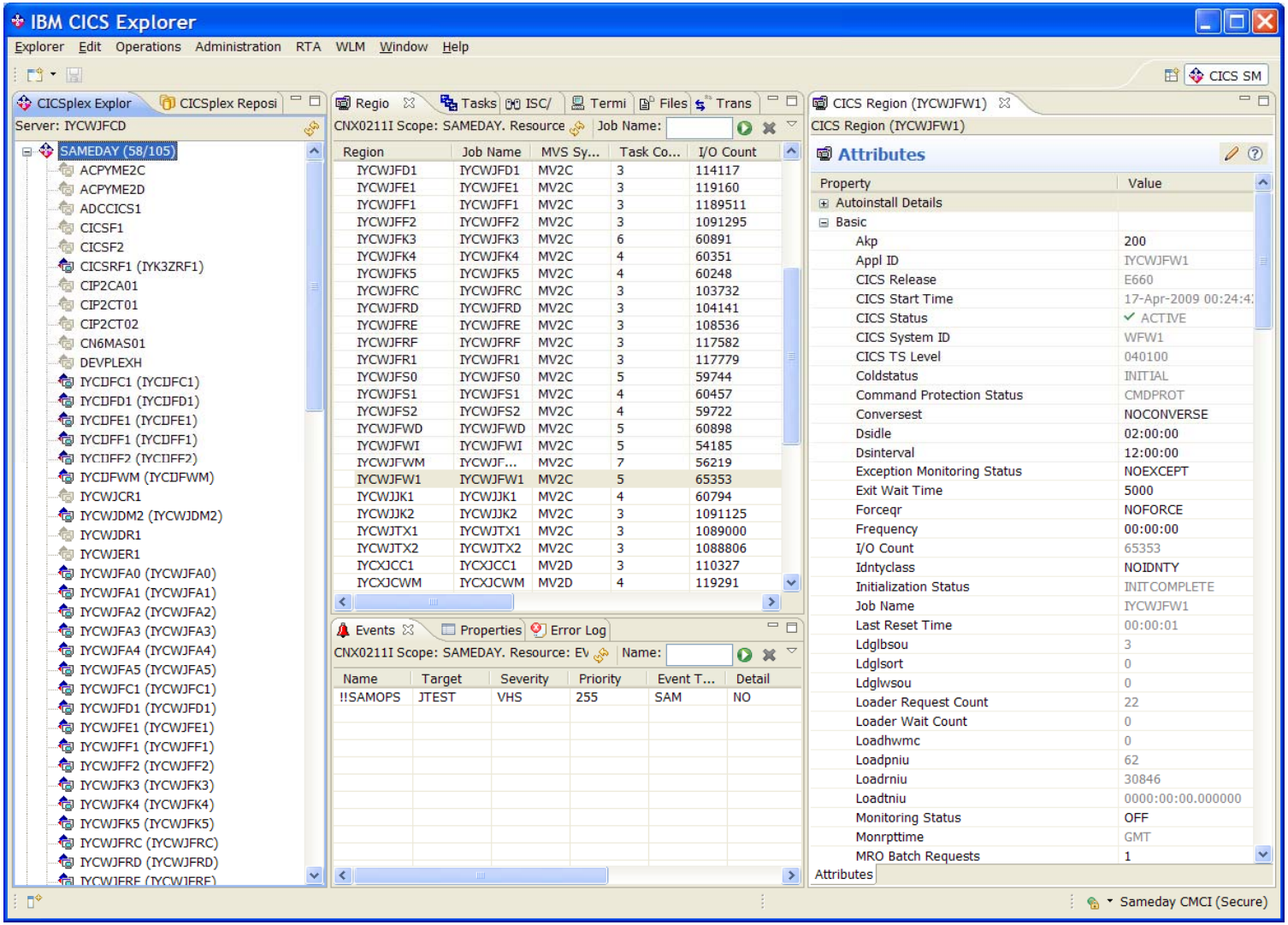
Explorer with CICSPlex SM



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