



CICS Explorer the New Frontier

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Presentation Objectives

- What is CICS Explorer?
- Why use CICS Explorer?
- Installation and Configuration
- CICS Explorer Workspace Logistics
- Deployment Considerations
- Hypothetical Deployment Example
- Basic Navigation
- Summary

What is CICS Explorer?



IBM (YouTube.com)

[New Face CICS - The CICS Explorer](#)

IBM has “No plans to make this a chargeable product”

- **New graphical tooling interface for CICS**
 - Eclipse Based
 - Connects to CICS via the CICSplex Web User Interface (WUI) System Task
 - Utilizes the existing CICSplex RACF Security rules
 - Provides:
 - A scalable/intuitive way to manage your CICS environment
 - The ability to create customizable task-oriented views
 - Single view of CICS tools
 - Rich set of CICS views
- **CICS Releases and Availability**
 - CICS TS V3.1 (Free IBM SupportPac PTFs Required)
 - CICS TS V3.2 (Free IBM SupportPac PTF Required)
 - CICS TS V4.1 and Beyond (Free orderable component)

Why use CICS Explorer?

- **Capabilities**

- User friendly
 - Easy to find what you are looking for
 - You are able to dynamically/easily/quickly manipulate your screen, so that you are only a few clicks away from the information, you REALLY want to see at any given time
- Expandable, via Plug-ins
 - For Shops that have CICS Tools, Explorer provides an integrated view
 - Even for Shops without CICS Tools, Explorer provides an integrated view of their CICS Environment
- CICS Explorer can be used to perform many, but not ALL Administration Functions, when connecting to a CICS TS v4.x Region, via a CMCI (CICS Management Client Interface) Connection

- **IBM Direction**

- IBM has made a significant commitment to Explorer
 - New releases GA approximately every 90 days
 - IBM has setup an Explorer Forum, for users to comment and request enhancements
[CICS Explorer forum](#)
 - From a Changing workforce perspective, IBM feels that Explorer will help shorten the learning curve for new IT Professionals

Installation and Configuration

Since Explorer is Eclipse based anyone could build a Plug-in for it

- IBM CICS Explorer Download Site and Options
 - <http://www-01.ibm.com/software/http/cics/explorer/download/>
 - You will see downloads for the following

For Linux/Windows:

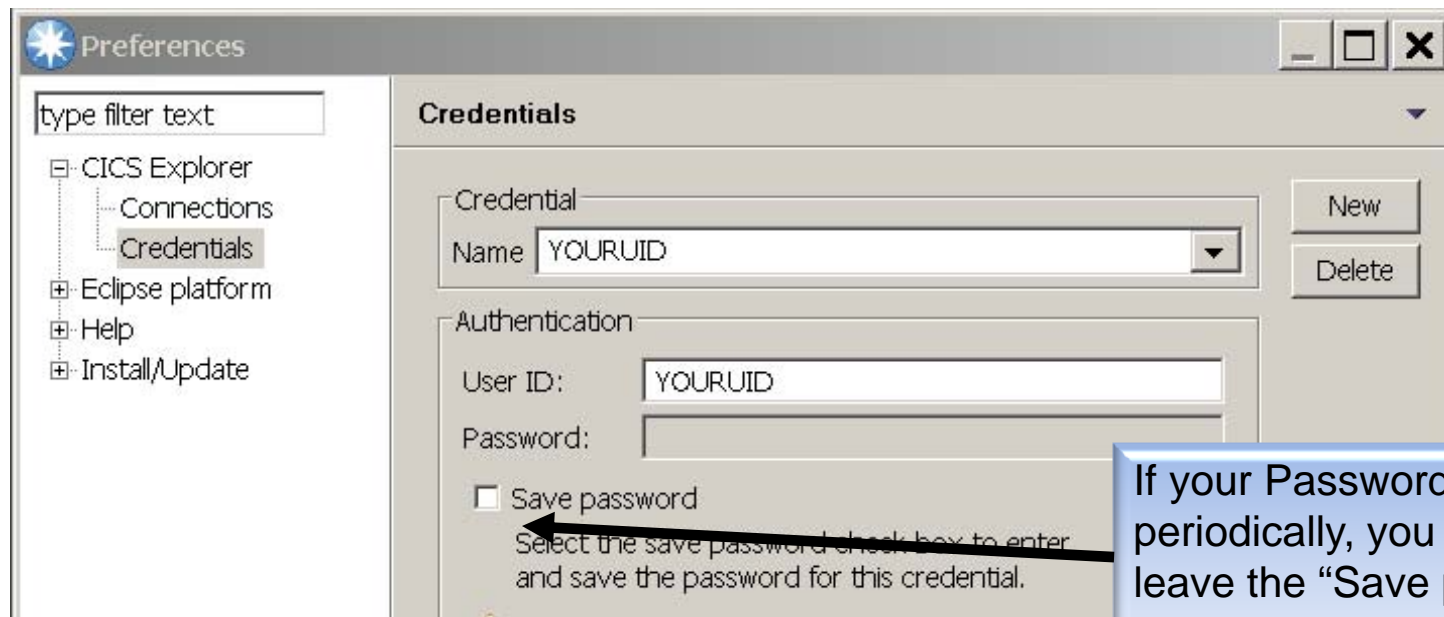
- Base CICS Explorer
- CICS CM Plug-in
(Configuration Manager)
- CICS DA Plug-in
(Deployment Assistant)
- CICS IA Plug-in
(Interdependency Analyzer)
- CICS PA Plug-in
(Performance Analyzer)
- IBM Session Manager Plug-in
- CICS Transaction Gateway Plug-in

