IBM CICS Deployment Assistant for z/OS V1.1

"Lunch and Learn"

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Notes

IBM CICS® Deployment Assistant for z/OS® (CICS DA) helps you use the latest IBM CICS technology faster and easier than ever before. With CICS DA you can discover, model, visualize, and deploy new and existing CICS regions, using automation and policy-driven advice built on your own and IBM's knowledge and experience.

CICS DA is a priced, one-time charge product, which can help CICS users reduce the cost of ownership of the System z platform

CICS DA provides key benefits to the enterprise. By simplifying and automating complex tasks, it improves productivity and reduces costs, risks, and dependency on specialized CICS skills. By promoting standardization and reducing complexity it helps to accelerate the deployment of new CICS capabilities and lines-of-business applications, while minimizing errors and the associated risk of failure.

Key deployment tasks supported by CICS DA

include:

• Discover CICS regions and dependencies

• Check CICS topology and initialization options are as expected

• Work with JCL, spool files, and datasets

• Add a CICS to an existing CICSplex

• Clone an existing application-owning or terminal-owning region

• Clone an existing standalone test region

• Start CICS region

Eclipse cheat sheets, embedding best practices, are also included to assist with CICS version to version upgrades and a CICSPlex SM implementation.

Announced July 22nd 2010 with planned generally availability September 24th 2010, CICS DA V1.1 will support CICS Transaction Server for z/OS (CICS TS) V3.1, V3.2, and V4.1.

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Session Agenda

- **Components of CICS DA**

- **Functions**
  - Discover and visualize CICSplexes and CICS regions in a sysplex
  - Create an offline model to share with others
  - Discover connectivity relationships and major subsystem dependencies
  - Start and stop CICS regions
  - View completed and running z/OS jobs and the System Log
  - Clone existing CICS regions by creating and submitting JCL directly from CICS Explorer
  - Add an existing CICS region to a CICSplex

- **Live Demonstration of CICS Deployment Assistant**

- **Summary**

Notes

These are the topics that will be covered in the session.