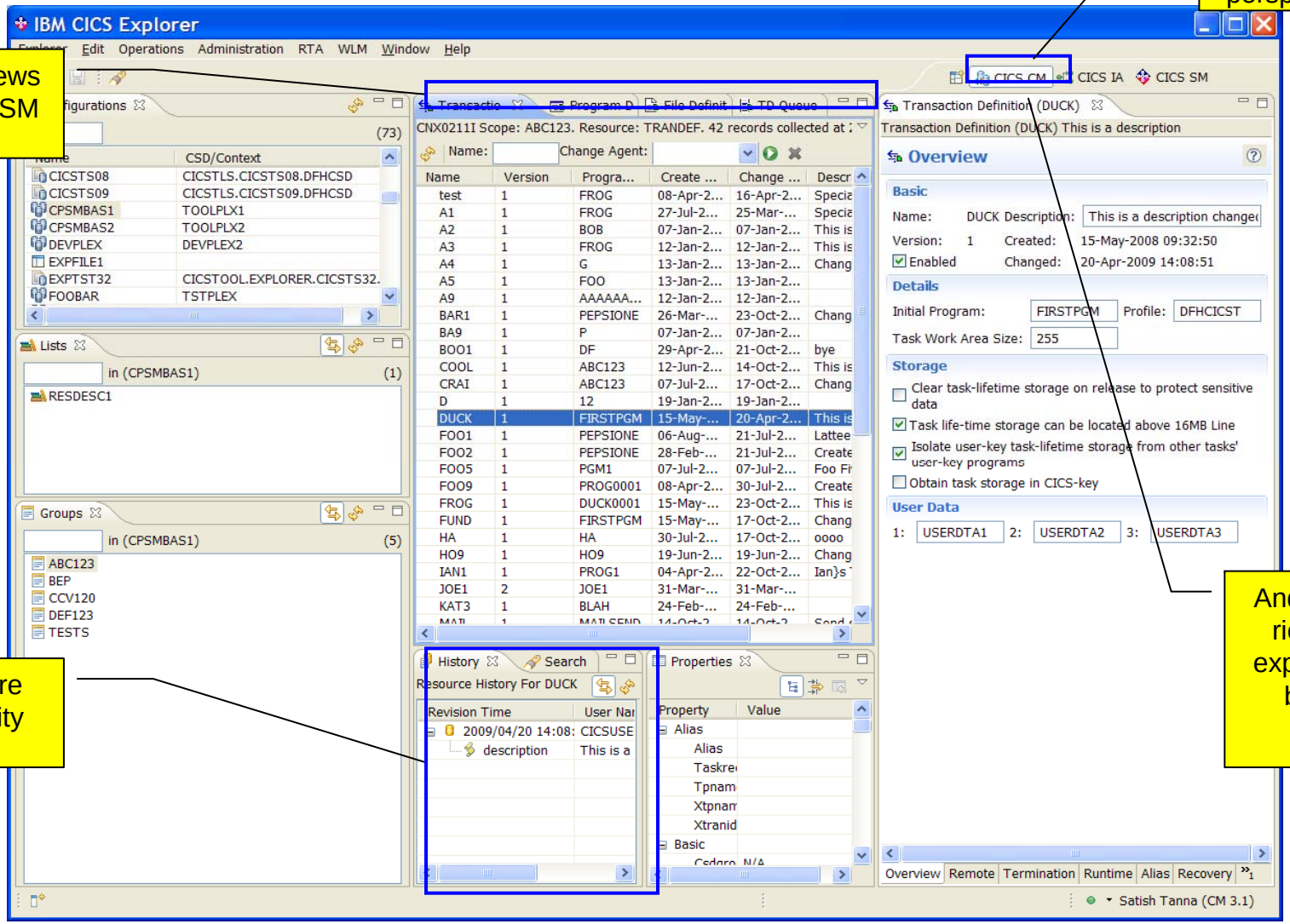
CICS Configuration Manager