Other Downloads	
Description	Link
File Manager SupportPac CN0M	Link to SupportPac
SupportPac CS1Q: CICS Explorer and WebSphere MQ Explorer integration	Link to SupportPac
OMEGAMON XE for CICS plug-in	Link to OPAL
Debug Tool SupportPac CN0D	Link to SupportPac
Fault Analyzer SupportPac CN0F	Link to SupportPac
Application Performance Analyzer SupportPac CN0A	Link to SupportPac

After the Base and appropriate Plug-ins are installed you can connect to Any/All of the above

Installation and Configuration

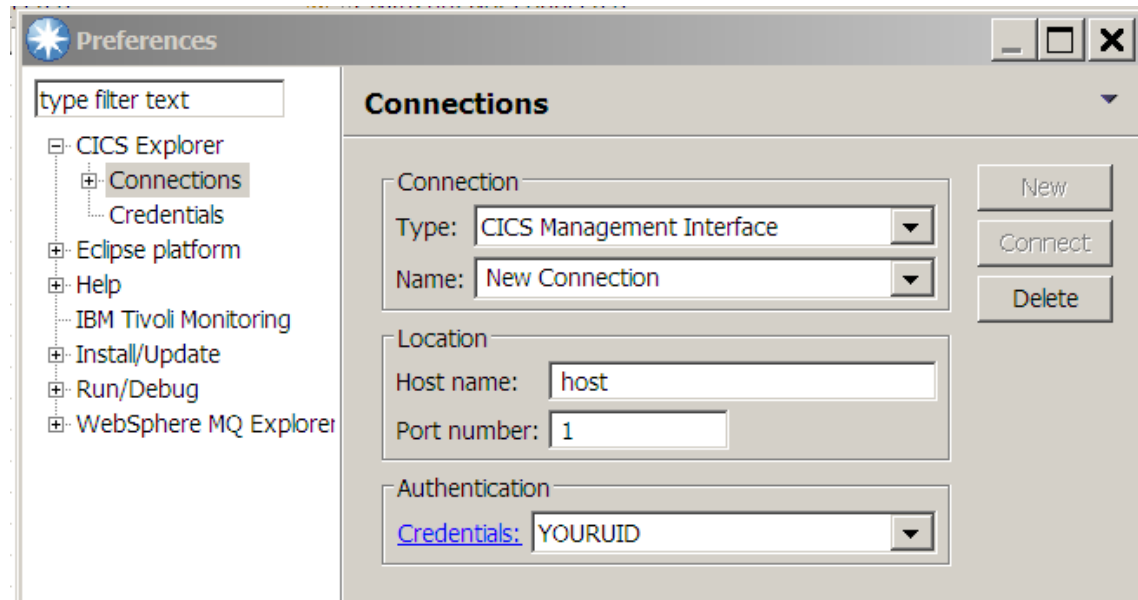
- Setting up CICS Explorer Credentials
 - The README file details the steps
 - Credentials contain user information that will be used by Connections
 - This is an example of a Credential:



Installation and Configuration

- Setting up CICS Explorer Connections
 - You will have a Choice of three Connection Types
 - System z – FTP (Required for the System z/OS Perspective)
 - CICS Management Interface (CMCI) Connection, Admin CICS WUI v4.1+
 - CICSplex SM Data Interface (Read Only Connection)
 - This is an example of a CMCI Connection definition:

- **Name:** Can be changed to anything you want
- **Host name:** TCP/IP host name of your CICSplex SM WUI server or your stand-alone CICS region
- **Port number:** CMCI port configured for your WUI Server
- **Credentials dropdown:** Point to any Credential you created



Installation and Configuration

- CICSplex WUI Connections

- You connect via Explorer as a WUI User
 - Authentication takes place just as if you were logged onto the WUI
 - The Same Security rules apply
 - Explorer “respects” WUI Params such as DEFAULTWARNCNT
 - CICS Explorer will not let you exceed DEFAULTWARNCNT. You will see the following in the Lower Left-hand corner of the screen:



- CICS Explorer will not display any information (ex: Terminal Details) till you filter to a result set that is smaller than the WUI DEFAULTWARNCNT

Installation and Configuration

- Starting Explorer for the first time
 - The workbench starts and the Welcome View is displayed



- Click on an icon to go to the desired Explorer target

You can re-open the Welcome View at any time by Selecting

Help > Welcome

From the workbench menu bar.

Note: A CICS Explorer Workspace is Created the first time you launch Explorer

CICS Explorer Workspace Logistics

- What is the CICS Explorer Workspace?
 - As with a traditional Eclipse workbench, CICS Explorer stores all user specific information in the users CICS Explorer Workspace.
 - The user specific information includes:
 - Credentials
 - Connections
 - etc.
 - Last display
 - CICS Event Processing Projects
 - Default Location: "C:\Documents And Settings\username\.cicsexplorer"
 - You can have more than one instance of Explorer running concurrently.
 - Each instance must have its own workspace.
 - Example to start a new instance from a command line
 - Change to the directory folder cicsexplorer.exe is installed in
 - Type the following command:

`cicsexplorer.exe -data "C:\Documents And Settings\username\.cicsexplorer2"`

Note: This starts the new instance using a new .cicsexplorer2 workspace

Deployment Considerations

- Intended Users
 - Number of users
 - Current WUI Users
 - User Type (Administrators, Read Only, Mixed)
 - Will certain groups use Plug-ins?
 - User Support
- Upgrade Administration
 - Frequency (New Releases Every 90 Days)
 - Upgrade method
 - Full Replacement
 - Automatic Update
 - Archive Site File
 - Plug-in Upgrades



Deployment Considerations

- Installation Specific Audit Requirements
 - Change Control
 - Processes and Procedures
 - Service Level Agreements
- Workspace Administration
 - Backup
 - Recovery
 - Connection Administration
 - CICS Event Processing Project Administration



Hypothetical Deployment Example

- Intended Users

- Migrate the Current WUI users (1,000+) to CICS Explorer
- User Types Include:
 - System Programmers
 - Application Developers
 - Operators
 - Offshore Personnel
- Some User Types will use appropriate Plug-ins
- Note: Not all users will have an IBMLINK ID or PC Admin Rights

- Upgrade Administration

- Due to Release Frequency, Installation Audit Requirements, and Plug-in upgrade considerations, the Archive Site File Upgrade Method is chosen

Note: This example is intended to highlight issues that MIGHT arise, with a given deployment method. Much will depend on Installation Specific factors.