CICS Deployment Assistant

- **New deployment perspective integrates with CICS Explorer**

- **Discovery and modelling of CICS systems and applications**

- **Advanced topology visualization**

- **Automated creation, deployment, customization, and control of CICS regions**

- **Edit files, submit JCL, view output**

- **Best practice cheat sheets assist CICS version upgrades and CICSPlex SM set-up**
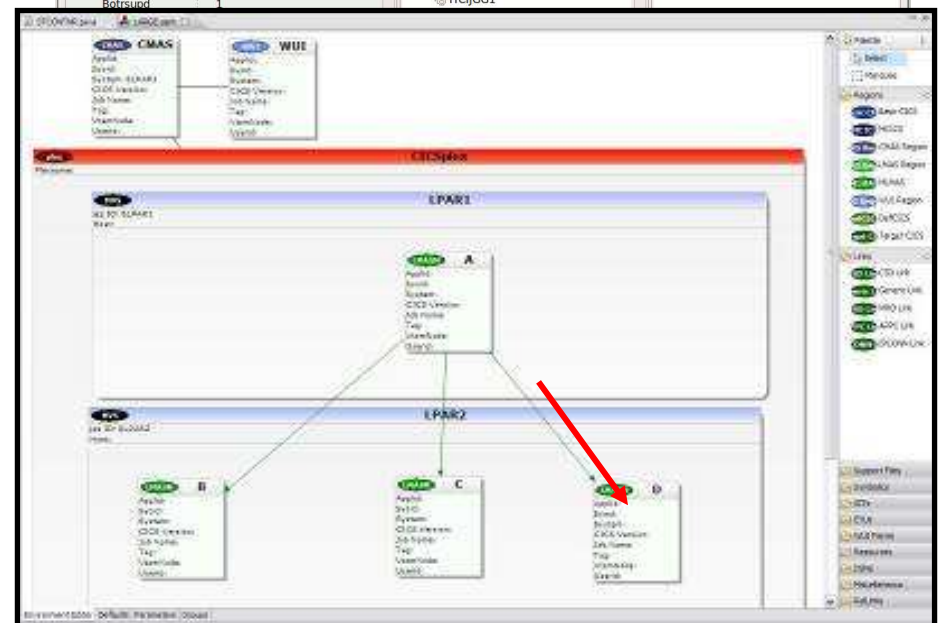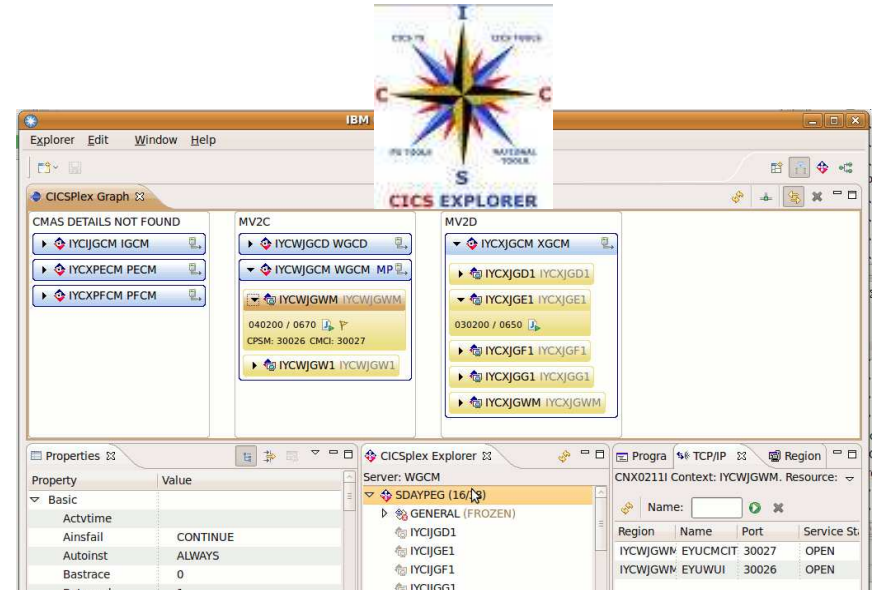
Notes

CICS Deployment Assistant can discover, model, visualize, and deploy new and existing CICS regions, using automation and policy-driven advice built on your own and IBM's knowledge and experience, giving you access to the latest IBM CICS technology faster and easier than ever before.

Discover and create an offline model of CICSplexes and CICS regions together with their startup options, connectivity relationships, and major subsystem dependencies. Offline models can be shared with other users.

Visualize the discovered regions your CICS environment with graphical representations of the model, to provide a powerful and intuitive way to understand system and connectivity status, navigate to and edit connectivity settings, and startup options.

Automate the cloning of existing CICS regions by creating and submitting the necessary Eclipse cheat sheets, embedding best practices, are also included to assist with CICS version to version upgrades and a CICSPlex SM implementation.

Components of CICS Deployment Assistant

- **CICS DA Explorer Plug-in**
  - Uses CICS Explorer enhanced connection model
    - CMCI / Data interface servers automatically defined as discovered
  - Uses new CICS Explorer System z/OS perspective plug-in
    - z/OS Dataset access
    - z/OS Unix File access
    - Spool (completed jobs only) access
  - Drives CICS DA Host component

- **CICS DA Host Component**
  - Runs in a CICS region
  - Provides for:
    - Discovery
    - Utility functions
    - Active Spool / System Log

Notes

CICS DA consists of two components: The CICS DA host component, which is installed in your host system using the SMP/E RECEIVE, APPLY, and ACCEPT commands, and the CICS DA plug-in, which is an Eclipse plug-in that operates on top of the IBM CICS Explorer.