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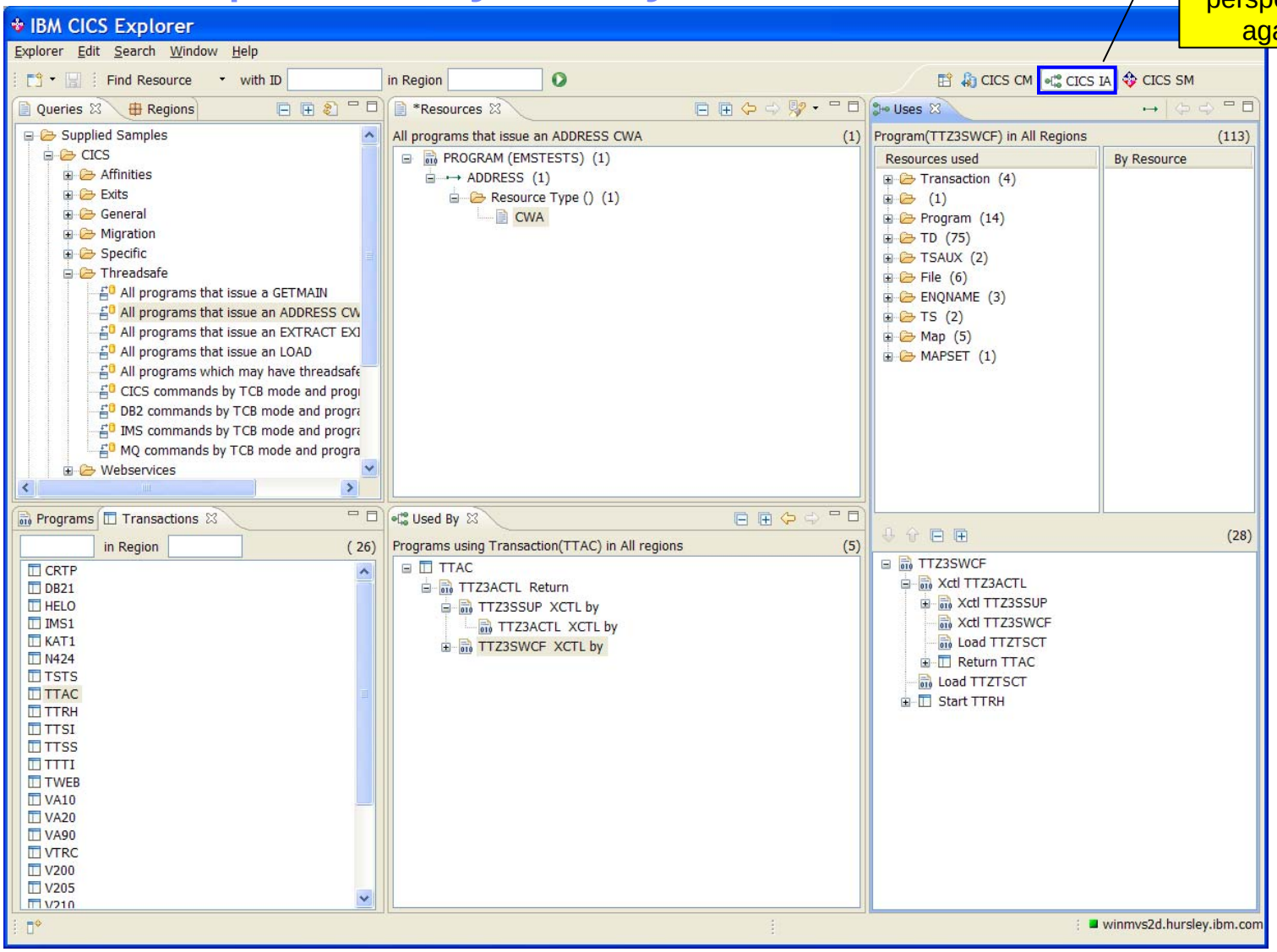
CICS Interdependency Analyzer



