

# Efficient management of online resources using CICS Configuration Manager

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Session GJ



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Changes across LPAR boundaries

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Cleanup and analysis

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Comparisons and exception analysis

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Cold start analysis

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zFS support

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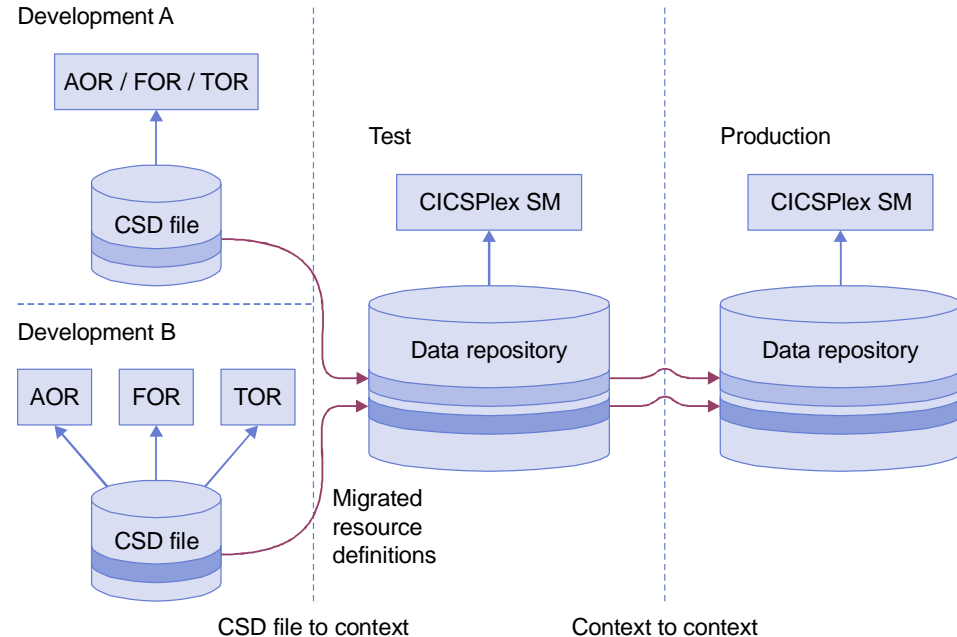
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DFHCSDUP audit collection

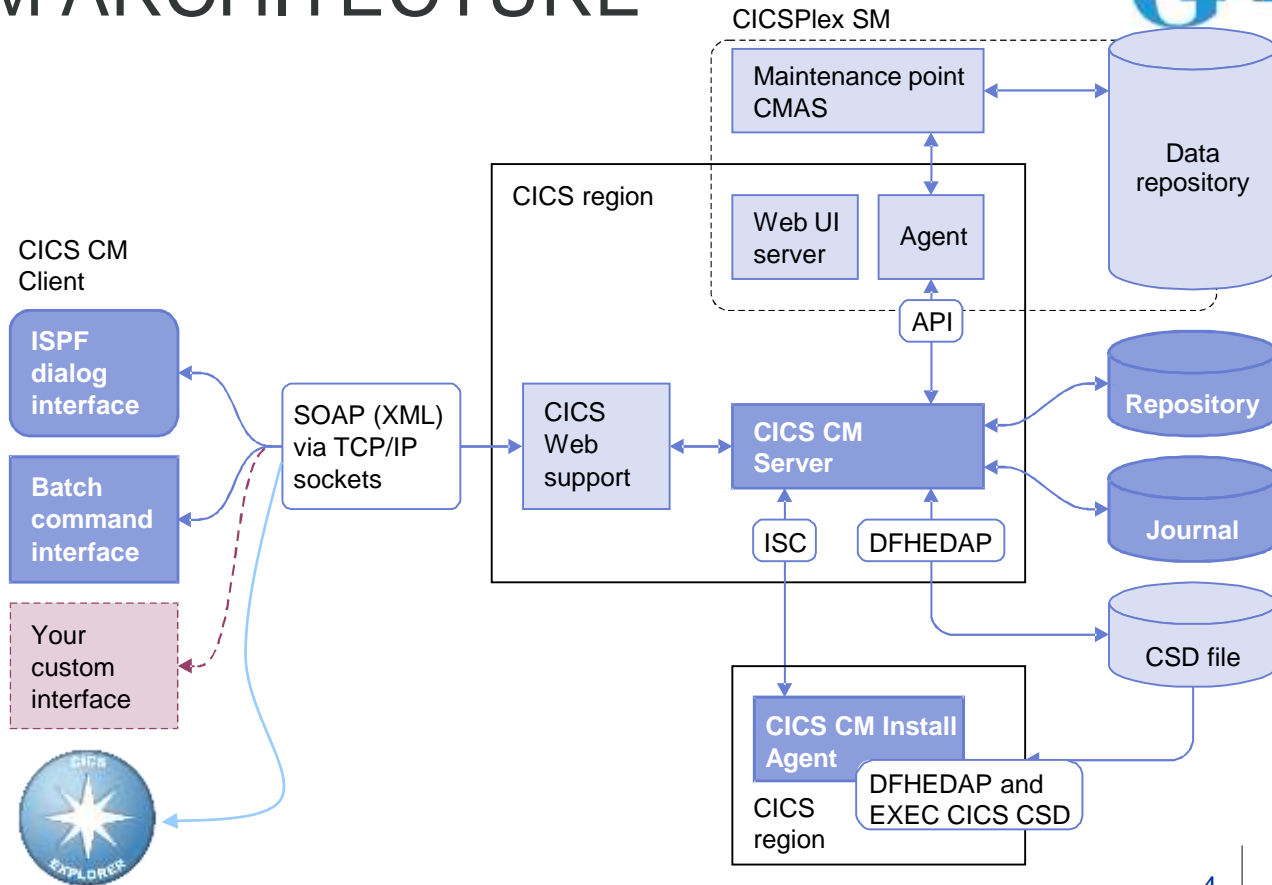
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# WHY THE NEED FOR CICS CM

- Manage resource definitions on multiple repositories across diverse environments
- Make rapid and frequent updates to resource definitions to handle new business requirements
- Understand the impact of definition attributes on target environments
- Identify duplicate, redundant, or inconsistent resource definitions



# CICS CM ARCHITECTURE



# CICS ADMIN PROBLEMS AND SOLUTIONS

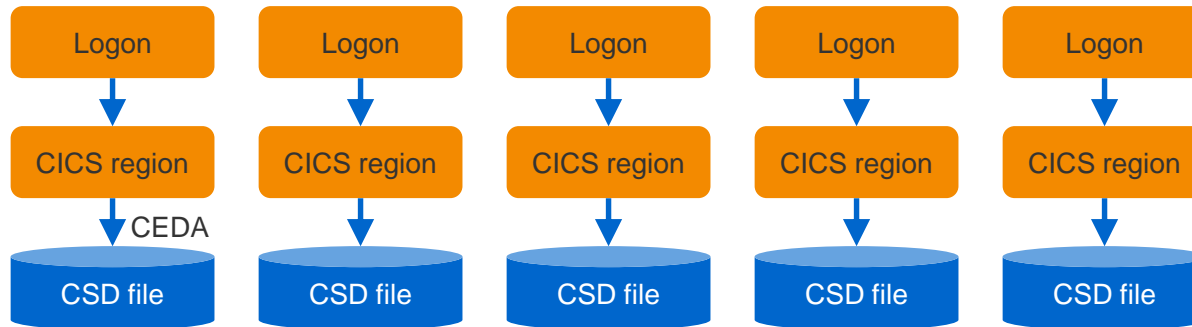
## Sample use cases

- Editing CSD files
- Working with CSD files and CPSM BAS repository
- Migrating changes between environments
- Delegating and approving changes
- Changes across LPAR boundaries
- Backout
- Audit compliance
- Clean-up and analysis
- Comparisons and exception analysis
- Cold start analysis
- Control of related zFS files
- Audit of DFHCSDUP changes

# EDITING CSD FILES

## Problem

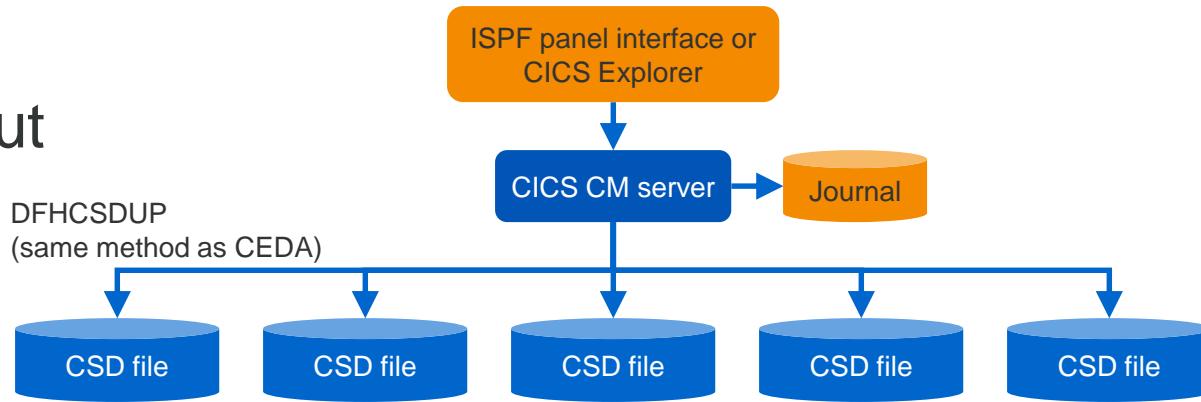
- Logon or route to each CSD's maintenance point
- CICS regions must be running
- No audit trail or easy backout



# EDITING CSD FILES

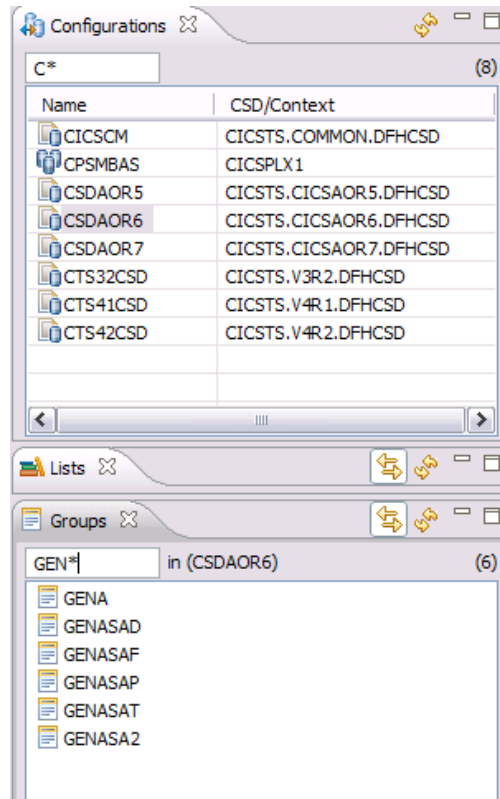
## Solution

- Single point of control (via the CICS CM Server)
- Application CICS regions may be inactive
- Audit trail
- Easy backout



# SINGLE POINT OF CONTROL FOR DEFINITIONS

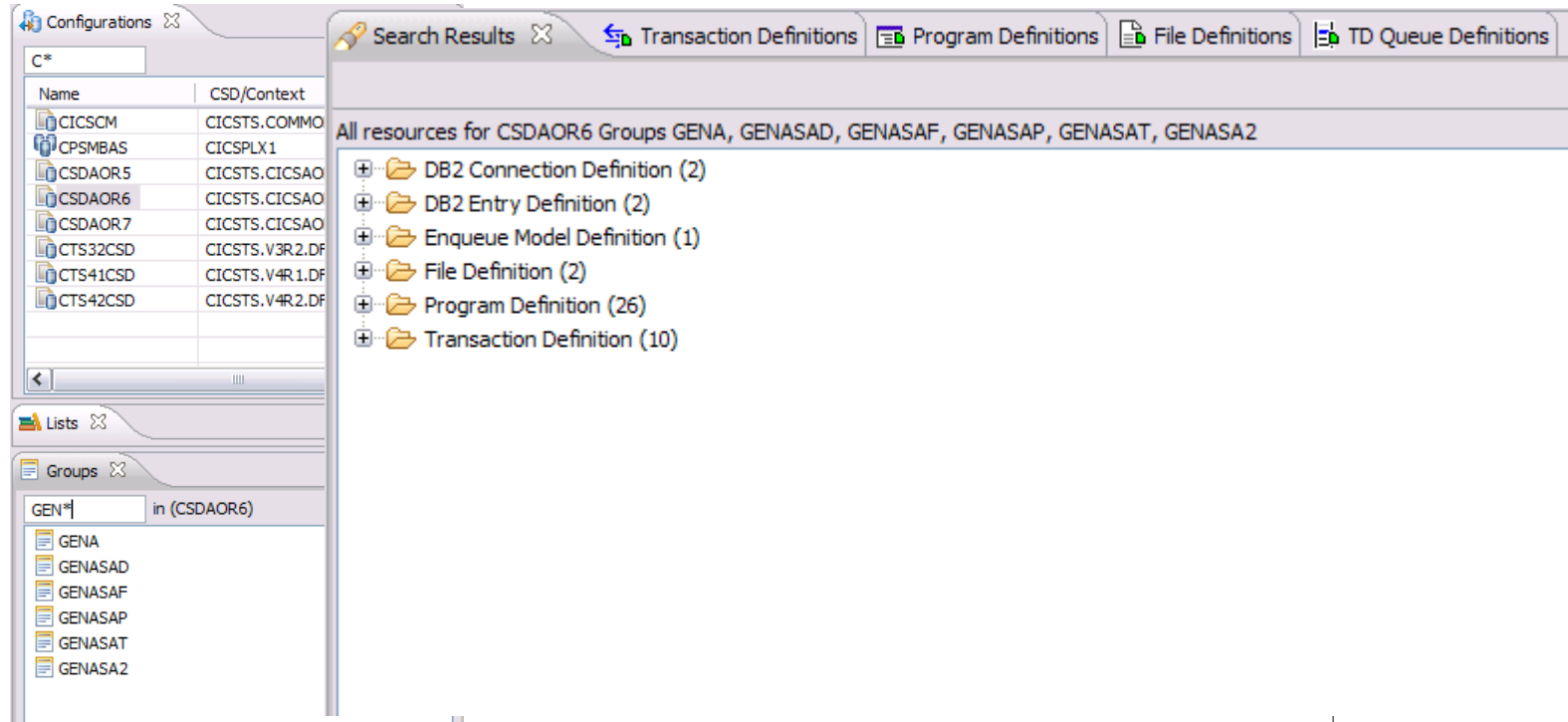
- Access multiple CSDs, Data Repositories, Lists, and Groups from a single interface (Explorer)





# SINGLE POINT OF CONTROL FOR DEFINITIONS

- Access multiple CSDs, Data Repositories, Lists, and Groups from a single interface (Explorer)



The screenshot displays a software interface with a table of CSDs and a search results pane.