The host component runs in any CICS region, possibly your Web User Interface region

Components of CICS Deployment Assistant…
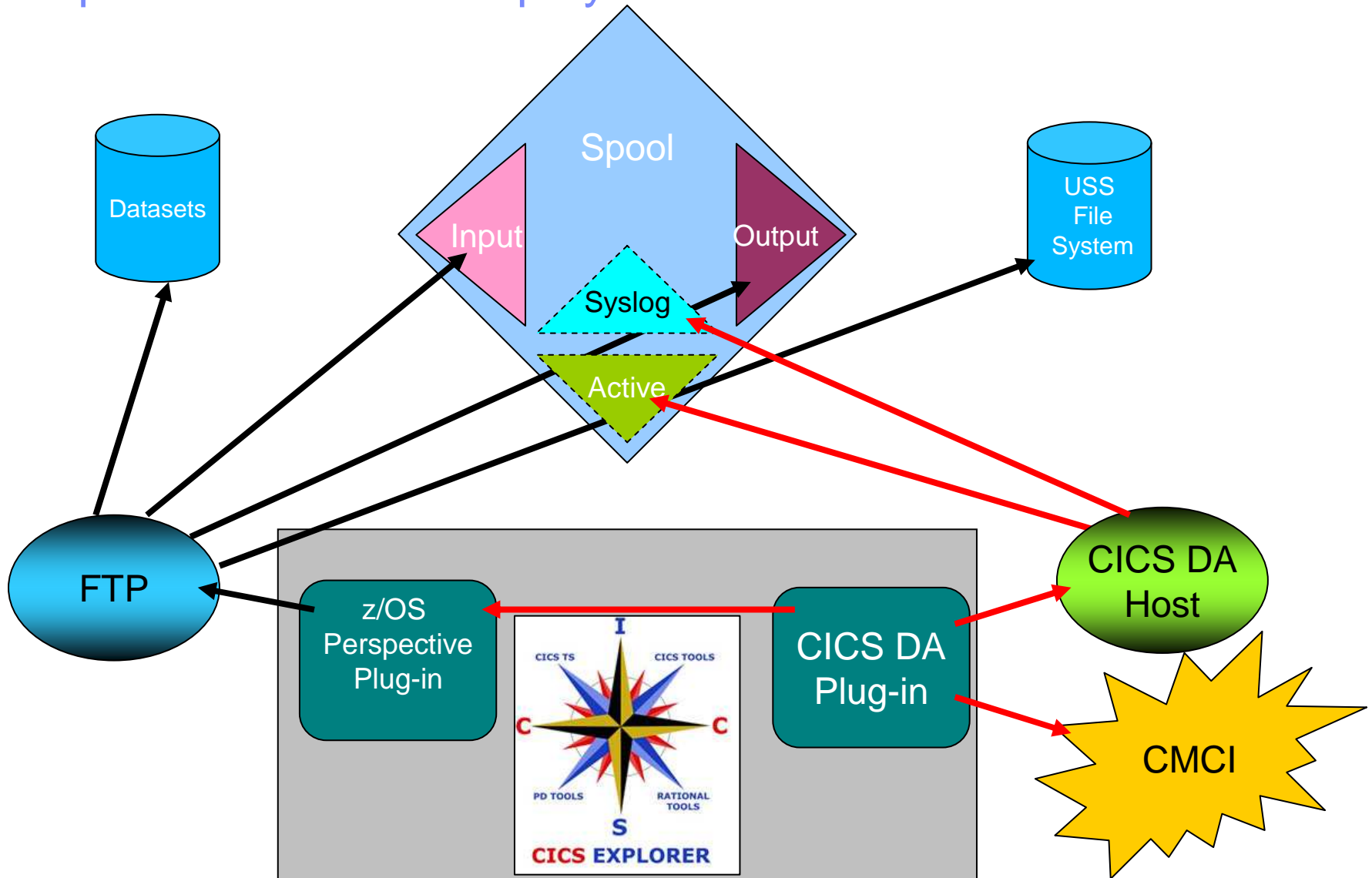
Notes

This chart illustrates the components of CICS Deployment Assistant and the functions the components provide.

Discover your CICS Assets

- **What is a CICS Asset?**
  - CICS system
  - CICS system management components
    - CICSPlex SM CMASes / Web User Interface Servers
  - CICS Infrastructure Components
    - Name Counter, Coupling Facility Data Tables, Temporary Storage Servers
  - CICS Transaction Gateway
  - CICS related subsystems
    - DB2
    - WebSphere MQ
    - DBCTL
 - Connections
  - CICS applications

Notes

CICS DA will discover and create an offline model of CICSplexes and CICS regions together with their startup options, connectivity relationships, and major subsystem dependencies.