Hypothetical Deployment Example

- Installation Specific Audit Requirements
 - Strict Change Control guidelines must be adhered to, for all Deployment and Upgrade activities.
 - The CICS Explorer SLA availability target is 24x7/365
- Workspace Administration Criteria
 - Provide workspace Backup and Recovery
 - Provide Central control for Connection Administration
 - CICS Event Processing Project Administration is not currently an issue

Hypothetical Deployment Example

- Option One - Local on Each User Workstation
 - Each user has an individual copy installed on their workstation

Advantages

- Fastest connect time

Dis-Advantages

- No Central Administration
 - No control of Local user versions
 - Connections must be managed by each user
 - No control of Plug-ins
 - No central method for upgrades or fixes
 - Problematic user support
- IBMLINK ID or Central download point Required
- No Central support for CICS Explorer Workspace backup/restoral

Hypothetical Deployment Example

- Option Two - Shared Network Drive
 - Installed/Accessed from a Shared Network Drive

Advantages

- Partial Central Administration
 - Version
 - Updates
 - Plug-ins
- No need for a central download point

Dis-Advantages

- Due to installation specific Network Architecture, Connection time is approx 2 hours
- Response time, after connect severely degraded
- No Central Connection Admin
- No Central support for CICS Explorer Workspace backup/restoral
- Security level available unacceptable
- Instance for offshore staff would require unique administration
- Subject to Shared Drive Failure

Hypothetical Deployment Example

- Option Three - Linux
 - Installed on z/Linux, utilizing z/VM

Advantages

- Full Central Administration
 - Version - Updates
 - Plug-ins - Connections
- No need for a central download point
- Central support for CICS Explorer Workspace backup/restoral

Dis-Advantages

- Workstation client required
- Currently not supported by IBM
 - The Base CICS explorer package contains compiled intel platform Linux code. It's not distributed as purely Java. It can't be used for Linux on zSeries w/o modifying it in a method currently not supported by IBM

Hypothetical Deployment Example

- Option Four - Streamed Isolated Environment

- Runs in an isolated environment like a tunnel, between the user workstation and the Citrix servers. The app is not physically installed in the Citrix server but it runs and grabs the necessary files (such as registry keys, DLLs, etc) as it needs them. Screen updates and user keystrokes are sent back and forth via the isolated environment.

Advantages

- Partial Central Administration
 - Version
 - Updates
 - Plug-ins
- No need for a central download point

Dis-Advantages

- No Central Connection Admin
- Connection time a minute and a half
- No Central support for CICS Explorer Workspace backup/restoral
- Unstable
 - Multiple errors encountered while testing this option

Hypothetical Deployment Example

- Option Five - Citrix Server
 - Installed on a Network (Citrix) Server

Advantages

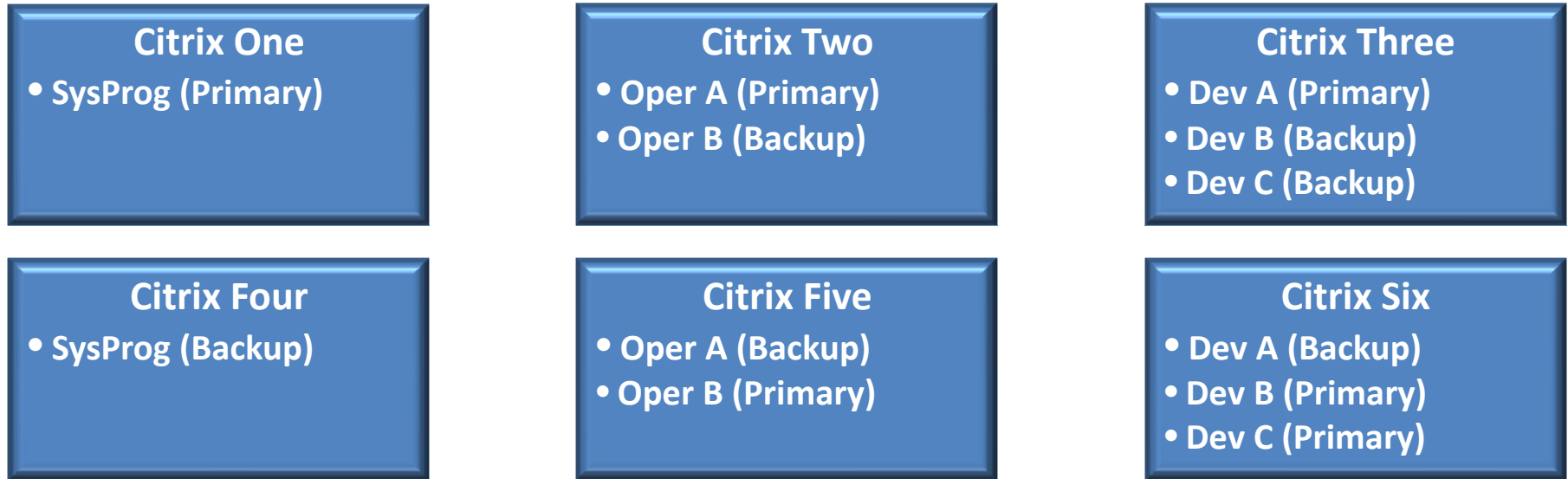
- Full Central Administration
 - Version - Updates
 - Plug-ins - Connections
- No need for a central download point
- Central support for CICS Explorer Workspace backup/restoral
- Response time (after connection) mirrors Local Workstation option
- Highly Secure
- Server supported by the Citrix Group
- Ability to Leverage Citrix Scripting