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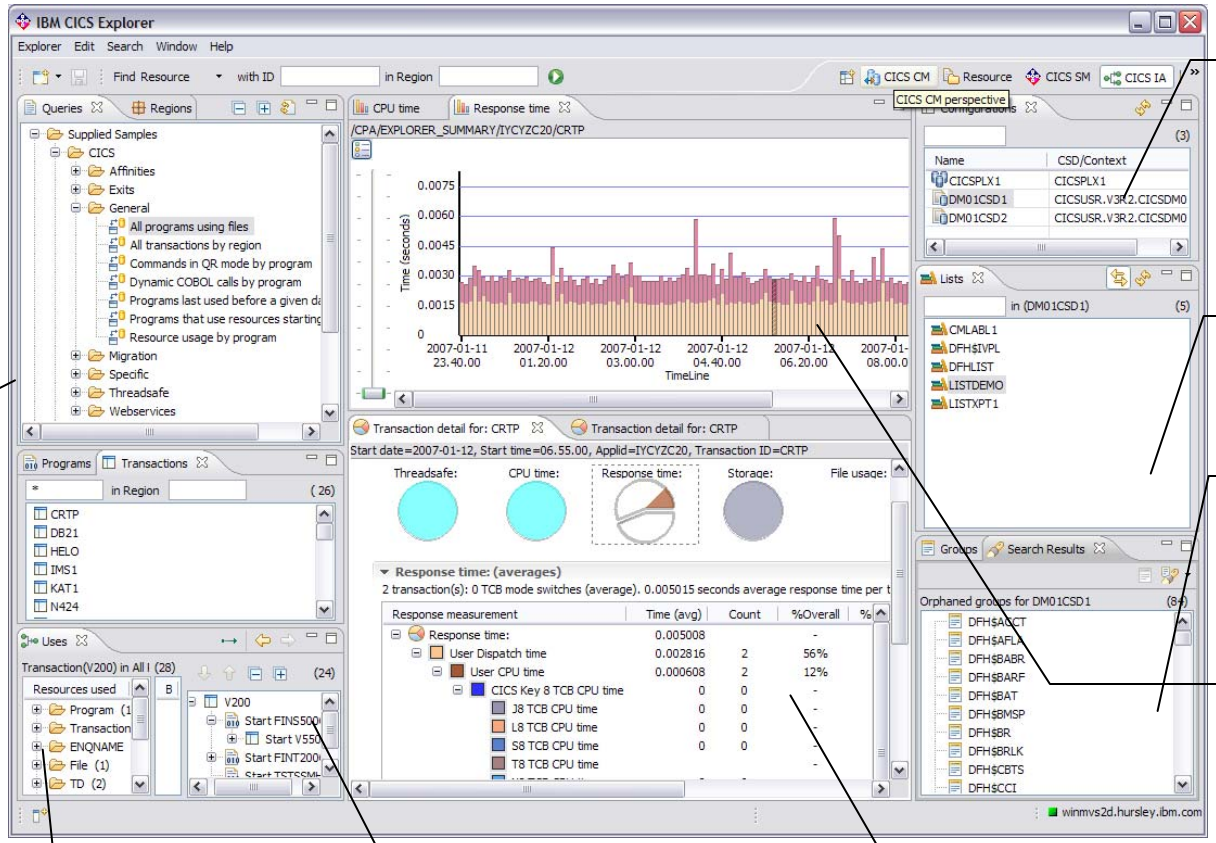
CICS Explorer & CICS Tools: Putting it all Together