System discovery works in two phases:

Phase 1 uses a supplied program running on z/OS to discover running CICS jobs. During phase 2, CICS DA connects to the running regions to discover more detailed information, including start-up options and DB2, IMS, and WebSphere MQ sub-system dependencies and associated settings.

Discover your CICS Assets…

- **Capture information about CICS assets**
  - Capture information to a shareable 'model'
 - Save model to a CICS DA Project
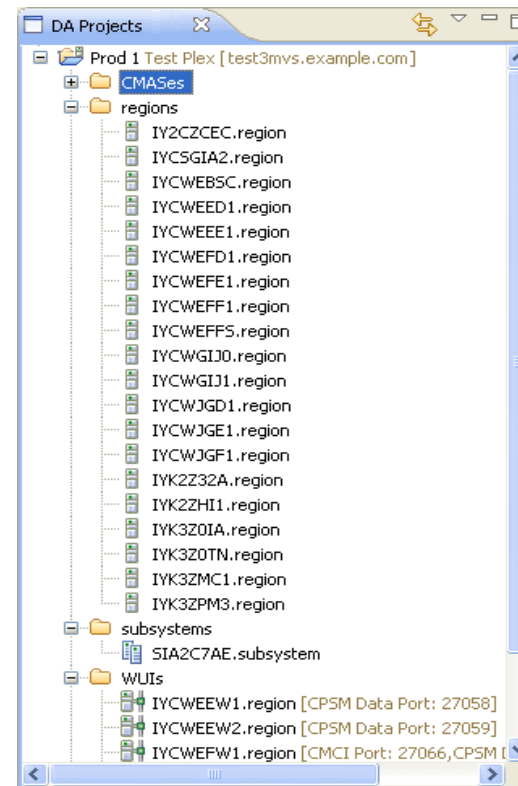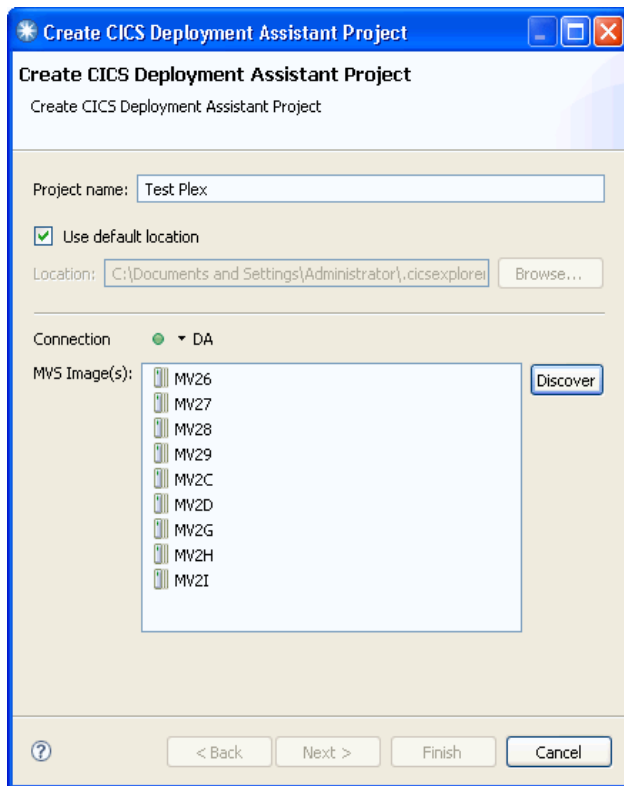
Notes

When you perform a discovery operation you import the discovered system information into a CICS DA Project. The system information contained in the project is known as the system model.

The Discovery task creates a CICS DA project, performs a discovery operation, and imports the systems information into the model in the project.