Dis-Advantages

- Workstation client required
- Connection time 45 seconds

Hypothetical Deployment Example

- Citrix Server Deployment Diagram

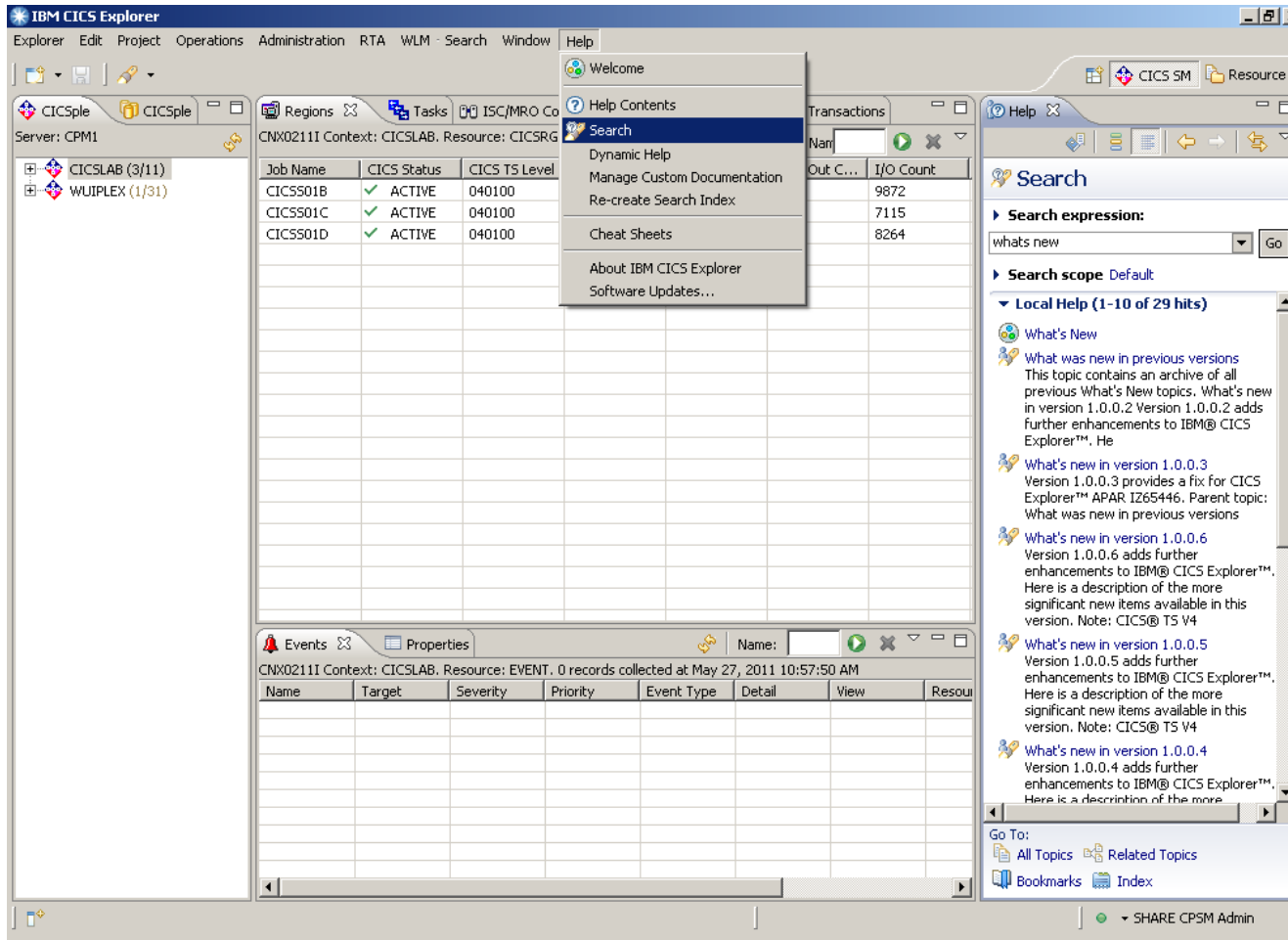


Citrix Scripting – CICS Explorer Workspace Administration

- A “Master” workspace, containing all the Connections and starting credentials is uploaded to each Server
- Each time a user logs on, Citrix Logon scripting checks for:
 - The users workspace. If none is found, the “Master” is copied to the users directory
 - A “Newer” (Date/Time) “Master” workspace. If the “Master” is newer than the users workspace, the users workspace will be replaced with a copy of the new “Master”

Basic Navigation *(Help and What's New)*

- Accessing Help and What's New



The frequency of New CICS Explorer Releases makes the Internal Help function a great (UTD) information source.

Each New Release includes a “What’s New” section, detailing new functionality

Basic Navigation (*Connections Menu*)

- Accessing the Connections Menu

The screenshot shows the IBM CICS Explorer application window. The 'Window' menu is highlighted with a black circle and an arrow pointing to it. A blue callout box with the text 'Click on Window > Preferences > Connections and Select' points to the 'Window' menu. At the bottom right, a 'Connections' menu icon (a green circle with a white dot) is highlighted with a black circle and an arrow. A blue callout box with the text 'Click on the Connection Menu Icon and Select' points to this icon. The main window displays a table of CICS jobs and an 'Events' panel at the bottom.