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

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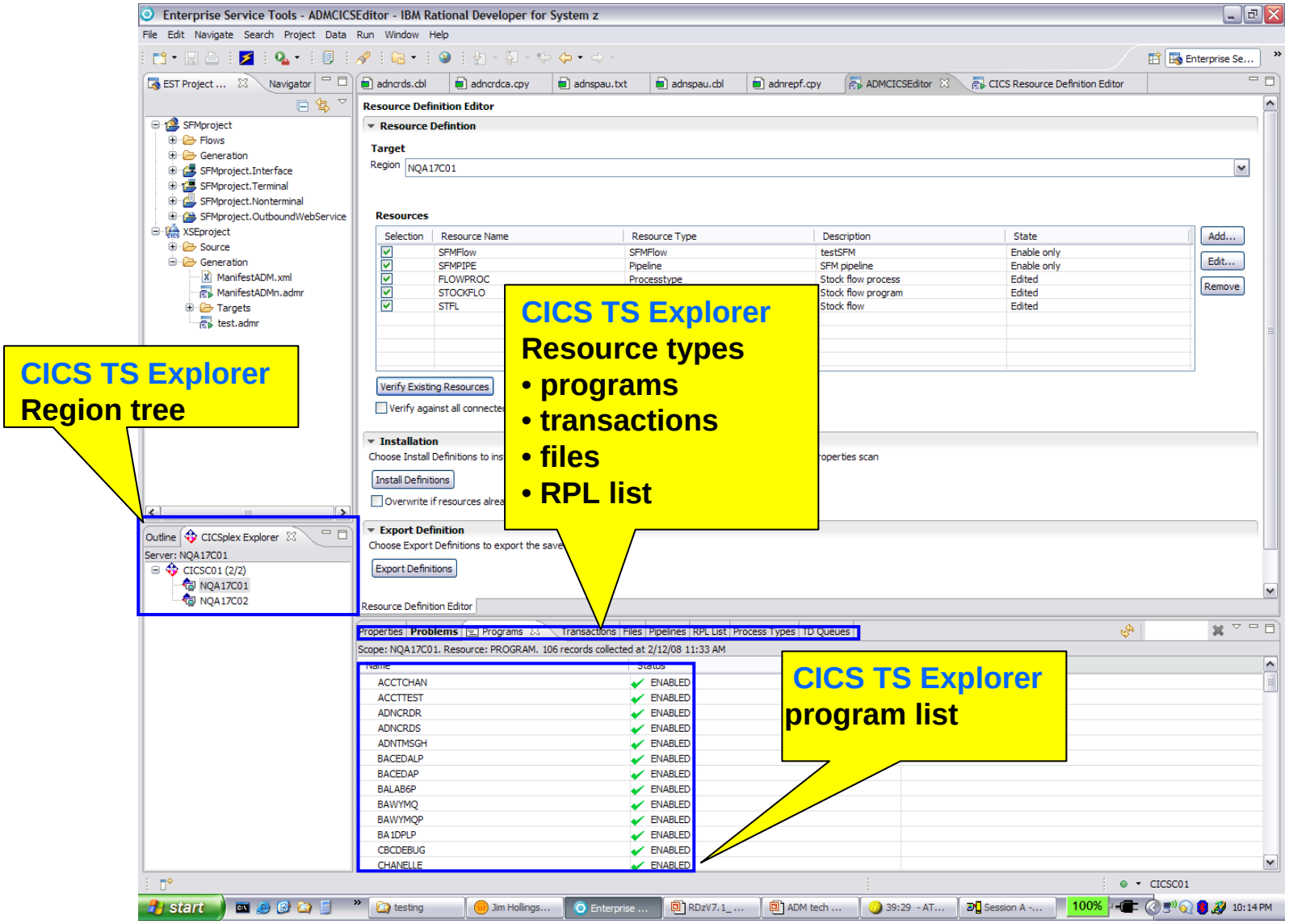
Rational Developer for System z