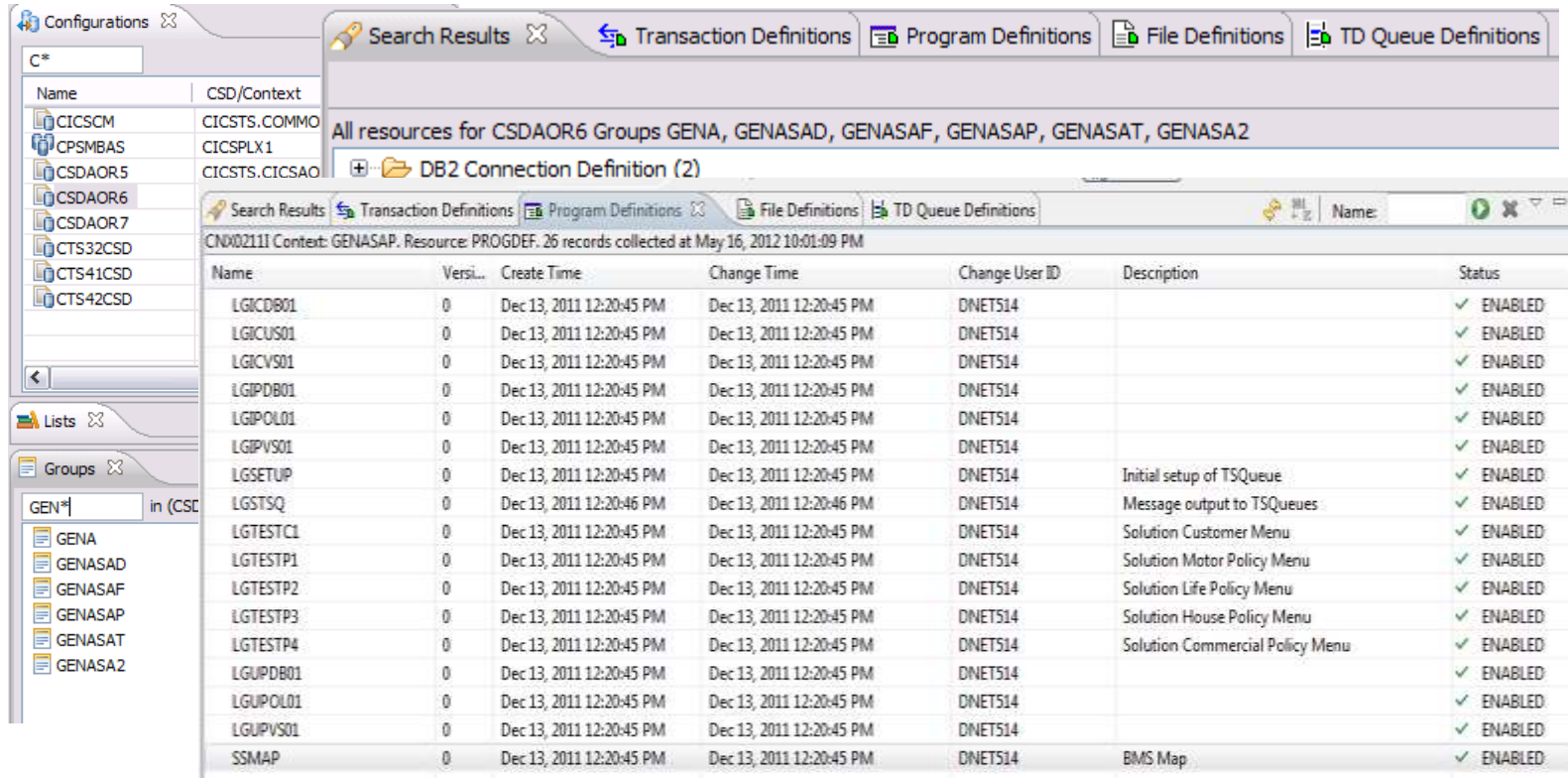
Name	CSD/Context
CICSCM	CICSTS.COMMO
CPSMBAS	CICSPX1
CSDAOR5	CICSTS.CICSAO
CSDAOR6	CICSTS.CICSAO
CSDAOR7	CICSTS.CICSAO
CTS32CSD	CICSTS.V3R2.DF
CTS41CSD	CICSTS.V4R1.DF
CTS42CSD	CICSTS.V4R2.DF

The search results pane shows the following resources for CSDAOR6 Groups:

- DB2 Connection Definition (2)
- DB2 Entry Definition (2)
- Enqueue Model Definition (1)
- File Definition (2)
- Program Definition (26)
- Transaction Definition (10)

# SINGLE POINT OF CONTROL FOR DEFINITIONS

- Access multiple CSDs, Data Repositories, Lists, and Groups from a single interface (Explorer)



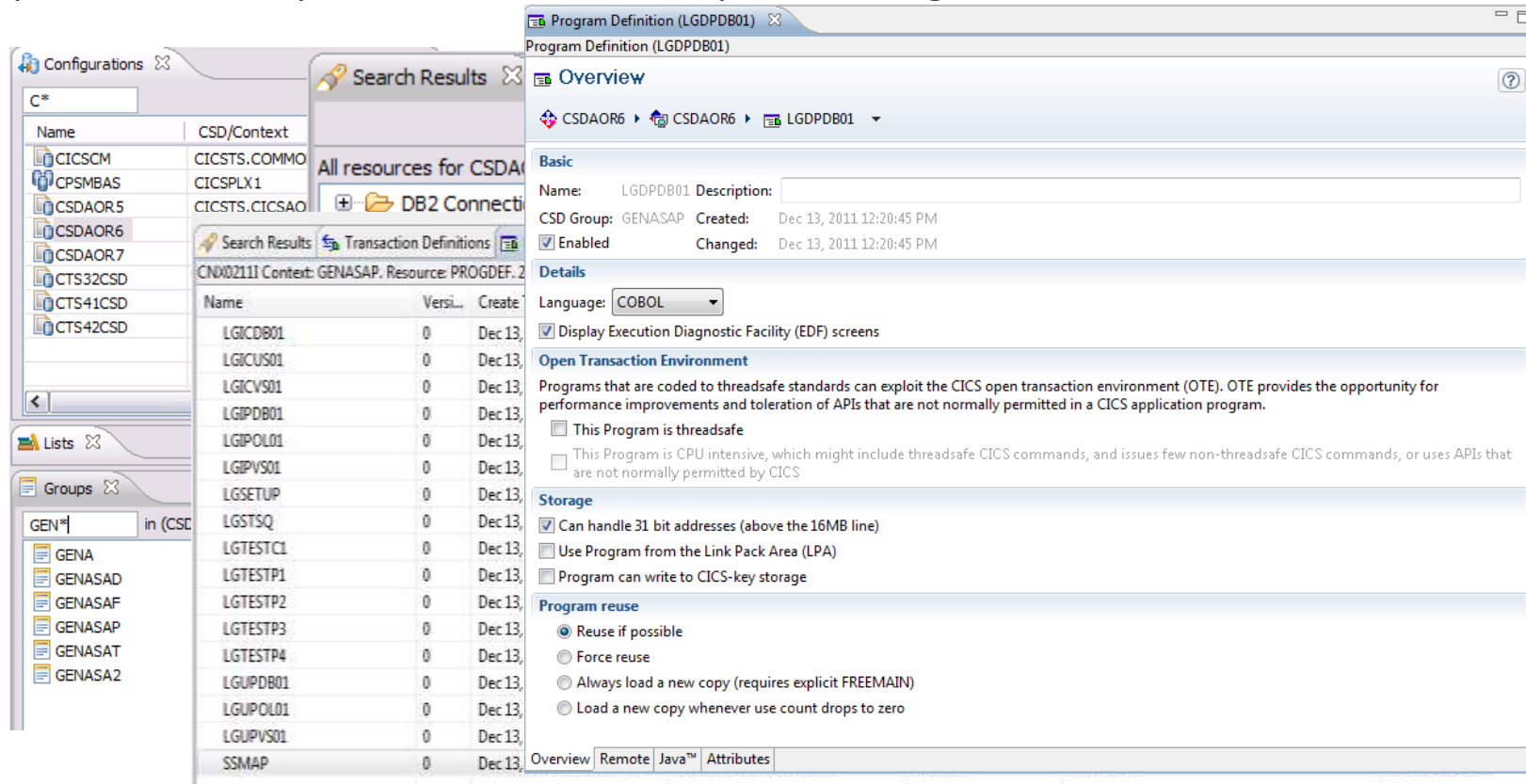
The screenshot displays the Explorer interface with the following components:

- Left Panel:** A tree view showing a hierarchy of configurations. Under 'CSDs', 'CSDAOR6' is selected. Below it, 'Lists' and 'Groups' are visible. The 'Groups' list shows 'GEN\*' selected, with sub-items: GENA, GENASAD, GENASAF, GENASAP, GENASAT, and GENASA2.
- Top Panel:** A navigation bar with tabs for 'Search Results', 'Transaction Definitions', 'Program Definitions', 'File Definitions', and 'TD Queue Definitions'. The 'Search Results' tab is active.
- Main Content Area:** A search results window titled 'All resources for CSDAOR6 Groups GENA, GENASAD, GENASAF, GENASAP, GENASAT, GENASA2'. It shows a folder icon for 'DB2 Connection Definition (2)'. Below this, a table lists the connection definitions.

Name	Versi...	Create Time	Change Time	Change User ID	Description	Status
LGICDB01	0	Dec 13, 2011 12:20:45 PM	Dec 13, 2011 12:20:45 PM	DNETS14		✓ ENABLED
LGICUS01	0	Dec 13, 2011 12:20:45 PM	Dec 13, 2011 12:20:45 PM	DNETS14		✓ ENABLED
LGICVS01	0	Dec 13, 2011 12:20:45 PM	Dec 13, 2011 12:20:45 PM	DNETS14		✓ ENABLED
LGIPDB01	0	Dec 13, 2011 12:20:45 PM	Dec 13, 2011 12:20:45 PM	DNETS14		✓ ENABLED
LGIPOL01	0	Dec 13, 2011 12:20:45 PM	Dec 13, 2011 12:20:45 PM	DNETS14		✓ ENABLED
LGIPVS01	0	Dec 13, 2011 12:20:45 PM	Dec 13, 2011 12:20:45 PM	DNETS14		✓ ENABLED
LGSETUP	0	Dec 13, 2011 12:20:45 PM	Dec 13, 2011 12:20:45 PM	DNETS14	Initial setup of TSQueue	✓ ENABLED
LGSTSQ	0	Dec 13, 2011 12:20:46 PM	Dec 13, 2011 12:20:46 PM	DNETS14	Message output to TSQueues	✓ ENABLED
LGTESTC1	0	Dec 13, 2011 12:20:45 PM	Dec 13, 2011 12:20:45 PM	DNETS14	Solution Customer Menu	✓ ENABLED
LGTESTP1	0	Dec 13, 2011 12:20:45 PM	Dec 13, 2011 12:20:45 PM	DNETS14	Solution Motor Policy Menu	✓ ENABLED
LGTESTP2	0	Dec 13, 2011 12:20:45 PM	Dec 13, 2011 12:20:45 PM	DNETS14	Solution Life Policy Menu	✓ ENABLED
LGTESTP3	0	Dec 13, 2011 12:20:45 PM	Dec 13, 2011 12:20:45 PM	DNETS14	Solution House Policy Menu	✓ ENABLED
LGTESTP4	0	Dec 13, 2011 12:20:45 PM	Dec 13, 2011 12:20:45 PM	DNETS14	Solution Commercial Policy Menu	✓ ENABLED
LGIPDB01	0	Dec 13, 2011 12:20:45 PM	Dec 13, 2011 12:20:45 PM	DNETS14		✓ ENABLED
LGIPOL01	0	Dec 13, 2011 12:20:45 PM	Dec 13, 2011 12:20:45 PM	DNETS14		✓ ENABLED
LGIPVS01	0	Dec 13, 2011 12:20:45 PM	Dec 13, 2011 12:20:45 PM	DNETS14		✓ ENABLED
SSMAP	0	Dec 13, 2011 12:20:45 PM	Dec 13, 2011 12:20:45 PM	DNETS14	BMS Map	✓ ENABLED

# SINGLE POINT OF CONTROL FOR DEFINITIONS

- Access multiple CSDs, Data Repositories, Lists, and Groups from a single interface



The screenshot displays a software interface with several components:

- Configurations:** A tree view showing various CSDs and Contexts, including CICSCM, CPSMBAS, CSDAOR5, CSDAOR6, CSDAOR7, CTS32CSD, CTS41CSD, and CTS42CSD.
- Search Results:** A table titled "All resources for CSDAOR6" showing search results for "CSDAOR6". The table has columns for Name, Version, and Create date. The selected resource is "CNDX0211I Context: GENASAP. Resource: PROGDEF.2".
- Program Definition (LGDPDB01):** An overview panel for the selected program definition. It includes fields for Name, Description, CSD Group, Created, and Changed dates. It also has checkboxes for "Enabled" and "Display Execution Diagnostic Facility (EDF) screens".
- Details:** A section for program details, including a Language dropdown set to "COBOL" and a checkbox for "Open Transaction Environment".
- Storage:** A section for storage options, including checkboxes for "Can handle 31 bit addresses (above the 16MB line)", "Use Program from the Link Pack Area (LPA)", and "Program can write to CICS-key storage".
- Program reuse:** A section for program reuse options, including radio buttons for "Reuse if possible", "Force reuse", "Always load a new copy (requires explicit FREEMAIN)", and "Load a new copy whenever use count drops to zero".