Job Name	CICS Status	CICS TS Level	Total CPU	Page In Count	Page Out Count	I/O Count
CICSS01B	✓ ACTIVE	040100	0000:00:09.0514	3	3	9872
CICSS01C	✓ ACTIVE	040100	0000:00:07.8241	7	1	7115
CICSS01D	✓ ACTIVE	040100	0000:00:07.6666	8	3	8264

Name	Target	Severity	Priority	Event Type	Detail	View	Resource ...	Resource ...	Description
CNX0211I Context: CICSLAB. Resource: EVENT. 0 records collected at May 27, 2011 10:57:50 AM									

Basic Navigation (*Default Perspective*)

Explorer View - Only View that can't be moved

Individual Resource Tabs

Perspective Selection

Explorer
Control the
Scope of
Resources
Being Viewed

Repo View
CICSGRP(s)
and
CICSSYS(s)
Def's. Can
also be used
to Control
Scope

Event Tab
View System
Events

The screenshot displays the IBM CICS Explorer application window. The top menu bar includes Explorer, Edit, Operations, Administration, RTA, WLM, Window, and Help. The main toolbar contains icons for Explorer, Edit, Operations, Administration, RTA, WLM, Window, and Help. The Explorer View on the left shows a tree structure of resources under the CPM1 server. The main pane displays a table of resources with columns: Region, Job Name, MVS System, Task Count, CICS Status, CICS TS L..., Total CPU, Page In C..., Page Out ..., and I/O Count. The bottom pane shows the Event Tab with columns: Name, Target, Severity, Priority, Event Type, Detail, View, Resource ..., Resource ..., and Description.