Working with a CICS Region Model

- **Define region start policy**

- **Start and stop the CICS regions**

- **Clone a CICS region**

- **Import/Export model information**
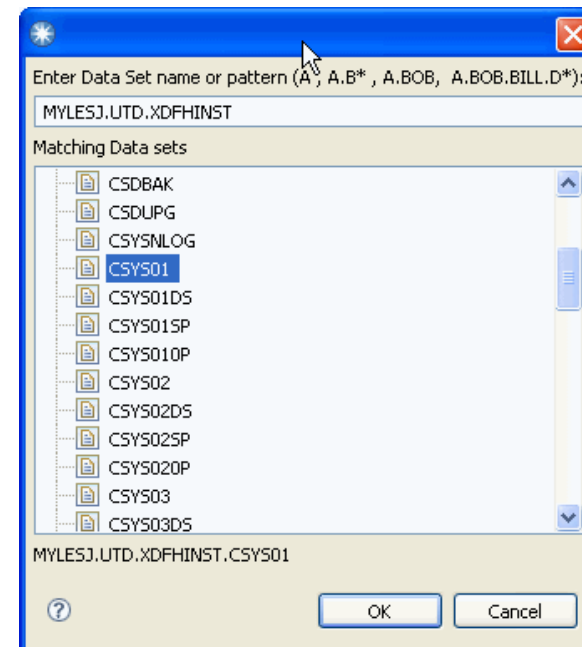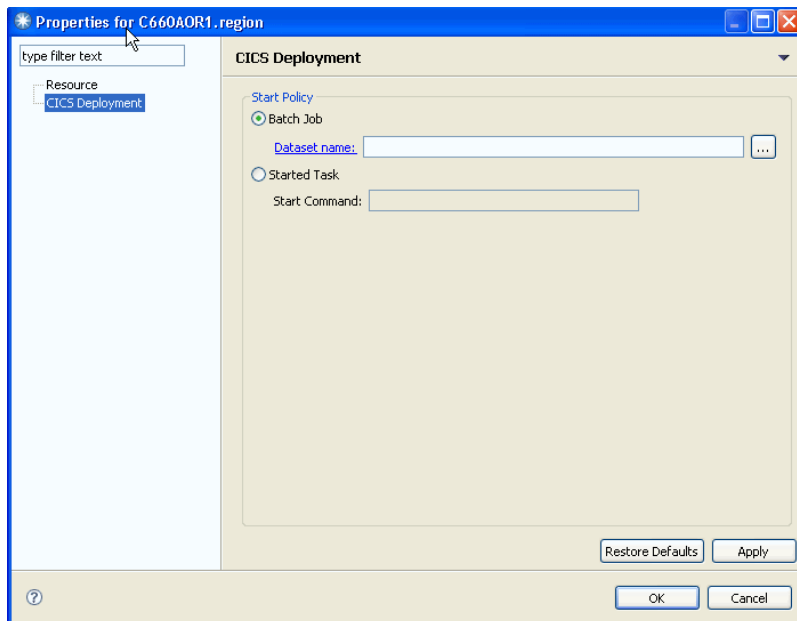
Notes

CICS DA can start a CICS region in one of two ways; either as a started task or by submitting JCL in a data set member. The method used is called the CICS region start policy. The CICS region must be in the system model, and you must update the model to provide the information about the CICS region's start policy.

When you have discovered your CICS systems and imported them into a CICS Deployment Assistant project, you can export the project to a file system for offline analysis or for sharing with other users. You may also import CICS DA projects from other users.