Name	Versi...	Create
LGICDB01	0	Dec 13,
LGICUS01	0	Dec 13,
LGICVS01	0	Dec 13,
LGIPDB01	0	Dec 13,
LGIPOL01	0	Dec 13,
LGIPVS01	0	Dec 13,
LGSETUP	0	Dec 13,
LGSTSQ	0	Dec 13,
LGTESTC1	0	Dec 13,
LGTESTP1	0	Dec 13,
LGTESTP2	0	Dec 13,
LGTESTP3	0	Dec 13,
LGTESTP4	0	Dec 13,
LGUPDB01	0	Dec 13,
LGUPOL01	0	Dec 13,
LGUPVS01	0	Dec 13,
SSMAP	0	Dec 13,

# SINGLE POINT OF CONTROL FOR DEFINITIONS

- Access multiple CSDs, Data Repositories, Lists, and Groups from a single interface (ISPF)

```
Resources                               CICS Configurations          Row 1 to 31 of 31
Command ==>> _____ Scroll ==>> PAGE
More: < >

Filter *      *      *      *
/  Name      Context  File name      Format
---
---  CICSCM    _____  CICSTS.CICSCM.DFHCS  CSD
---  CPSCMBAS  CICSPLX1    _____  CPSM
---  CPSMBA5   CICSPLX1    _____  CPSM
---  CSDAOR3   _____  CICSTS.CICSAOR3.DFH  CSD
---  CSDAOR4   _____  CICSTS.CICSAOR4.DFH  CSD
---  CSDAOR6   _____  _____  _____
---  CSDAOR7   _____  _____  _____
---  CSDAOR8   _____  _____  _____
---  DEVT2553 _____  _____  _____
---  EXPORTPD _____  _____  _____
---  EXPORTST _____  _____  _____
---  EXPST52  _____  _____  _____
---  JOE      _____  _____  _____
---  MEXICO   _____  _____  _____
---  MEXICOIM _____  _____  _____
---  MEXICSD  _____  _____  _____
---  ZTEST    _____  _____  _____
---  ZDEVV    _____  _____  _____
```

```
File Menu Settings Checksum Show Help
Groups                               CSDAOR6 CICS Resources      Row 1 to 2 of 2
Command ==>> _____ Scroll ==>> PAGE

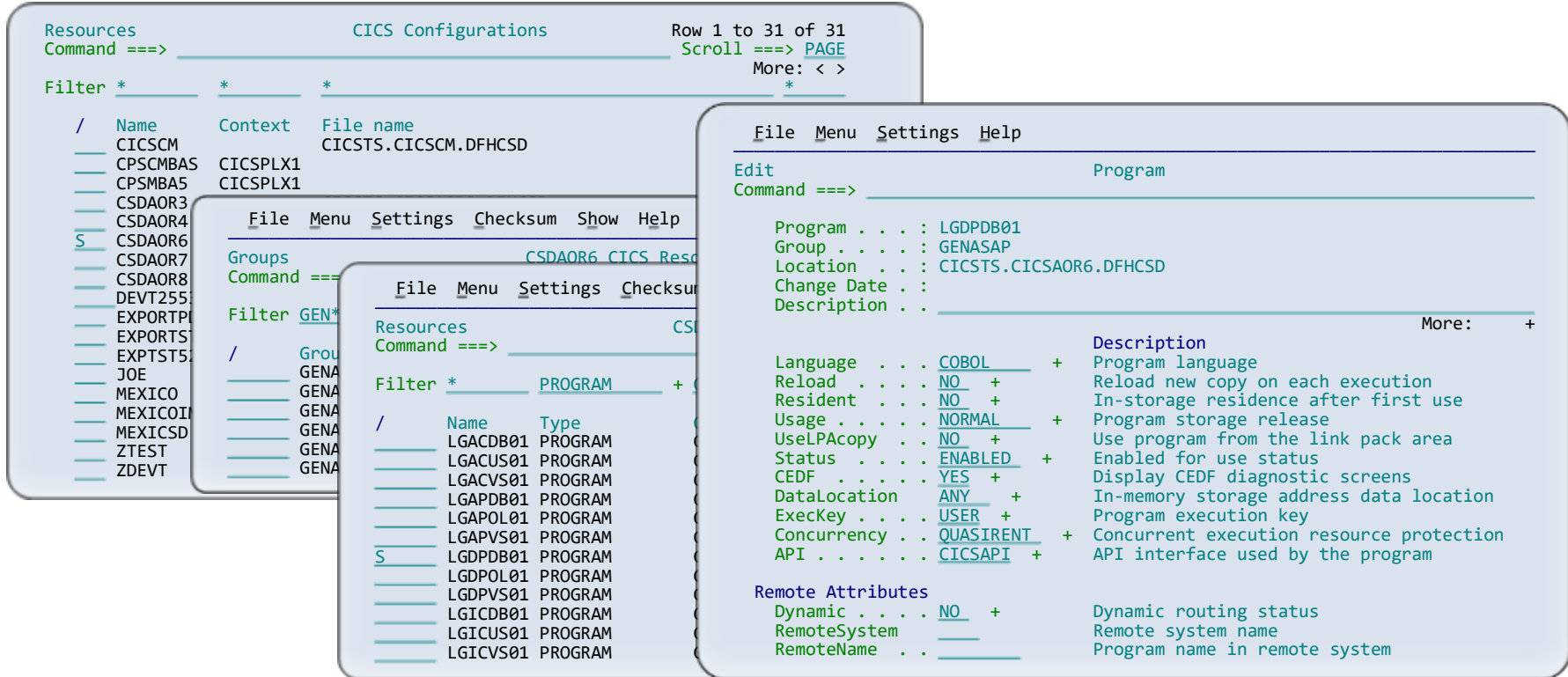
Filter GEN*
/  Group      Prompt
---
---  GENA
---  GENASAD
---  GENASAF
---  GENASAP
---  GENASAT
---  GENASA2
```

```
File Menu Settings Checksum Search Show Help
Resources                               CSDAOR6 CICS Resources      Row 1 to 10 of 10
Command ==>> _____ Scroll ==>> PAGE

Filter *      PROGRAM      + GEN*      *
/  Name      Type      Group      Prompt      --- Changed ---
---
---  LGACDB01  PROGRAM  GENASAP    _____  2017/09/15 10:48
---  LGACUS01  PROGRAM  GENASAP    _____  2017/10/09 14:42
---  LGACVS01  PROGRAM  GENASAP    _____  2017/10/09 14:42
---  LGAPDB01  PROGRAM  GENASAP    _____  2017/09/20 14:21
---  LGAPOL01  PROGRAM  GENASAP    _____  2017/11/14 14:31
---  LGAPVS01  PROGRAM  GENASAP    _____  2017/09/14 14:42
---  LGDPDB01  PROGRAM  GENASAP    _____  2017/08/11 13:32
---  LGDPOL01  PROGRAM  GENASAP    _____  2016/12/13 07:03
---  LGDPVS01  PROGRAM  GENASAP    _____  2016/10/18 09:04
---  LGICDB01  PROGRAM  GENASAP    _____  2016/12/15 14:30
---  LGICUS01  PROGRAM  GENASAP    _____  2016/12/15 14:30
---  LGICVS01  PROGRAM  GENASAP    _____  2016/12/15 14:30
```

# SINGLE POINT OF CONTROL FOR DEFINITIONS

- Access multiple CSDs, Data Repositories, Lists, and Groups from a single interface (ISPF)



The screenshot illustrates the ISPF interface for managing CICS configurations and resources. It is divided into several overlapping windows:

- CICS Configurations (Top Left):** Shows a list of configurations. The selected configuration is CSDAOR6.
 

Name	Context	File name
CICSCM		CICSTS.CICSCM.DFHCS
CPSCMBAS	CICSPLX1	
CPSMBA5	CICSPLX1	
CSDAOR3		
CSDAOR4		
CSDAOR6		
CSDAOR7		
CSDAOR8		
DEVT255		
EXPORTP		
EXPORTS		
EXPTST5		
JOE		
MEXICO		
MEXICOII		
MEXICSD		
ZTEST		
ZDEVT		
- CSDAOR6 CICS Resources (Middle Left):** Shows a list of resources. The selected resource is LGDPDB01.
 

Name	Type
LGACDB01	PROGRAM
LGACUS01	PROGRAM
LGACVS01	PROGRAM
LGAPDB01	PROGRAM
LGAPOL01	PROGRAM
LGAPVS01	PROGRAM
LGDPDB01	PROGRAM
LGDPOL01	PROGRAM
LGDPVS01	PROGRAM
LGICDB01	PROGRAM
LGICUS01	PROGRAM
LGICVS01	PROGRAM
- Program Details (Right):** Shows the details for the selected program LGDPDB01.
 

Attribute	Value	Description
Program	LGDPDB01	
Group	GENASAP	
Location	CICSTS.CICSAOR6.DFHCS	
Change Date		
Description		
Language	COBOL	Program language
Reload	NO	Reload new copy on each execution
Resident	NO	In-storage residence after first use
Usage	NORMAL	Program storage release
UseLPACopy	NO	Use program from the link pack area
Status	ENABLED	Enabled for use status
CEDF	YES	Display CEDF diagnostic screens
DataLocation	ANY	In-memory storage address data location
ExecKey	USER	Program execution key
Concurrency	QUASIRENT	Concurrent execution resource protection
API	CICSAPI	API interface used by the program
Dynamic	NO	Dynamic routing status
RemoteSystem		Remote system name
RemoteName		Program name in remote system

# WORKING WITH MULTIPLE CONFIGURATIONS

Menu option 4.1, **Reports > Multiple Configs**

Solution

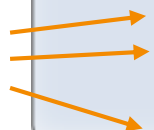
Reports CICS Configurations Row 1 to 12 of 12  
Command ==> \_\_\_\_\_ Scroll ==> PAGE  
More: < >

Select one or more CICS configurations and press Enter

Filter DEMO\*

/	Name	Context	CSD File	Format
	DEMO		CCVCICS.DEMO.DFHCS	CSD
<u>S</u>	DEMOCPSM	CCVPLEXK		CPSM
<u>S</u>	DEMODEVT		CCVCICS.DEMODEVT.DFHCS	CSD
<u>S</u>	DEMOPROD		CCVCICS.DEMOTEST.DFHCS	CSD
<u>S</u>	DEMOTEST	CPSM1		CPSM

Select multiple

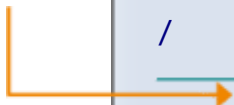


Resources Multiple Configuration Resource Row 106 to 120 of 1,366  
Command ==> \_\_\_\_\_ Scroll ==> PAGE

Filter \* \_\_\_\_\_ PROGRAM + DEMOGRP1

/	Name	Type	Group	Prompt	Config
<u>S</u>	DEMAMG10	PROGRAM	DEMOGRP1		DEMOCPSM
<u>S</u>	DEMAMG10	PROGRAM	DEMOGRP1		DEMODEVT
<u>S</u>	DEMAMG10	PROGRAM	DEMOGRP1		DEMOTEST

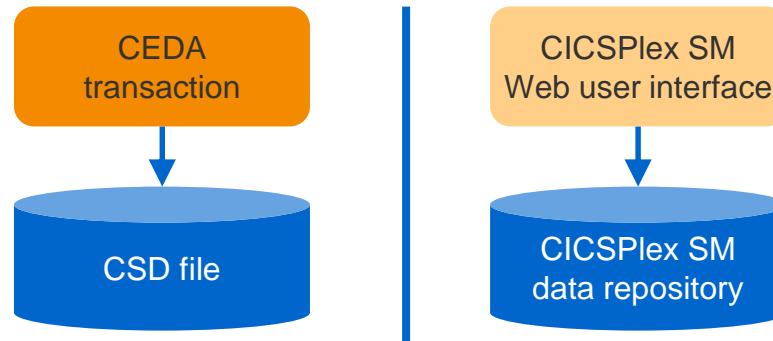
Display multiple



# CSD FILES AND CPSM BAS REPOSITORY

## Problem

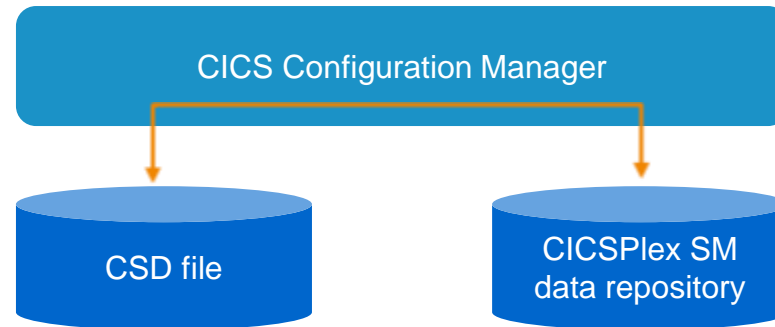
- Different interfaces: CEDA or CPSM WUI
- No method for moving from CPSM repository to CSD file