Region	Job Name	MVS System	Task Count	CICS Status	CICS TS L...	Total CPU	Page In C...	Page Out ...	I/O Count
CICSS01B	CICSS01B	S1	3	✓ ACTIVE	040100	0000:01:3...	1	0	11393
CICSS01D	CICSS01D	S1	3	✓ ACTIVE	040100	0000:01:0...	16	0	8644

Name	Target	Severity	Priority	Event Type	Detail	View	Resource ...	Resource ...	Description
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Basic Navigation (Zoom in and Out)

- **Zoom In/Out of a View**

- Double Click the View Tab to Zoom in or Back out of a view

The left screenshot shows the IBM CICS Explorer interface with the 'Regions' tab selected. The 'Regions' list on the left pane shows a tree structure with 'CICSS01B' expanded. The main pane displays a table of regions with columns: Region, Name, Status, Use Count, Concurrent Use, Language, Share Status, CEDF Status, and NEWCOPY Status. The table lists various regions like CICSS01B, WUI01A, WUI01L, WUI02L, WUI03L, WUI04L, WUI05L, WUI06L, WUI07L, WUI08L, WUI09L, WUI10L, WUI11L, WUI12L, WUI13L, WUI14L, WUI15L, WUI16L, WUI17L, WUI18L, WUI19L, WUI20L, and WUI21L.

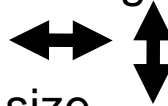
The right screenshot shows the same interface but with the 'View' tab selected. The main pane displays a detailed view of the 'CICSS01B' region, showing a table of programs with columns: Region, Name, Status, Use Count, Concurrent Use, Language, Share Status, CEDF Status, and NEWCOPY Status. The table lists various programs like CICSS01B, WUI01A, WUI01L, WUI02L, WUI03L, WUI04L, WUI05L, WUI06L, WUI07L, WUI08L, WUI09L, WUI10L, WUI11L, WUI12L, WUI13L, WUI14L, WUI15L, WUI16L, WUI17L, WUI18L, WUI19L, WUI20L, and WUI21L.

A large red arrow points from the left screenshot to the right screenshot, indicating the zoom action.

Basic Navigation (*Manipulating a View*)








- **Resizing a View**

- Float the Cursor over the inside edge of the view until it changes to a Double-Ended arrow.
- Drag the edge to the desired size



- **Moving a View**

- Position the Cursor on the Tab of the View you want to move
- Drag it to the area of the screen you want to position it in.
 - Your cursor will change to one of the following, indicating where the screen will be positioned.

Cursor	Where the View will be moved
	Position above the Current View (the View that is underneath the cursor)
	Position Below the Current View
	Position to the Right of the Current View
	Position to the Left of the Current View
	Stack: The View is stacked as a Tab in the Current View
	Restricted: Can't be positioned in Current Area
	Open a New Window. Drag outside the workbench to position in a new window. Note: Click on the New Window and Drag Back to position it back

Basic Navigation (*Working with Columns*)

- Move Column - Click on Column and Drag to the Desired Location
- From the View Menu you can:

- Refresh the View
- Reset Columns
- Equalize Column Widths

- Customize Columns

- Choose filter attributes

The screenshot displays the IBM CICS Explorer interface. The main window shows a table of CICS transactions with columns: Region, Job Name, MVS System ID, Task Count, CICS Status, CICS TS L..., Total CPU, Page In Count, and Page Out Count. A 'Customize Columns - CICSRRGN' dialog box is open, showing a list of available attributes on the left and current viewer columns on the right. The 'View' menu is open, showing options: Refresh, Reset Columns, Equalize Column Widths, Customize Columns..., and Choose filter attributes... A list of filter attributes is also shown on the right side of the screen.

Region	Job Name	MVS System ID	Task Count	CICS Status	CICS TS L...	Total CPU	Page In Count	Page Out Count
CICSS01B	CICSS01B	S1	3	ACTIVE	040100	0000:01:3...	1	1
CICSS01D	CICSS01D	S1	3	ACTIVE	040100	0000:01:1...	1	1

Customize Columns - CICSRRGN

Available attributes: Actthrdtcbs, Appl ID, Auxiliary Trace Status, Auxiliary Trace Switch T, CICS Start Time, CICS System ID, Command Protection S, Current Auxiliary Trace, Current Dump DS, Debug Tool, Default User ID.