Working with a CICS Region Model…

- **Compare CICS regions**
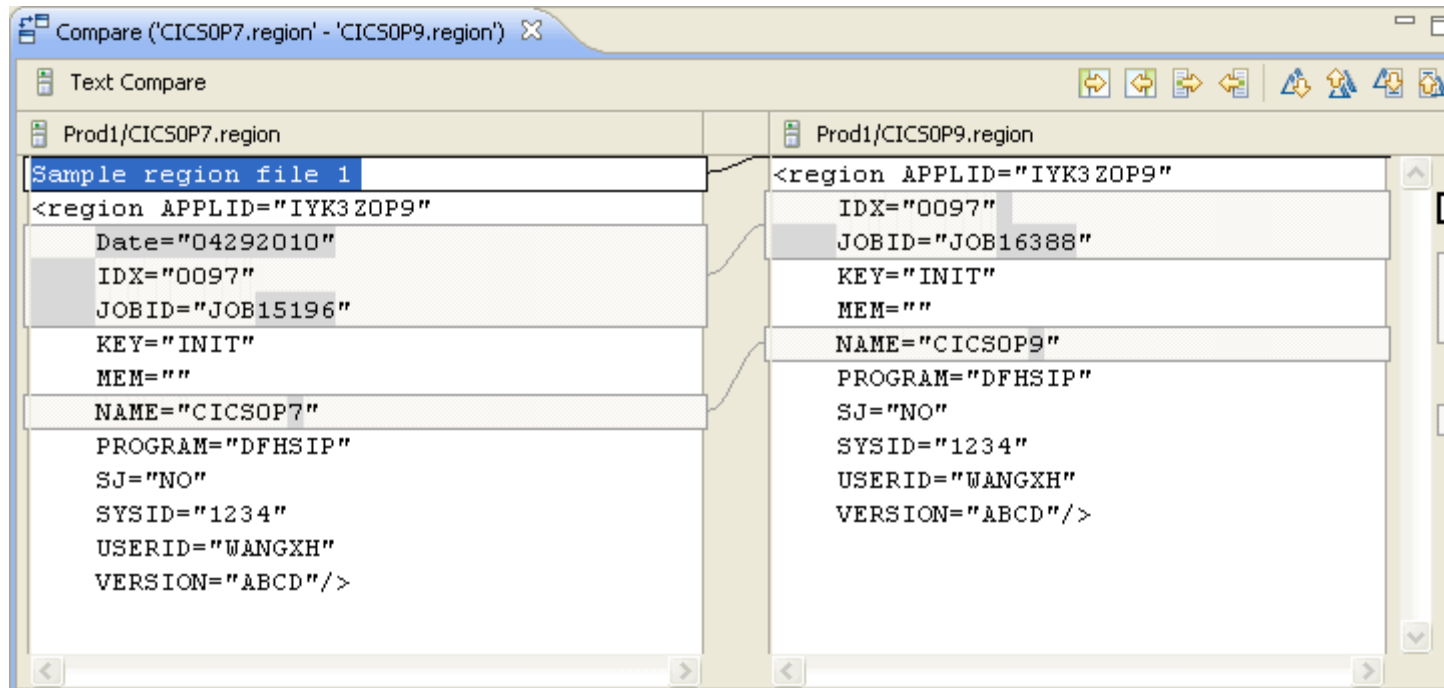
Notes

You use the Eclipse Workbench built-in compare function to compare the contents of two resources in a project. The compare function opens in a special compare editor and you can use the compare function to assist you in identifying differences between resources, and to copy changes from one resource to another.