# CSD FILES AND CPSM BAS REPOSITORY

## Solution





- Single user interface
- Seamless across CSD files and CPSM repositories
- Copy resource definitions in either direction





# SUPPORT FOR CPSM RESOURCES

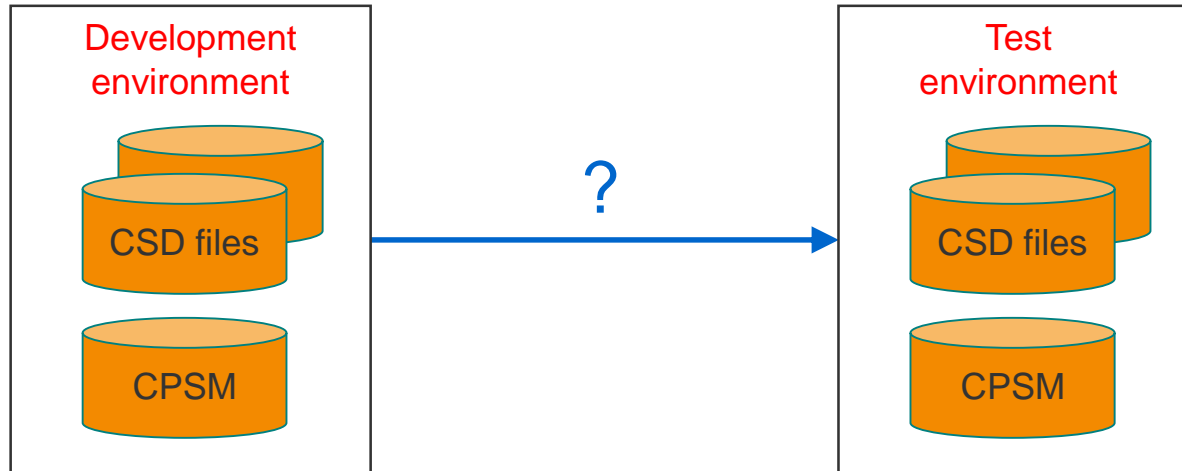
## Solution

- you can define and work with CICSplex SM resource definitions
  - WLMDEFs (WLMSPEC WLMGROUP WLMDEF TRANGRP LNKSWSCS LNKSWSCG WLMINSPC WLMINGRP DTRINGRP) 
  - topologies (CSYSDEF CSYSGRP PERIODEF CSGLCGCS CSGLCGCG) 
  - package (via P line action) 
  - transform (via ISPF option 1.5) 

# MIGRATING CHANGES BETWEEN ENVIRONMENTS

## Problem

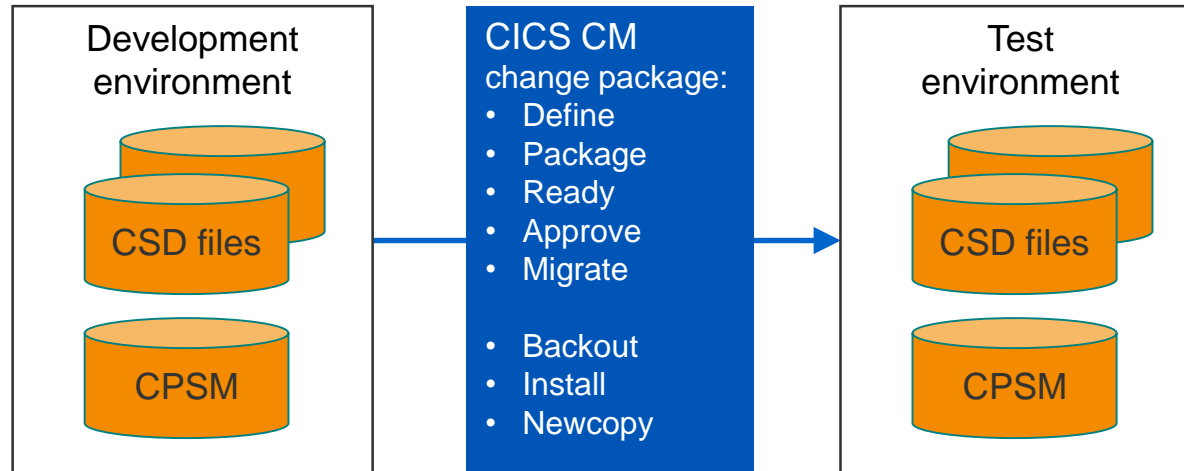
- How do you systematically promote resource definition changes?
  - Collecting sets of definitions
  - Tailoring definition attributes (data set names in Files)
  - Identifying and updating target CSD files or CPSM BAS repositories



# MIGRATING CHANGES BETWEEN ENVIRONMENTS

## Solution

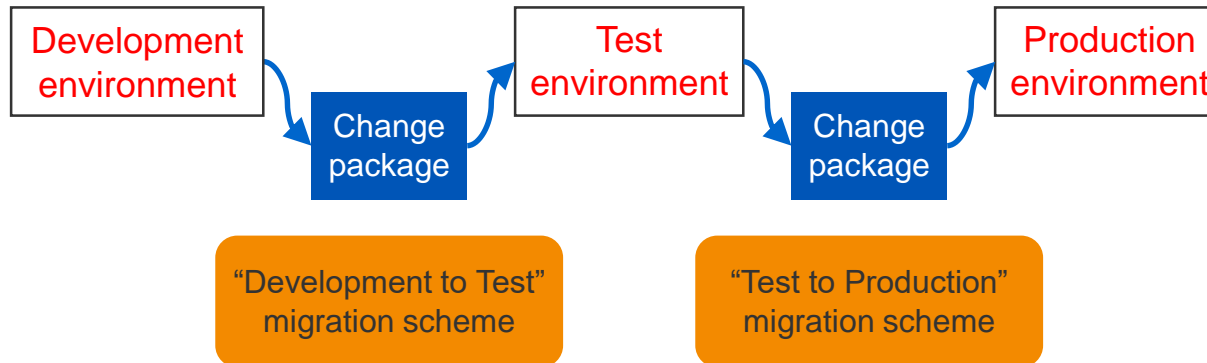
- Group changes into a CICS CM change package
- Manage the package as a single unit
- Supports Ready, Approve, and Backout processing
- APIs and exit-points for integration to change-control products



# MIGRATING CHANGES BETWEEN ENVIRONMENTS

## Solution

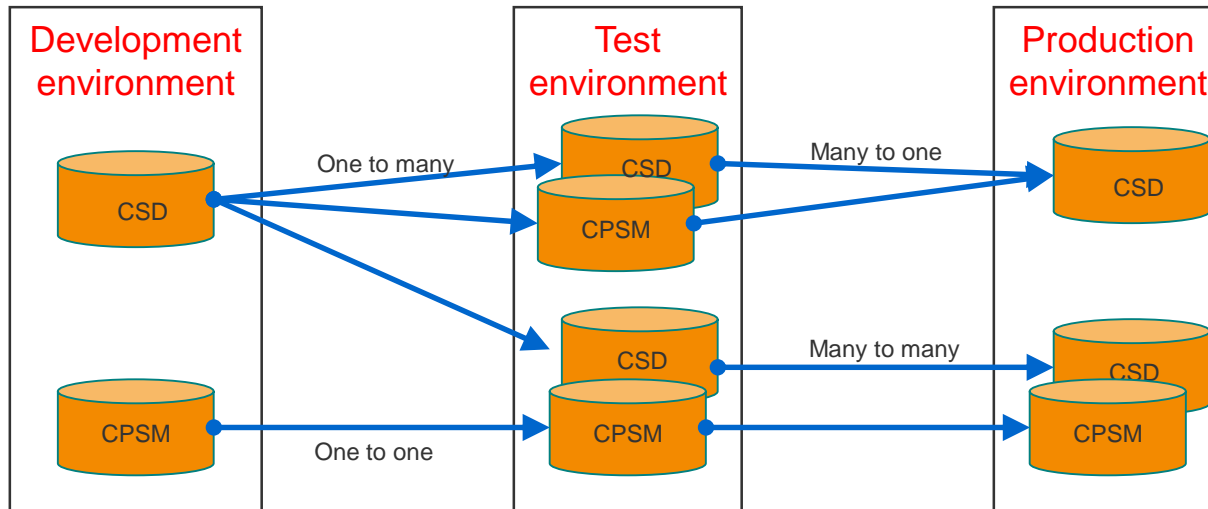
- Migration schemes identify source and target repositories
- Different schemes to progressively migrate a change package



# MIGRATING CHANGES BETWEEN ENVIRONMENTS

## Solution

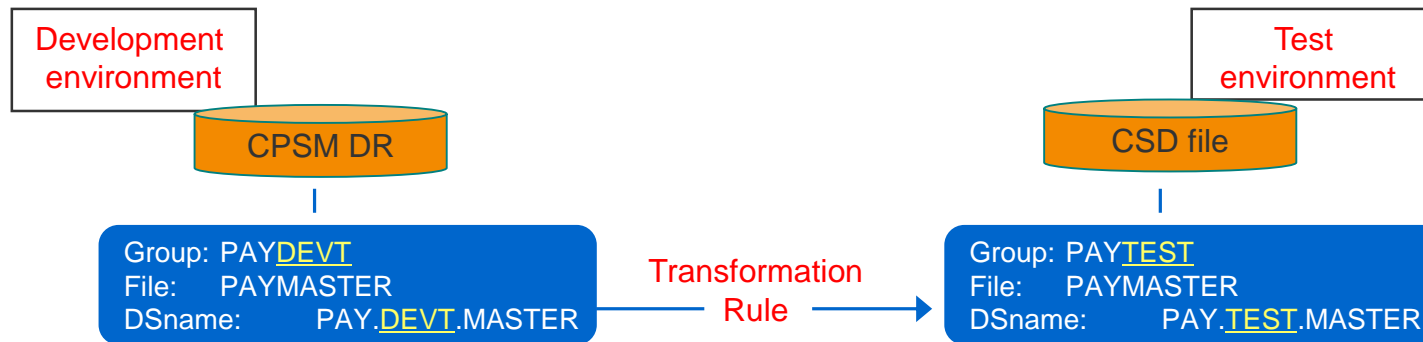
- Schemes can intermix CSD files or CPSM repositories
- Supports one or many source/target pairs in any combination



# MIGRATING CHANGES BETWEEN ENVIRONMENTS

## Solution

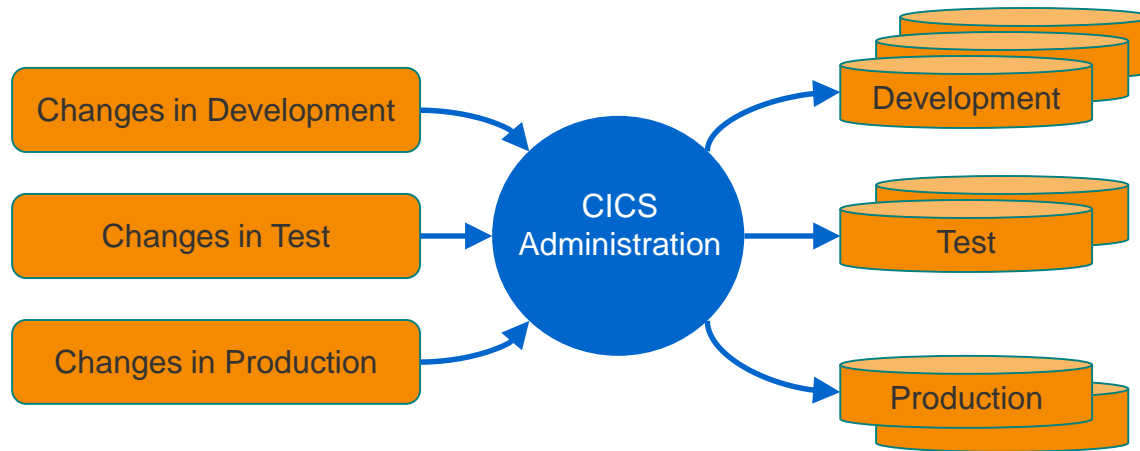
- Transformation rules tailor definitions for each target:
  - No manual editing – it's automatic
  - You can change group names, attribute values, or resource definition names
  - Value masking is supported (e.g. change File DSNAME \*DEVT\* to \*TEST\*)
  - Qualification criteria may be specified



# DELEGATING RESPONSIBILITIES

## Problem

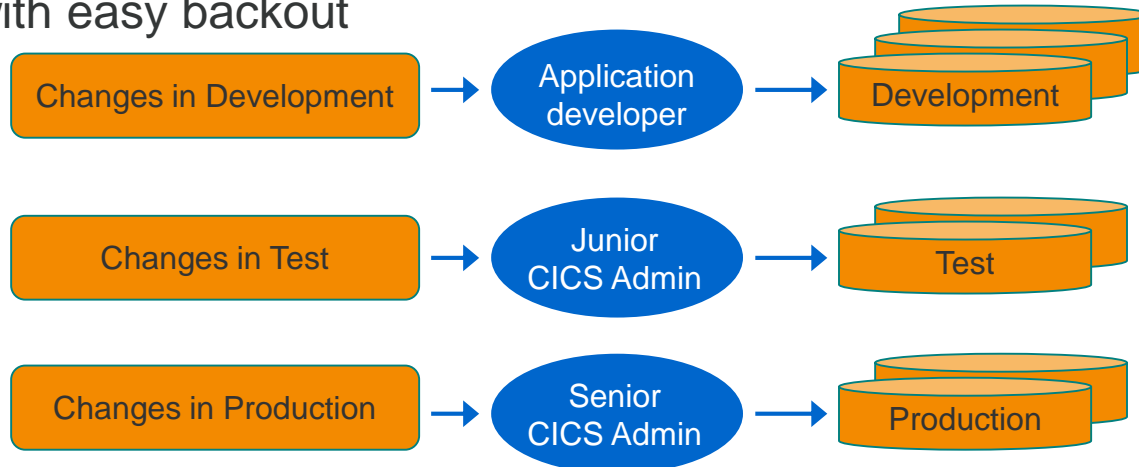
- Administration bottlenecks for resource definition changes
- CICS support personnel are overworked and scarce
- Complexity and 'institutional knowledge' makes delegation risky