Current viewer columns: Region, Job Name, MVS System ID, Task Count, CICS Status, Release, Total CPU, Page In Count, Page Out Count, I/O Count.

View Menu: Refresh, Reset Columns, Equalize Column Widths, Customize Columns..., Choose filter attributes...

Filter Attributes: Region, Job Name, MVS System ID, Task Count, CICS Status, Release, Total CPU, Page In Count, Page Out Count, I/O Count.

Basic Navigation (*Operations Tasks*)

Right click on an individual entry to take Action on it.

Refresh View

Filter of EYU* Used

The screenshot shows the IBM CICS Explorer interface. The main window displays a table of CICS resources. The left pane shows the project structure with 'CICSLAB (3/11)' and 'WUIMPLEX (1/31)'. The top menu bar includes Explorer, Edit, Project, Operations, Administration, RTA, WLM, Search, Window, and Help. The toolbar has icons for various actions. The main table has columns: Region, Name, Status, Use Count, Concurrent ..., Language, Share Status, CLDF Status, and NEWCOPY ... The table is filtered by 'EYU*'. A right-click context menu is open over the entry 'EYU9BA01', showing actions: Open, New Copy, Phase In, Discard, Enable, and Disable. A callout box explains how to perform actions on multiple entries (Click, Shift, Click, Right Click) and on entries not grouped together (Click, CTRL, Click, CTRL, Right Click). Another callout box points to the 'Refresh View' button. A third callout box points to the filter 'EYU*'. A fourth callout box points to the 'Actions Available' menu.

Region	Name	Status	Use Count	Concurrent ...	Language	Share Status	CDF Status	NEWCOPY ...
CICSS01B	EYUTXLPD	✓ ENABLED	1	1	ASSEMBLER	PRIVATE	NOCEDF	NOTREQUI...
CICSS01B	EYU9AEDF	✓ ENABLED	0	0	ASSEMBLER	PRIVATE	NOCEDF	NOTREQUI...
CICSS01B	EYU9BA01	✓ ENABLED	1	1	ASSEMBLER	SHARED	NOCEDF	NOTREQUI...
CICSS01B	EYU9CM01	✓ ENABLED	1	1	ASSEMBLER	SHARED	NOCEDF	NOTREQUI...
CICSS01B	EYU9DBG0	✓ ENABLED	0	0	ASSEMBLER	PRIVATE	NOCEDF	NOTREQUI...
CICSS01B	EYU9DBG1	✓ ENABLED	0	0	ASSEMBLER	PRIVATE	NOCEDF	NOTREQUI...
CICSS01B	EYU9DBG2	✓ ENABLED	0	0	ASSEMBLER	PRIVATE	NOCEDF	NOTREQUI...
CICSS01B	EYU9DBG3	✓ ENABLED	0	0	ASSEMBLER	PRIVATE	NOCEDF	NOTREQUI...
CICSS01B	EYU9MNO1	✓ ENABLED	1	1	ASSEMBLER	SHARED	NOCEDF	NOTREQUI...
CICSS01B	EYU9NA01	✓ ENABLED	1	1	ASSEMBLER	SHARED	NOCEDF	NOTREQUI...
CICSS01B	EYU9NLDC	✓ ENABLED	1	1	ASSEMBLER	PRIVATE	NOCEDF	NOTREQUI...
CICSS01B	EYU9NLDR	✓ ENABLED	1	1	ASSEMBLER	PRIVATE	NOCEDF	NOTREQUI...
CICSS01B	EYU9NLID	✓ ENABLED	1	1	ASSEMBLER	PRIVATE	NOCEDF	NOTREQUI...
CICSS01B	EYU9NLME	✓ ENABLED	1	1	ASSEMBLER	PRIVATE	NOCEDF	NOTREQUI...

Perform actions on Multiple Entries, that are grouped together by doing Click, Shift, Click (to Select), and then Right Click

Perform actions on Entries not grouped together by doing Click, CTRL, Click, CTRL (to Select), and then Right Click

Actions Available

Summary

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