CICS Explorer System z/OS perspective

- **The System z/OS perspective**

  – Contains new views to help you manage your system z artifacts

    • Data Sets, Jobs, z/OS Unix Files and the Console
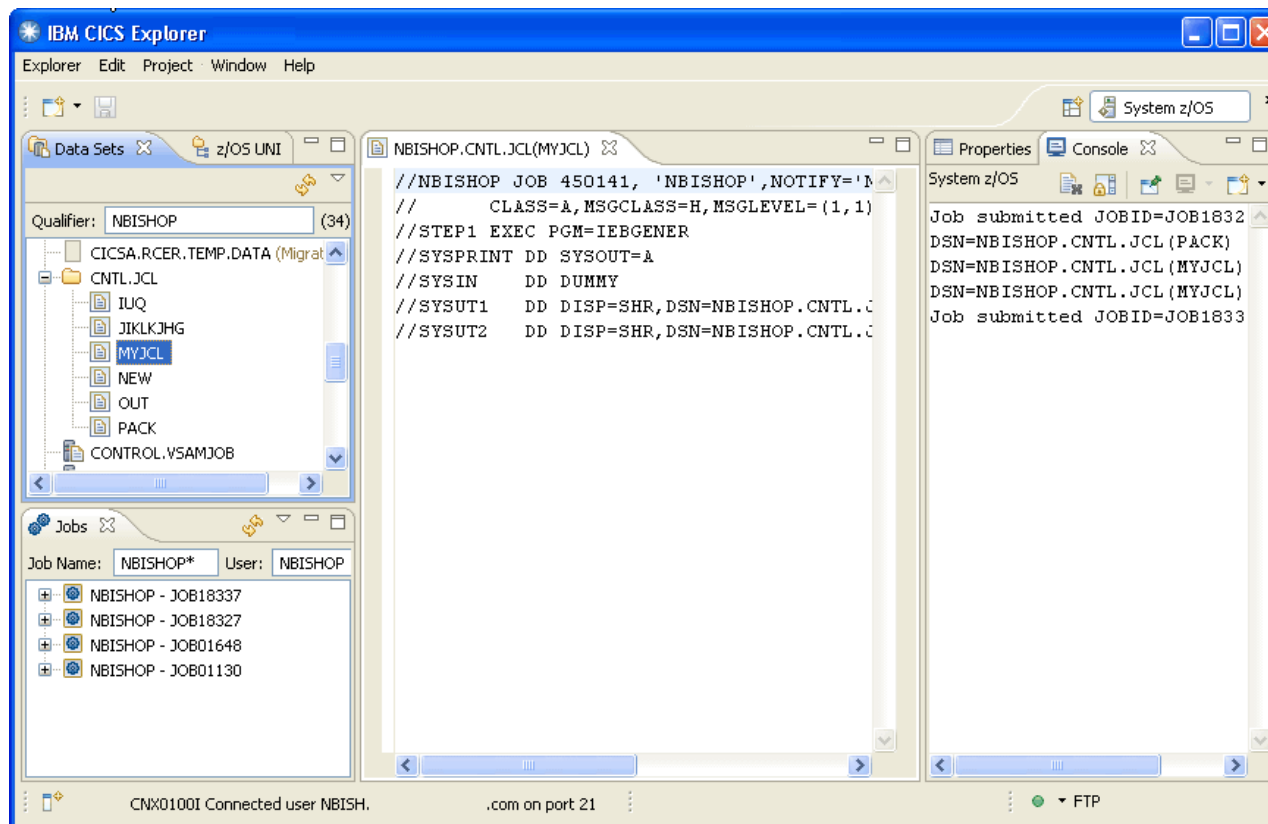
Notes

The System z/OS perspective contains a set of new views to help you manage your system z artifacts.

Data Sets: Use the Data Sets view to manage your z/OS data sets, edit, and submit jobs. When you edit a data set it opens in the data set editor. In the screen capture, the editor is shown in the center of the image.

Jobs: Use the Jobs view to see completed jobs. You can expand the job to show the output data sets, and open them to show the content.

z/OS Unix Files: Use the z/OS Unix Files view to see the HFS and zFS file system structure and contents.

Console: Use the Console view to see a history of the actions you have performed, such as submitting jobs and changing data sets.

A Live Demonstration of the CICS Deployment Assistant

Notes

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CICS Deployment Assistant Benefits

Discover/Visualize	Without CICS DA and CICS Explorer	With CICS DA and CICS Explorer
Discover CICS regions and key dependencies	Requires 10 manual steps per CICS, plus necessary skills. Up to 5 minutes per CICS	Display in 4 clicks for ALL CICS within CICSplex As little as 30 seconds
Check CICS topology is as expected	Requires 2-3 steps per CICS, plus inside knowledge of expected CICS topology. Up to 2 minutes per CICS	Display in 4 clicks for ALL CICS within CICSplex. Required configuration known by CICS DA. As little as 30 seconds
Productivity		
Check CICS initialization options	Requires 10+ manual steps, plus skill/knowledge of location of SIT source and override locations. Up to 30 minutes	Access in 2 clicks. Greatly reduced skill required and stay within the CICS Explorer Environment. As little as 5 seconds
Work with CICS related spool files	Requires 4 manual steps, plus switching of interface. Up to 2 minutes (x times a day)	Access in 2 clicks. Stay within the CICS Explorer environment. As little as 2 seconds (x times a day)
Work with CICS related Datasets and JCL	Requires 4 manual steps + 4 for each subsequently referenced dataset, plus knowledge of location and switching of interface. Up to 2 minutes (x times a day)	Access in 2 clicks + 1 click for each subsequently referenced dataset. Stay within the CICS Explorer environment. As little as 2 seconds (x times a day)
Automate		
Add a CICS to an existing CICSplex	Requires 10 manual steps, plus CICSPlex SM knowledge. Up to 20 minutes	4 Steps and eliminates common setup errors. As little as 5 minutes
Clone an existing AOR or TOR	Requires 20+ manual steps, plus knowledge of system setup and operational procedures. Up to 6 hours	10 steps, errors reduced and reduced skill levels. As little as 1 hour
Clone an existing standalone test region	CICS System programmer scheduled task requiring 10 manual steps. Up to 4 hours	5 Steps and reduced skill levels mean that task could be delegated to help desk or Lead Applications Developer. As little as 30 minutes
Start CICS region	Requires 2-4 manual steps, plus knowledge of operational procedures. Up to 2 minutes (x times per day)	Start in 2 clicks. Start policy defined within product reducing knowledge needed by user. As little as 10 seconds (x times per day)