# DELEGATING RESPONSIBILITIES

## Solution

- Security controls by repository, Group, type and name
- Standards enforcement for attribute values
- Approve change packages before migration
- Audit trail with easy backout





# DELEGATING RESPONSIBILITIES

## Solution

```
Edit                                     Program
Command ==> _____

Program . . . : DEMACOPY
Group . . . . : DEMAGRP1
Location . . . : CCVPLEXF
Change Date . : 2017/10/30 10:32:01.74
Description . . Demonstration - COPY API Handler - changed
                                                    More: +

Language . . . COBOL +   Default      Alternative Values
Reload . . . . NO +     NO        ASSEMBLER C COBOL LE370 PLI
Resident . . . NO +     NO        YES
Usage . . . . . NORMAL +  NORMAL    TRANSIENT
UseLPacopy . . NO +     NO        YES
Status . . . . . ENABLED +  ENABLED   DISABLED
CEDF . . . . . NO +     YES       NO
DataLocation   ANY +     BELOW     ANY
ExecKey . . . . USER +     USER     CICS
Concurrency . . QUASIRENT +  QUASIRENT  REQUIRED THREADSAFE N_A
API . . . . . CICSAPI +   CICSAPI   OPENAPI
```

1. Set CEDF(NO) which violates standards, then SAVE

# DELEGATING RESPONSIBILITIES

## Solution

```
Exception Messages
Row 1 to 3 of 3
Command ==> _____ Scroll ==> PAGE

Messages
XPRA: Create/Update of this resource was rejected by a site Exit. Rule
. details: PGM_0001-A-0001
XPRA: Attribute CEDF must have value YES
***** Bottom of data *****
```

Standards enforced

RULE_NAME	ATTRIBUTE	CONDITION	ACTION
PGM_0001	Q	PROGDEF_GROUP EQ DEMOGRP1	
PGM_0001	Q	PROGDEF_NAME EQM DEMA*	
PGM_0001	A	PROGDEF_CEDF NE YES	REJECT

# DELEGATING RESPONSIBILITIES

## Solution

```

      _____ Program _____
                SAVEAS Confirmation  Authorization failed

Enter details and press Enter to save new PROGRAM

Name . . . . . DEMACOPY
Group . . . . . PAYROLL  +
CICS Configuration . . DEMODEVT  +

-----
You are not authorized to perform the requested function. Security
failure details are logged in the CICS Configuration Manager server job
output, using a message prefix DFHXS.
-----

CEDF . . . . . YES  +
DataLocation ANY  +
ExecKey . . . . USER  +
Concurrency . . QUASIRENT  +
API . . . . . CICSAPI  +
    
```

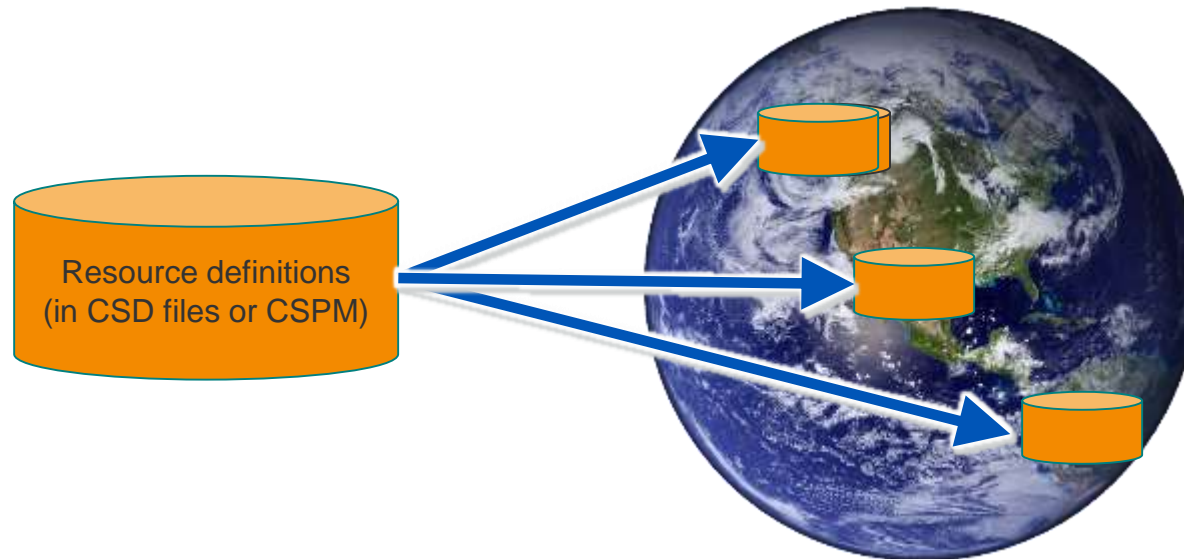
RACF	PFX	CONFIG	GROUP	TYPE	NAME
PERMIT	CCV.DEMOCPSM.PAYROLL.PROGDEF.*				_A
	CLASS(XFACILIT)				
	ID(RJA2) ACC(NONE)				

Secure definitions by repository, Group, Type and Name

# CHANGES ACROSS LPAR BOUNDARIES

## Problem

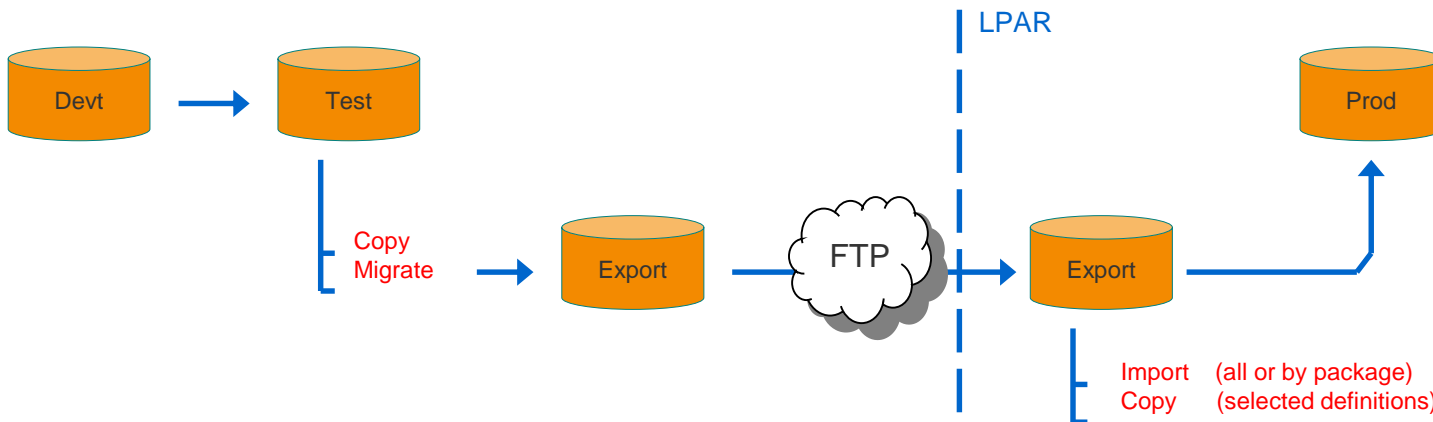
- Need to distribute resource definition changes to remote CICS sites across LPAR boundaries



# CHANGES ACROSS LPAR BOUNDARIES

## Solution

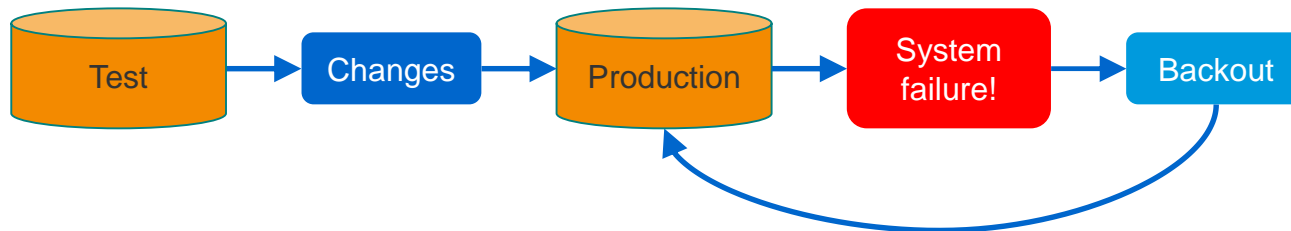
- Export definitions selectively by Copy or via change package Migrate
- Samples illustrate automated file transfer to remote sites
- Import definitions with auto-register of change packages



# BACKOUT

## Solution

- All changes logged to a journal file
- Backout entire change package
- Recover individual resource definitions
- View resource definition histories on screen



# AUDIT COMPLIANCE

## Problem

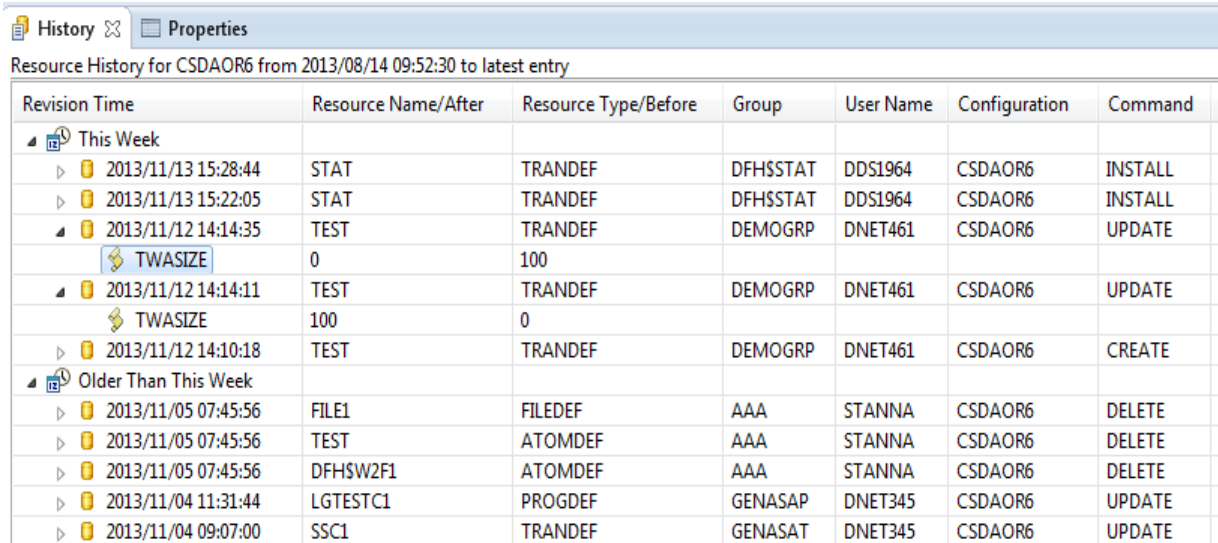
- Requirement to collect audit data
- Searching and reporting results is cumbersome and time consuming



# AUDIT COMPLIANCE

## Solution

- All changes logged to a journal file
- Online histories and journal-event views
- ISPF, Explorer and Batch journal audit reporting



History Properties

Resource History for CSDAOR6 from 2013/08/14 09:52:30 to latest entry

Revision Time	Resource Name/After	Resource Type/Before	Group	User Name	Configuration	Command
▲ This Week						
▶ 2013/11/13 15:28:44	STAT	TRANDEF	DFH\$STAT	DDS1964	CSDAOR6	INSTALL
▶ 2013/11/13 15:22:05	STAT	TRANDEF	DFH\$STAT	DDS1964	CSDAOR6	INSTALL
▲ 2013/11/12 14:14:35	TEST	TRANDEF	DEMOGRP	DNET461	CSDAOR6	UPDATE
TWASIZE	0	100				
▲ 2013/11/12 14:14:11	TEST	TRANDEF	DEMOGRP	DNET461	CSDAOR6	UPDATE
TWASIZE	100	0				
▶ 2013/11/12 14:10:18	TEST	TRANDEF	DEMOGRP	DNET461	CSDAOR6	CREATE
▲ Older Than This Week						
▶ 2013/11/05 07:45:56	FILE1	FILEDEF	AAA	STANNA	CSDAOR6	DELETE
▶ 2013/11/05 07:45:56	TEST	ATOMDEF	AAA	STANNA	CSDAOR6	DELETE
▶ 2013/11/05 07:45:56	DFH\$W2F1	ATOMDEF	AAA	STANNA	CSDAOR6	DELETE
▶ 2013/11/04 11:31:44	LGTESTC1	PROGDEF	GENASAP	DNET345	CSDAOR6	UPDATE
▶ 2013/11/04 09:07:00	SSC1	TRANDEF	GENASAT	DNET345	CSDAOR6	UPDATE



# AUDIT COMPLIANCE

## Solution

```
Compare Transaction
Command ==> _____

Transaction . : TEST TEST
ResGroup . . : DEMOGRP DEMOGRP
Location . . : CCVCICS.CICSREG.ABCCSD CCVCICS.CICSREG.ABCCSD
==> Change Date . : 2017/11/01 08:11:31.10 2017/11/01 08:11:12.47
Description . :

Program . . . : GETWIT GETWIT
==> TWAsize . . . : 0 100
Profile . . . : DFHCICST DFHCICST
PartitionSet :
Status . . . : ENABLED ENABLED
TaskDataLoc . : BELOW BELOW
TaskDataKey . : USER USER
StorageClear : NO NO
Runaway . . . : SYSTEM SYSTEM
Shutdown . . : DISABLED DISABLED
Isolate . . . : YES YES
BRexit . . . :
```