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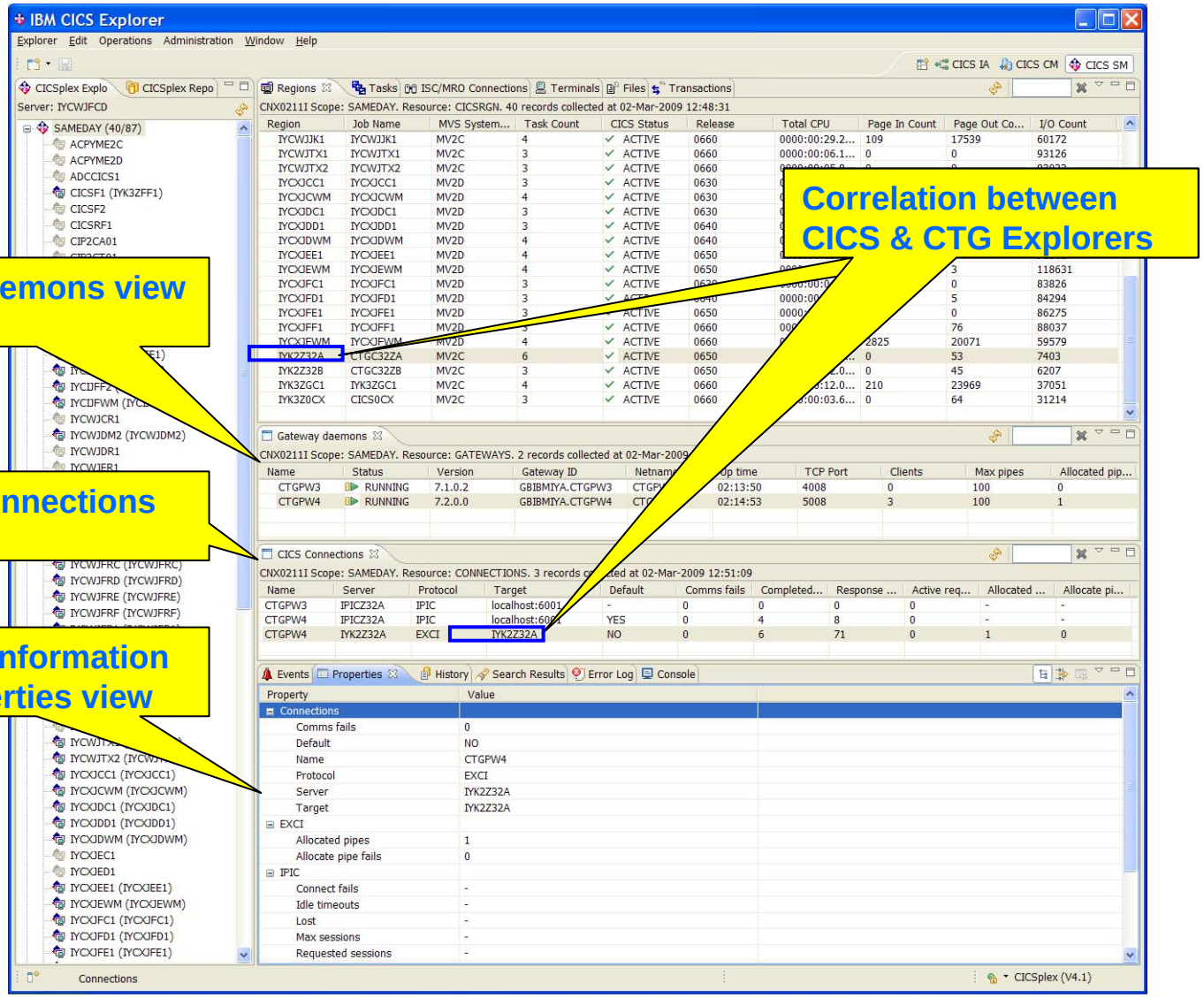
CICS Transaction Gateway