Notes

This chart compares the effort to accomplish common CICS tasks when using the CICS Deployment Assistant and the CICS Explorer against manual procedures.

The timings and number of steps are estimates only. The number of steps and elapsed time to accomplish a given task is dependent on your procedures and expertise.

Pre-requisites

- **Supports CICS TS V3.1 or higher**

  - Experience will be better with later versions of CICS TS

- **z/OS V1.9**

  - JES3 Users will need z/OS V1.10

  - Syslog support requires z/OS V1.11

- **For SYSPARM support:**

  - CICS TS V4 Users need PTFs for APARs PM15214 and PM15583

- **CICSPlex SM**

  - If systems to be managed not part of a CICSPlex SM managed CICSPlex, a cheat sheet is provided to assist in setup

Notes

CICS DA V1.1 requires IBM z/OS V1.9, or later.

If access to the joblog for active CICS systems is required by JES3 users of CICS DA, then IBM z/OS V1.10 is required.

If access to the MVS system log is required by users of CICS DA, then z/OS V1.11 is required.

The CICS DA plug-in for CICS Explorer requires CICS Explorer V1.0.0.8 or later.

The CICS Explorer is supported on the following platforms:

Microsoft® Windows® platforms
     Windows 7
     Windows XP Professional SP2
     Windows Vista Business, Ultimate
     Windows 2003 Standard SP1, Enterprise
     Windows 2008 Standard SP1, Enterprise
Linux® platforms
     SUSE Linux Enterprise Server (SLES) 10
     Red Hat Enterprise Linux 5.0
For all platforms previously listed
Only 32-bit platforms supported
Only x86 Machines supported

CICS DA V1.1 is designed to be used with CICS TS V4.1 (5655-S97), where it supports fully the new function of the latest version of CICS TS. CICS DA V1.1 can also be used with CICS TS V3 (5655-M15).

Summary

- **New deployment perspective integrates with CICS Explorer**

- **Discovery and modelling of CICS systems and applications**

- **Advanced topology visualization**

- **Automated creation, deployment, customization, and control of CICS regions**

- **Edit files, submit JCL, view output**

- **Best practice cheat sheets assist CICS version upgrades and CICSPlex SM set-up**

- **Beta Program is now open, if interested contact:**
  - CICS & WebSphere z/OS Early Programs
    - Charley Wiese   wiese@us.ibm.com
    - Francis Burgess   francis_burgess@uk.ibm.com

Notes

CICS DA V1.1 can help you leverage the latest IBM CICS technology faster and easier than ever before. CICS DA lets you discover, model, visualize, and deploy new and existing CICS regions, using automation and policy-driven advice built on your own and IBM knowledge and experience.

With CICS DA V1.1, you can:

- Manage CICS deployments with a new plug-in integrated with the CICS Explorer
- Quickly discover and visualize existing CICS region resources, relationships, and topology
- Reduce number of steps and skills required to create and deploy a new region into an existing CICSplex
- Simplify the complexity and skills required in controlling CICS startup and startup options
- Leverage new capability in the CICS Explorer to view and edit z/OS datasets and zFS files, submit JCL, and view output intuitively and securely