More: +

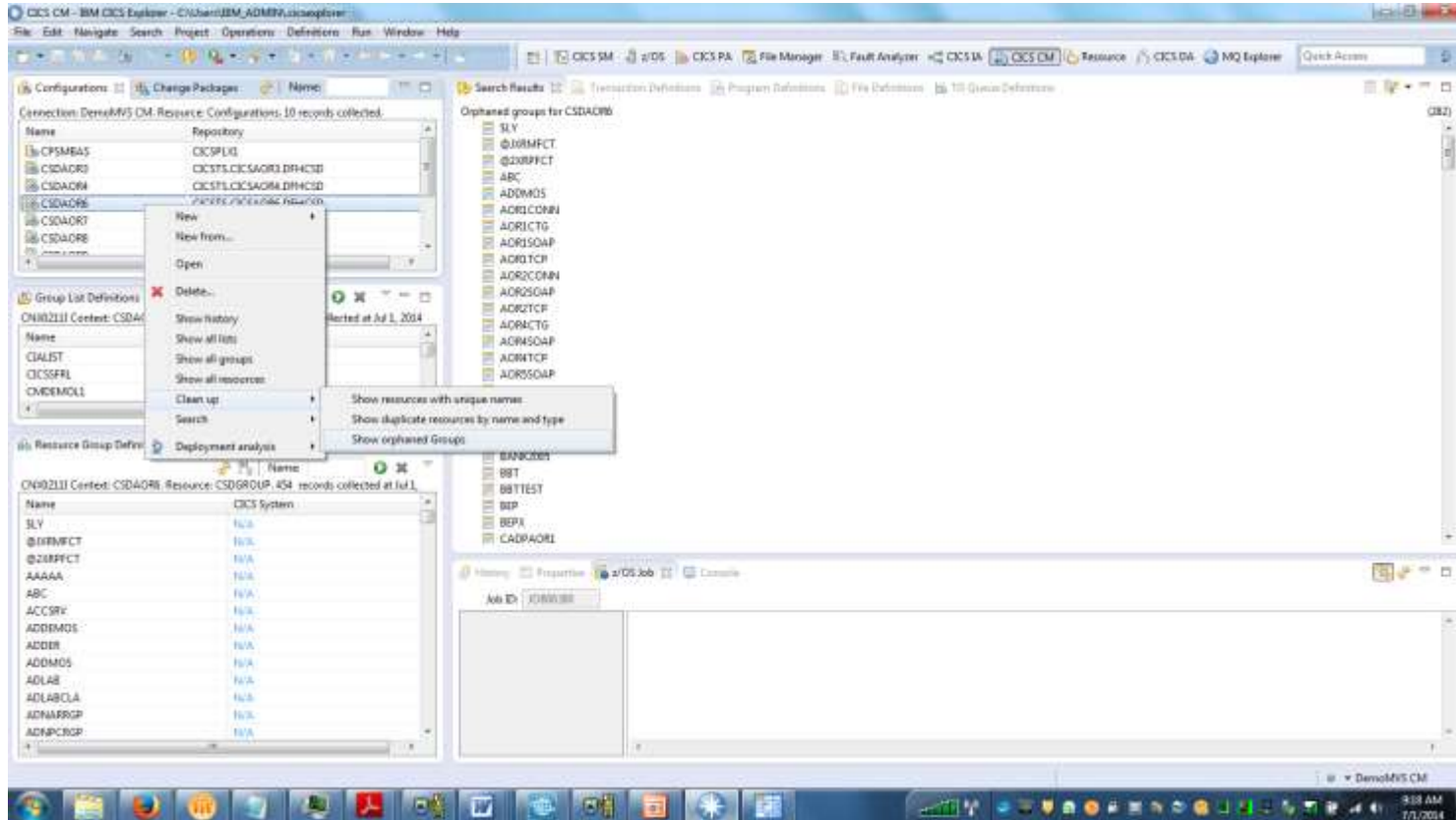
# CLEANUP AND ANALYSIS

## Problem

- Do I have:
  - Orphan Groups (Groups unrelated to any Lists)
  - Duplicated definitions (same name, different attribute values)
  - Redundant definitions (same attribute values, different names)
- How do I find ... a needle in a haystack?
  - All PAY files using LSRpoolID(1)
  - All programs using DataLocation(BELOW)

# CLEANUP AND ANALYSIS

Solution



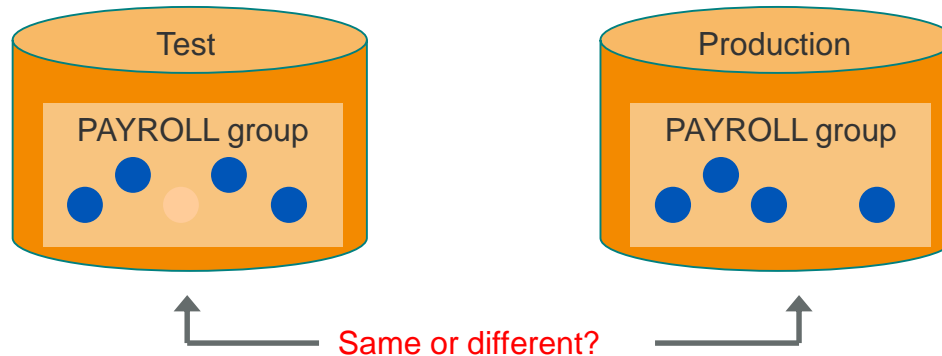
The screenshot displays the BMC CM Explorer interface. The main window shows a tree view of configurations and a search results pane. A context menu is open over the 'CSDA09B' resource group, with the 'Cleanup' option selected. The 'Cleanup' submenu is visible, showing options to show resources with unique names, duplicate resources, and orphaned groups. The 'Orphaned groups for CSDA09B' pane lists various resource groups like SLY, @IRMFCT, @ZIRPFCT, ABC, ADDMOS, ADRICOM, ADRICTG, ADRISOAP, ADRITCP, ADRICOMN, ADRISGAP, ADRITCF, ADRACTG, ADRISOAP, ADRITCP, and ADRISGAP. The 'Resource Group Definition' pane shows a table of resources for the 'CSDA09B' group.

Name	CICS System
SLV	N/A
@IRMFCT	N/A
@ZIRPFCT	N/A
AAAAA	N/A
ABC	N/A
ACCSRV	N/A
ADDERMOS	N/A
ADDER	N/A
ADDMOS	N/A
ADLAB	N/A
ADLABCLA	N/A
ADNAPRGP	N/A
ADNAPCRGP	N/A

# COMPARISONS AND EXCEPTION ANALYSIS

## Problem

- Is Group(PAYROLL) the same in TEST and PRODUCTION?
- What definitions are missing?
- What definitions are different?
- Are the FILEs the same, except for DSNNAME?
- How can I compare two resource definitions?



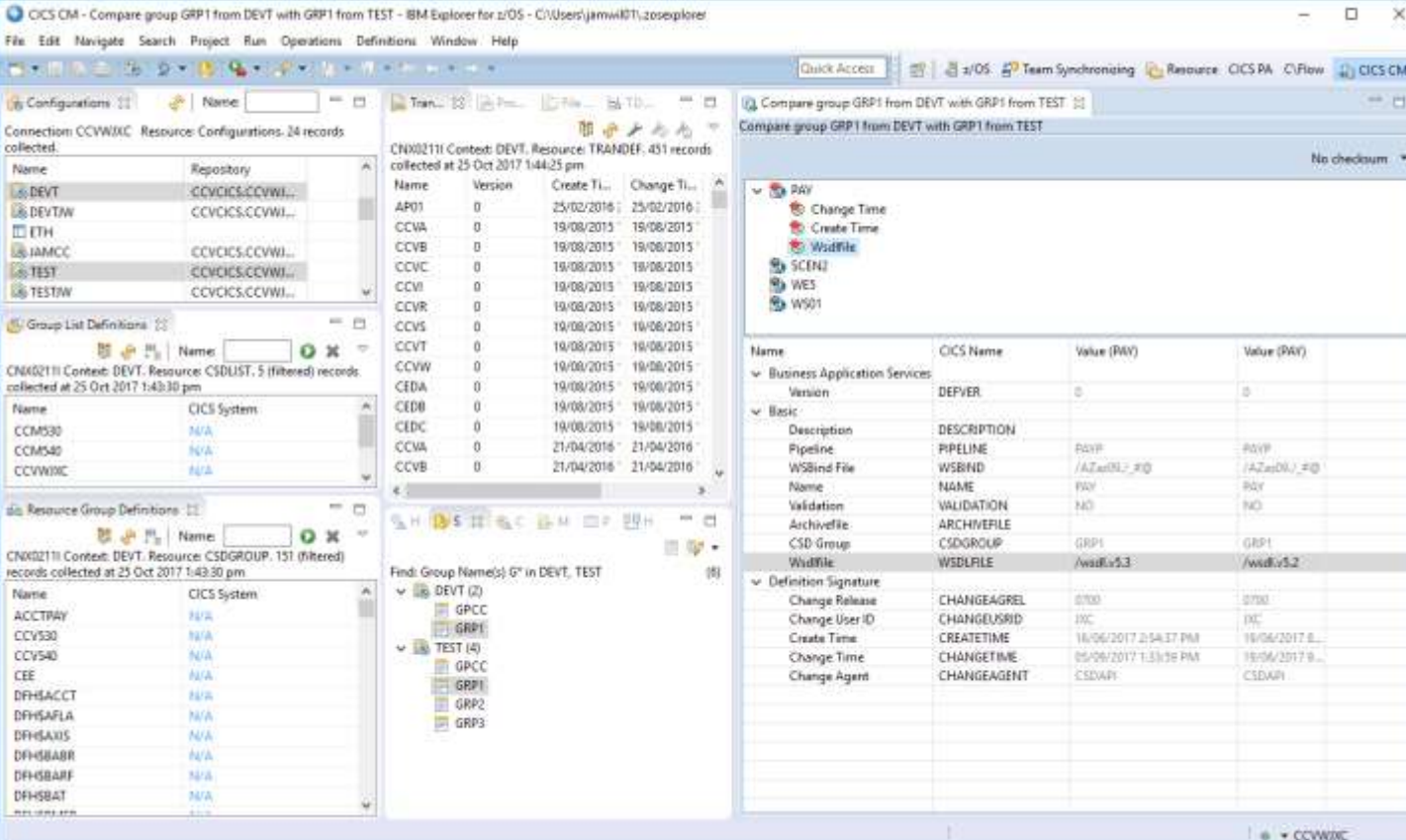
# COMPARISONS AND EXCEPTION ANALYSIS

## Solution

- Side-by-side compare of Lists, Groups, or Resources
- Compare across CSDs, CPSM DRs, or history views
- ‘Checksum’ analysis (hash-value used as a compare indicator)
  - Predefined attribute lists for checksum calculation
  - User-selectable attributes for checksum calculation
  - n-Way analysis across 2, 3, 4 or multiple repositories
  - ‘Show’ exception analysis to highlight anomalies

# COMPARISONS AND EXCEPTION ANALYSIS

Solution



The screenshot displays the IBM Explorer for z/OS interface with the following components:

- Configurations Panel:** Shows a list of configurations for connection CCVWXC.
 

Name	Repository
DEV	CCVCICS.CCVW...
DEVTW	CCVCICS.CCVW...
ETH	
JAMCC	CCVCICS.CCVW...
TEST	CCVCICS.CCVW...
TESTTW	CCVCICS.CCVW...
- Group List Definitions Panel:** Shows 5 filtered records for CSDJUST.
 

Name	CICS System
CCMS30	N/A
CCMS40	N/A
CCVWXC	N/A
- Resource Group Definitions Panel:** Shows 151 filtered records for CSDGROUP.
 

Name	CICS System
ACCTPAY	N/A
CCV530	N/A
CCV540	N/A
CEE	N/A
DFHSACCT	N/A
DFHSAFLA	N/A
DFHSAXIS	N/A
DFHSBABR	N/A
DFHSBARF	N/A
DFHSBAT	N/A
- Transaction List Panel:** Shows a list of transactions for context DEVT.
 