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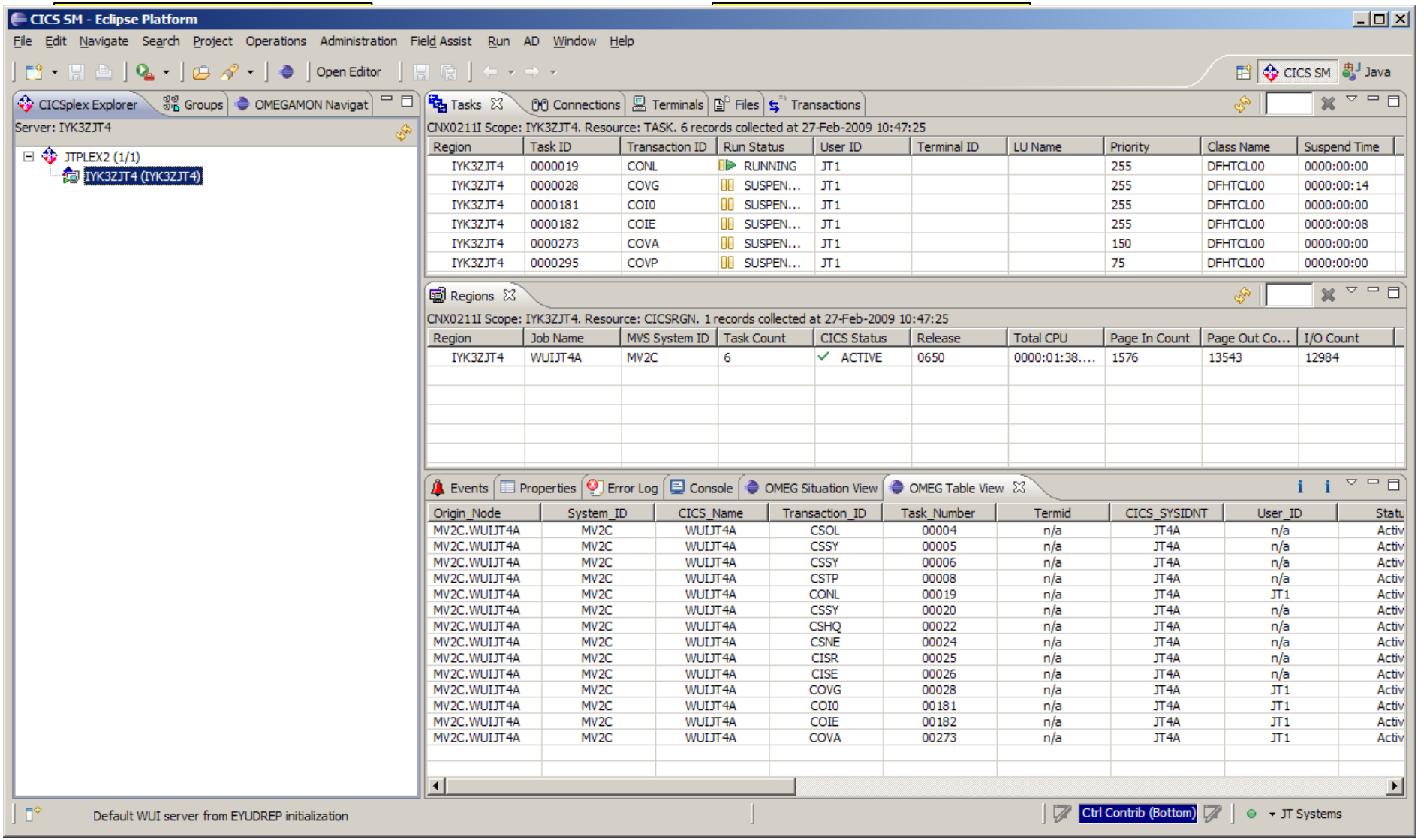
OMEGAMON XE for CICS PoC



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Summary

- Easy-to-use, Eclipse-based interface
- Rich edit and view capabilities
- Productivity for experienced and new CICS users
- View CICS V3, view and update CICS V4
- Tools integration

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CICS Explorer Community

- CICS Explorer home page
  - Remember this link ibm.com/cics/explorer
- CICS Explorer Forum
  - http://tinyurl.com/68bndw
  - IBM developerWorks forum with FAQs, Links & resources, ISV Contributions, etc. Ask questions, suggest improvements, report problems, chat
- Twitter
  - Subscribe to the IBM_System_z channel to get CICS Explorer news flashes
- Blog
  - Comment and opinion at TheMasterTerminal.com
- CICS eNews
  - Subscribe for news about CICS and related products
- YouTube channels
  - CICS Explorer - Videos, demos and other cool stuff
  - CICSFluff - Other CICS videos

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Useful Links

- Downloads, forum, and other useful information
- www.ibm.com/cics/explorer
- CICS Explorer SupportPacs
- http://www-01.ibm.com/support/docview.wss?rs=1083&context=SSGMGV&context=SSZPSF&context=SSNQZF&dc=D400&uid=swg24020718&loc=en_US&cs=utf-8&lang=en
- CICS TS version 4.1
- http://www.ibm.com/software/htp/cics/tserver/v41/
- CICS TG plug-in
- http://www-01.ibm.com/support/docview.wss?rs=9&context=SSGMJ2&dc=D400&uid=swg24022354&loc=en_US&cs=UTF-8&lang=en&rss=ct9other

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Thank You !

Any questions?

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