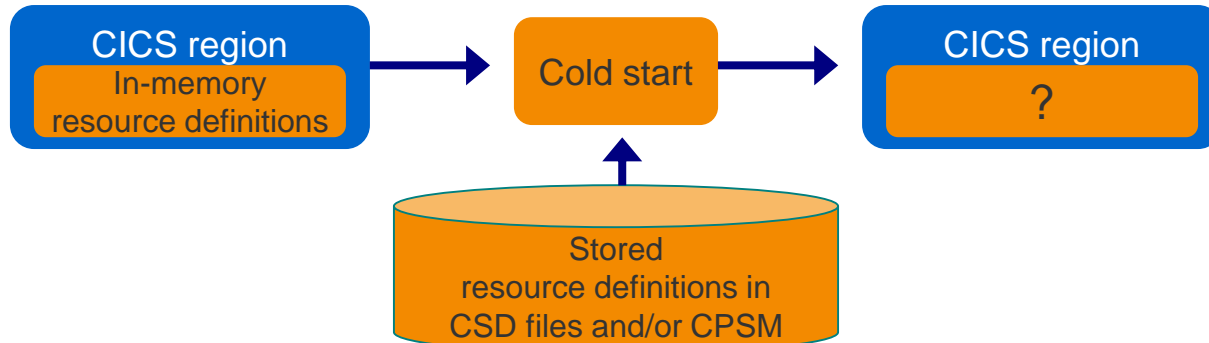
Name	Version	Create Ti...	Change Ti...
AP01	0	25/02/2016	25/02/2016
CCVA	0	19/08/2015	19/08/2015
CCVB	0	19/08/2015	19/08/2015
CCVC	0	19/08/2015	19/08/2015
CCVI	0	19/08/2015	19/08/2015
CCVR	0	19/08/2015	19/08/2015
CCVS	0	19/08/2015	19/08/2015
CCVT	0	19/08/2015	19/08/2015
CCVW	0	19/08/2015	19/08/2015
CEDA	0	19/08/2015	19/08/2015
CEDB	0	19/08/2015	19/08/2015
CEDC	0	19/08/2015	19/08/2015
CCVA	0	21/04/2016	21/04/2016
CCVB	0	21/04/2016	21/04/2016
- Comparison Panel:** Compares group GRP1 from DEVT with GRP1 from TEST.
  - Tree View:**
    - RAY
      - Change Time
      - Create Time
      - Wsdfile
      - SCEN2
      - WES
      - WS01
  - Table View:**

Name	CICS Name	Value (RAY)	Value (TEST)
<b>Business Application Services</b>			
Version	DEPVER	0	0
<b>Basic</b>			
Description	DESCRIPTION		
Pipeline	PIPELINE	RAYP	RAYP
WSBind File	WSBIND	/AZAS01.._#0	/AZAS01.._#0
Name	NAME	RAY	RAY
Validation	VALIDATION	NO	NO
Archivefile	ARCHIVEFILE		
CSD Group	CSDGROUP	GRP1	GRP1
Wsdfile	WSDLFILE	/wsdlv5.3	/wsdlv5.2
<b>Definition Signature</b>			
Change Release	CHANGEAGREL	0700	0700
Change User ID	CHANGEUSRID	JXC	JXC
Create Time	CREATETIME	19/06/2017 2:54:37 PM	19/06/2017 8...
Change Time	CHANGETIME	05/09/2017 1:33:39 PM	19/06/2017 9...
Change Agent	CHANGEAGENT	CSDARI	CSDARI

# COLD START ANALYSIS

## Problem

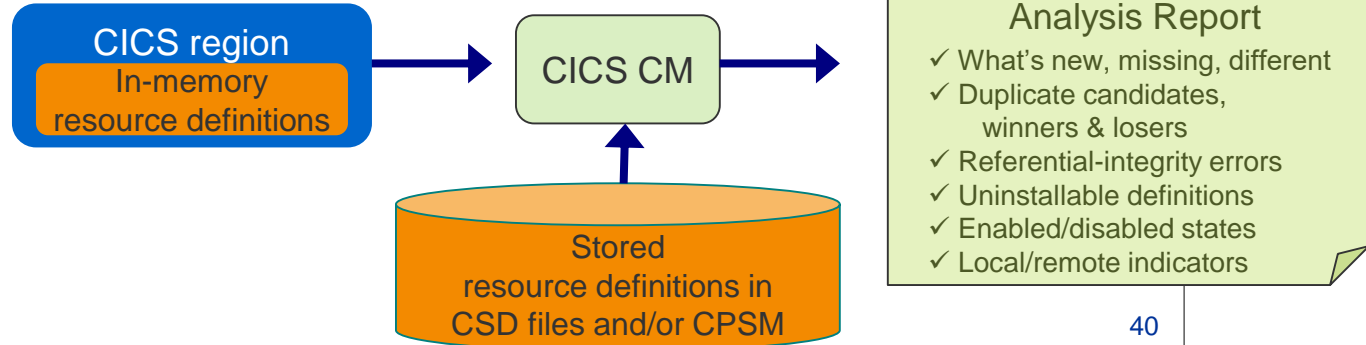
- What will change at the next Cold Start?



# COLD START ANALYSIS

## Solution

- Immediate analysis – no need to stop/start CICS regions
- Supports CSD, CPSM, or CSD/CPSM hybrid models
- Understands ‘order-sequence’ processing and RASGNDEF overrides
- Provides filtering for auto-install, dynamic resources, known conditions
- Reports ...





# COLD START ANALYSIS

## Solution

CICS Deployment Analysis Report  
Cold Start Compare Report  
Missing Definitions

**Missing**

Report Item	ID	Name	Type	Group	List or RESDESC	Code	Condition	Loc Rem	Ena	VV	Deploy Checksum	Collection Type
7	01	CCVR0001	FILE	CCVSRCS	N/A	0200	Missing	LOC	UNE		A028B276	RUNTIME-CCM
8	01	CCVR0002	FILE	CCVSRCS	N/A	0200	Missing	LOC	UNE		CDC28071	RUNTIME-CCM

CICS Deployment Analysis Report  
Cold Start Compare Report  
Mismatched Definitions

**Different**

Report Item	ID	Name	Type	Group	List or RESDESC	Code	Condition	Loc Rem	Ena	VV	Deploy Checksum	Collection Type
98	01	T31M	CONNECTION			0300	Checksum Mismatch	LOC	ENA		5136F694	REGION-CCM
		Attribute: ACCESSMETHOD		Value: IRC								
99	02	T31M	CONNECTION	CCVLINKS	CCVT22M	0300	Checksum Mismatch	LOC	ENA		E709BDAA	CANDIDATES-CSD
		Attribute: ACCESSMETHOD		Value: XM								

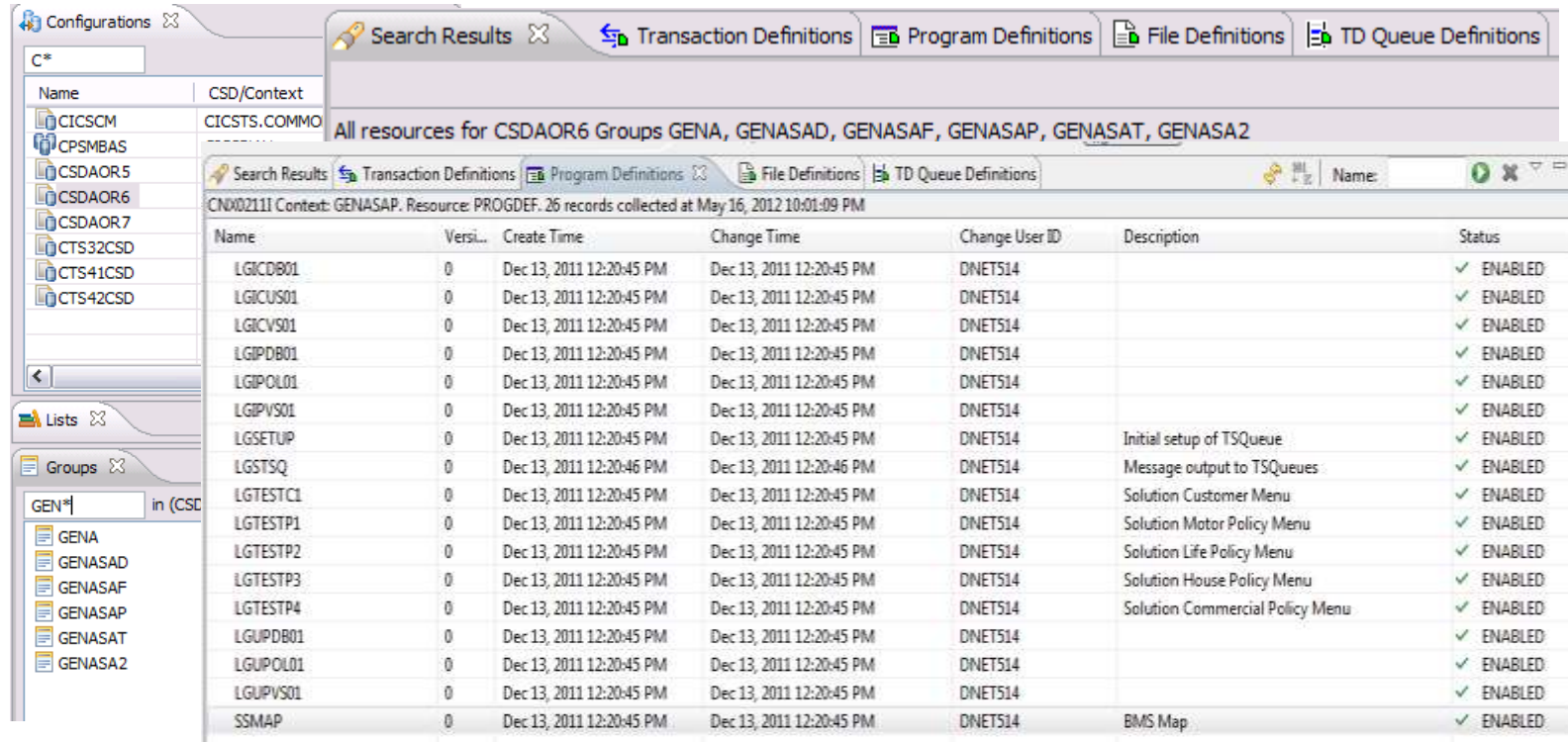
CICS Deployment Analysis Report  
Cold Start Compare Report  
Referential Integrity Verification

**RI errors**

Report Item	ID	Name	Type	Group	List or RESDESC	Code	Condition	Loc Rem	Ena	VV	Deploy Checksum	Collection Type
148	02	CCVBACK	FILE	CCV540	CCM540	0951	CCV5451W	LOC	ENA		4FE7F1CF	CANDIDATES-CSD
		Attribute: LSRPOOLID		Value: 1								

# SINGLE POINT OF CONTROL FOR DEFINITIONS

- Access multiple CSDs, Data Repositories, Lists, and Groups from a single interface (Explorer)



The screenshot displays a software interface with a left-hand navigation pane and a main content area. The navigation pane includes sections for 'Configurations', 'Lists', and 'Groups'. The 'Groups' section is expanded to show a list of groups: GENA, GENASAD, GENASAF, GENASAP, GENASAT, and GENASA2. The main content area shows a search results window for 'All resources for CSDAOR6 Groups GENA, GENASAD, GENASAF, GENASAP, GENASAT, GENASA2'. The search results are displayed in a table with the following columns: Name, Versi..., Create Time, Change Time, Change User ID, Description, and Status. The table contains 20 rows of data, all with a status of 'ENABLED'.

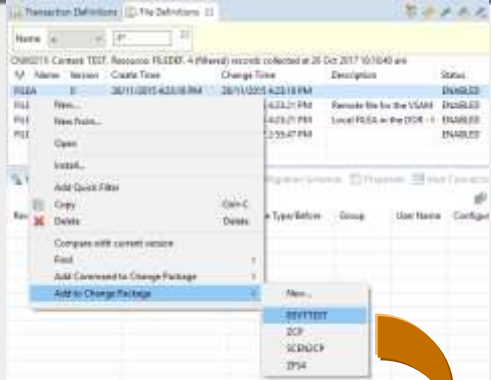
Name	Versi...	Create Time	Change Time	Change User ID	Description	Status
LGICDB01	0	Dec 13, 2011 12:20:45 PM	Dec 13, 2011 12:20:45 PM	DNETS14		✓ ENABLED
LGICUS01	0	Dec 13, 2011 12:20:45 PM	Dec 13, 2011 12:20:45 PM	DNETS14		✓ ENABLED
LGICVS01	0	Dec 13, 2011 12:20:45 PM	Dec 13, 2011 12:20:45 PM	DNETS14		✓ ENABLED
LGIPDB01	0	Dec 13, 2011 12:20:45 PM	Dec 13, 2011 12:20:45 PM	DNETS14		✓ ENABLED
LGIPOL01	0	Dec 13, 2011 12:20:45 PM	Dec 13, 2011 12:20:45 PM	DNETS14		✓ ENABLED
LGIPVS01	0	Dec 13, 2011 12:20:45 PM	Dec 13, 2011 12:20:45 PM	DNETS14		✓ ENABLED
LGSETUP	0	Dec 13, 2011 12:20:45 PM	Dec 13, 2011 12:20:45 PM	DNETS14	Initial setup of TSQueue	✓ ENABLED
LGSTSQ	0	Dec 13, 2011 12:20:46 PM	Dec 13, 2011 12:20:46 PM	DNETS14	Message output to TSQueues	✓ ENABLED
LGTESTC1	0	Dec 13, 2011 12:20:45 PM	Dec 13, 2011 12:20:45 PM	DNETS14	Solution Customer Menu	✓ ENABLED
LGTESTP1	0	Dec 13, 2011 12:20:45 PM	Dec 13, 2011 12:20:45 PM	DNETS14	Solution Motor Policy Menu	✓ ENABLED
LGTESTP2	0	Dec 13, 2011 12:20:45 PM	Dec 13, 2011 12:20:45 PM	DNETS14	Solution Life Policy Menu	✓ ENABLED
LGTESTP3	0	Dec 13, 2011 12:20:45 PM	Dec 13, 2011 12:20:45 PM	DNETS14	Solution House Policy Menu	✓ ENABLED
LGTESTP4	0	Dec 13, 2011 12:20:45 PM	Dec 13, 2011 12:20:45 PM	DNETS14	Solution Commercial Policy Menu	✓ ENABLED
LGUPDB01	0	Dec 13, 2011 12:20:45 PM	Dec 13, 2011 12:20:45 PM	DNETS14		✓ ENABLED
LGUPOL01	0	Dec 13, 2011 12:20:45 PM	Dec 13, 2011 12:20:45 PM	DNETS14		✓ ENABLED
LGUPVS01	0	Dec 13, 2011 12:20:45 PM	Dec 13, 2011 12:20:45 PM	DNETS14		✓ ENABLED
SSMAP	0	Dec 13, 2011 12:20:45 PM	Dec 13, 2011 12:20:45 PM	DNETS14	BMS Map	✓ ENABLED

# CICS CM – CICS RESOURCE DEFINITION LIFECYCLE MANAGEMENT


**Benefits**

- Eliminate manual and error prone processes
- Full audit trail and backout capability
- Integrate with source code change management processes

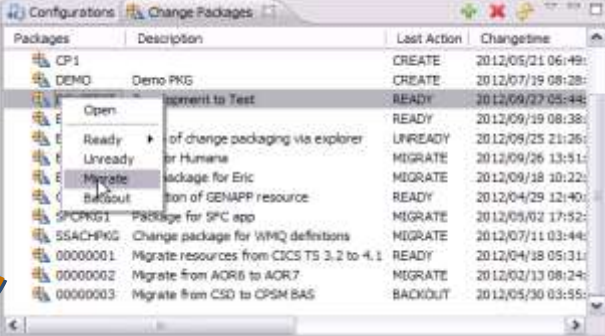
**Change package created for resources in Development repository**



**Install definitions in CICS regions on test environment**



**Change package migrated to Test environment**

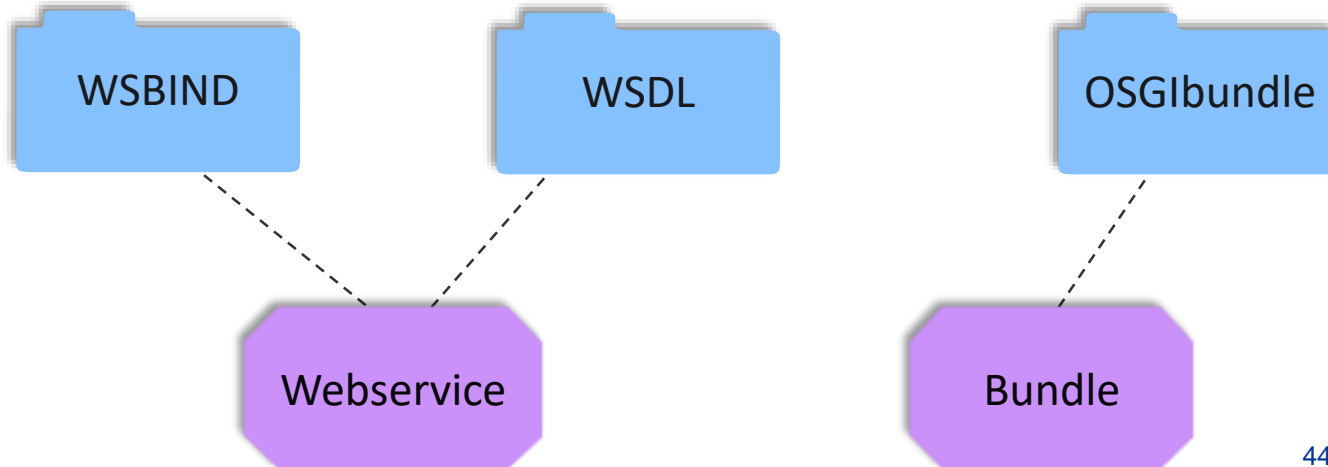


Package	Description	Last Action	Changetime
CP1		CREATE	2012/05/21 06:49:
DEMO	Demo PKG	CREATE	2012/07/19 08:28:
Open	Open	READY	2012/09/27 05:48:
Ready	of change packaging via explorer	READY	2012/09/19 08:38:
Unready	or Humans	UNREADY	2012/09/25 21:26:
Migrate	package for Eric	MIGRATE	2012/09/18 10:22:
Backout	tion of GENAPP resource	READY	2012/04/29 12:40:
SFCPKG1	Package for SFC app	MIGRATE	2012/05/02 17:52:
SSACHNG1	Change package for WMQ definitions	MIGRATE	2012/07/11 03:44:
00000001	Migrate resources from CICS TS 3.2 to 4.1	READY	2012/04/18 05:31:
00000002	Migrate from ACR6 to ACR7	MIGRATE	2012/02/13 08:24:
00000003	Migrate from CSD to CPSM BAS	BACKOUT	2012/05/30 03:55:

# ZFS SUPPORT

## Problem

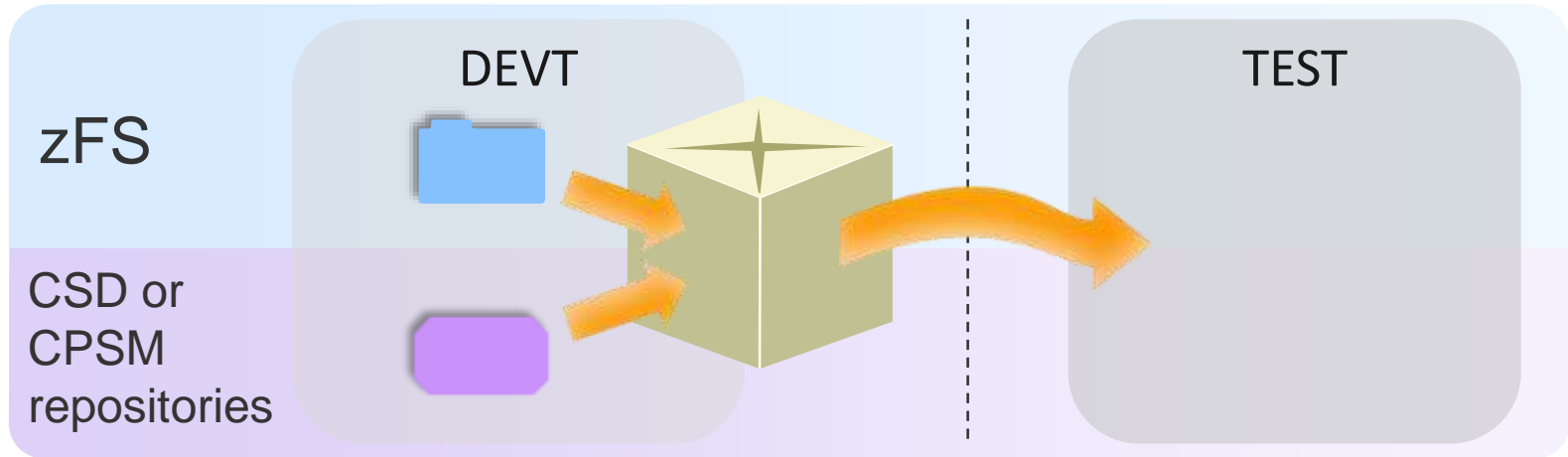
- Some CICS resource definitions have related zFS files, for example bundles and WebService WSDL files.
- **I need configuration control over these too.**



# ZFS SUPPORT

## Solution

- Define 'ZFSFILE' resource definitions that refer to zFS files or directories. Then migrate or copy the ZFSFILES to the desired CICS configuration along with the related CICS resources.



# ZFS SUPPORT - CICS CONFIGURATIONS

```

Edit                                     CICS Configuration
Command ==> _____

Name . . . . : ZTEST
Description . . A source directory where zFS files are stored

Specify the type of Configuration
4  1. CICSPlex SM context . . _____
   2. CSD file . . . . . _____
   3. Export-import file . . _____
   4. zFS directory . . . . . /ccv000/test/ +>

Choose a view for related options
5  1. Transform      2. CSD      3. CSD remote    4. Export      5. zFS
   variables        options    connections  options      options

Define zFS processing options
Backup method . . . . DIR + DIR or NONE
Backup count . . . . 9      0, 3-9
Backup directory . . /ccv000/backup/ +>
  
```

# ZFS SUPPORT - ZFSFILE RESOURCE DEFINITIONS

```

Edit                                     ZFSFILE
Command ==> _____

Name . . . . : ZWSDL1
Location . . : /u/products/ccv000/wabc/devt/
Change Date . :
Description . : This resource definition ZWSDL1, refers to file first.wsd1
                                                    More: +

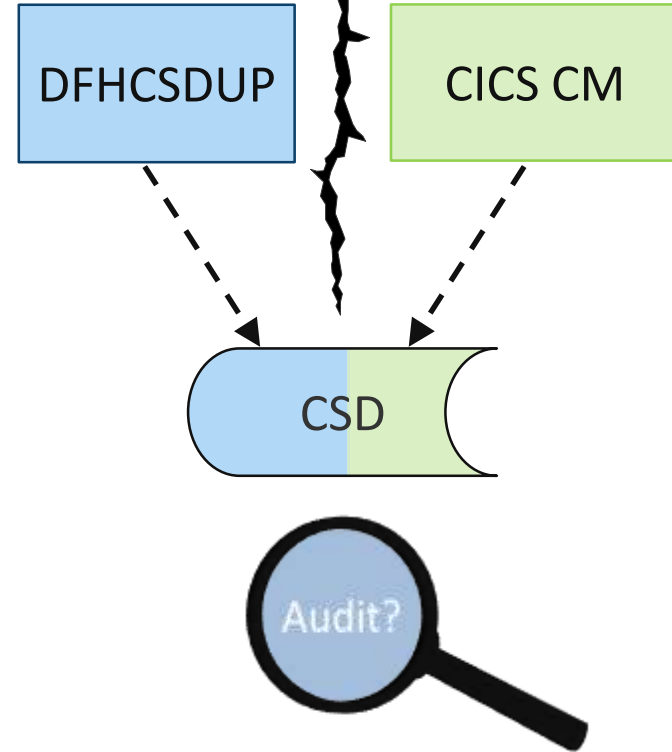
Attributes                                Description
RelativePath . first.wsd1 _____ +>
. . _____
. . _____
. . _____
. . _____

Information Attributes
Data1 . . . . . _____ Data1 (CICS resource name)
Data2 . . . . . _____ Data2 (CICS resource type)
Data3 . . . . . _____ Data3 (CICS resource group)
Data4 . . . . . _____ Data4 (CICS resource attribute)
  
```

# DFHCSDUP AUDIT COLLECTION

## Problem

- Sometimes, we need to make emergency changes to CICS resources using DFHCSDUP. These changes aren't tracked by CICS CM, so there is nowhere where you can see an audit record of both the CICS CM and the DFHCSDUP changes.
- **I need to track all changes to the CSD.**

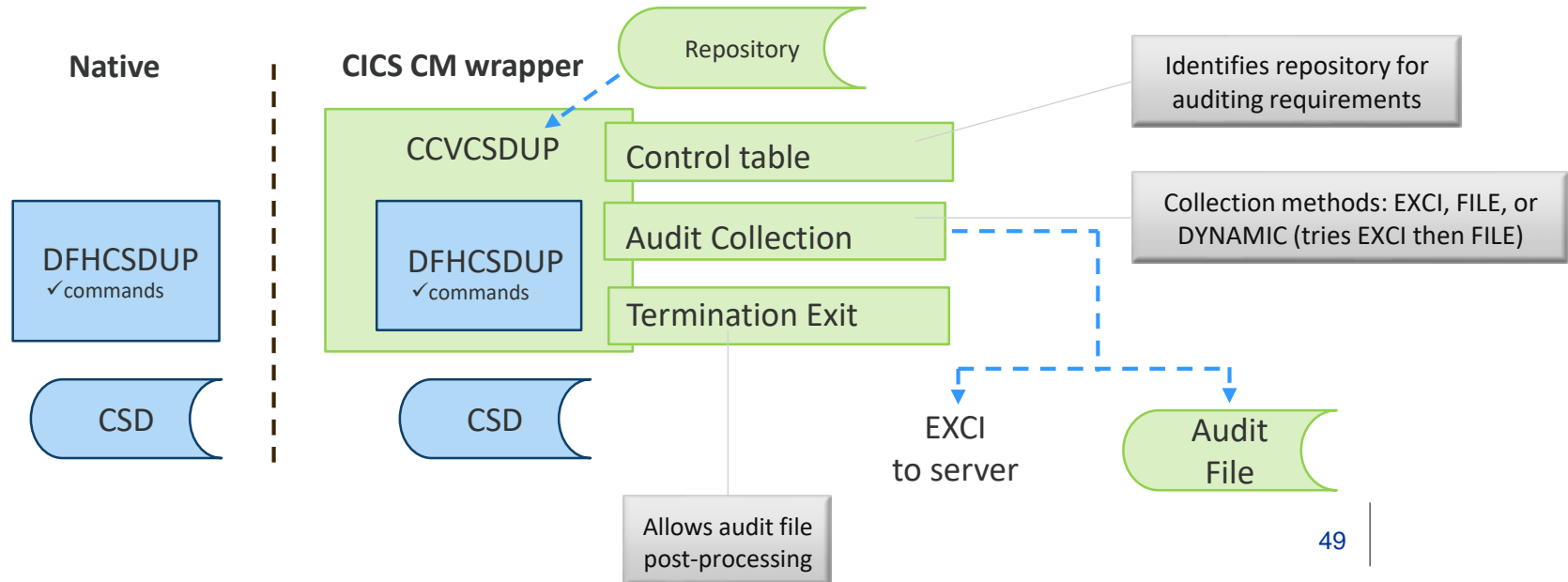




# DFHCSDUP AUDIT COLLECTION

## Solution

- Collect DFHCSDUP audit records with no changes to existing interfaces or to existing JCL DFHCSDUP jobs



# BETTER SUPPORT FOR DFHCSDUP EXPORT FILES

## Previously...

- CICS CM is not available on a remote system. I can already use a DFHCSDUP-format export file to get resources to that system, but I can't export commands to that file to do tasks like deleting resources from a group.

## Now...

- You can now write change package commands to a DFHCSDUP-format export file.
- Therefore you can take advantage of the benefits of CICS CM even when a few of your systems are not running the CICS CM server.

# SUMMARY

- Why CICS CM is useful
- Editing CSD files
- Working with CSD files and CPSM BAS repository
- Migrating changes between environments
- Delegating responsibilities
- Changes across LPAR boundaries
- Backout
- Audit compliance
- Cleanup and analysis
- Comparisons and exception analysis
- Cold start analysis
- zFS support
- DFHCSDUP audit collection

**Thank You for Attending!**  
**Please remember to complete your evaluation of this session**

**Efficient management of online resources using  
CICS Configuration Manager**

