

# E41

## The New Face of IMS: Integration into DB2 Control Center

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IMS User Centered Design



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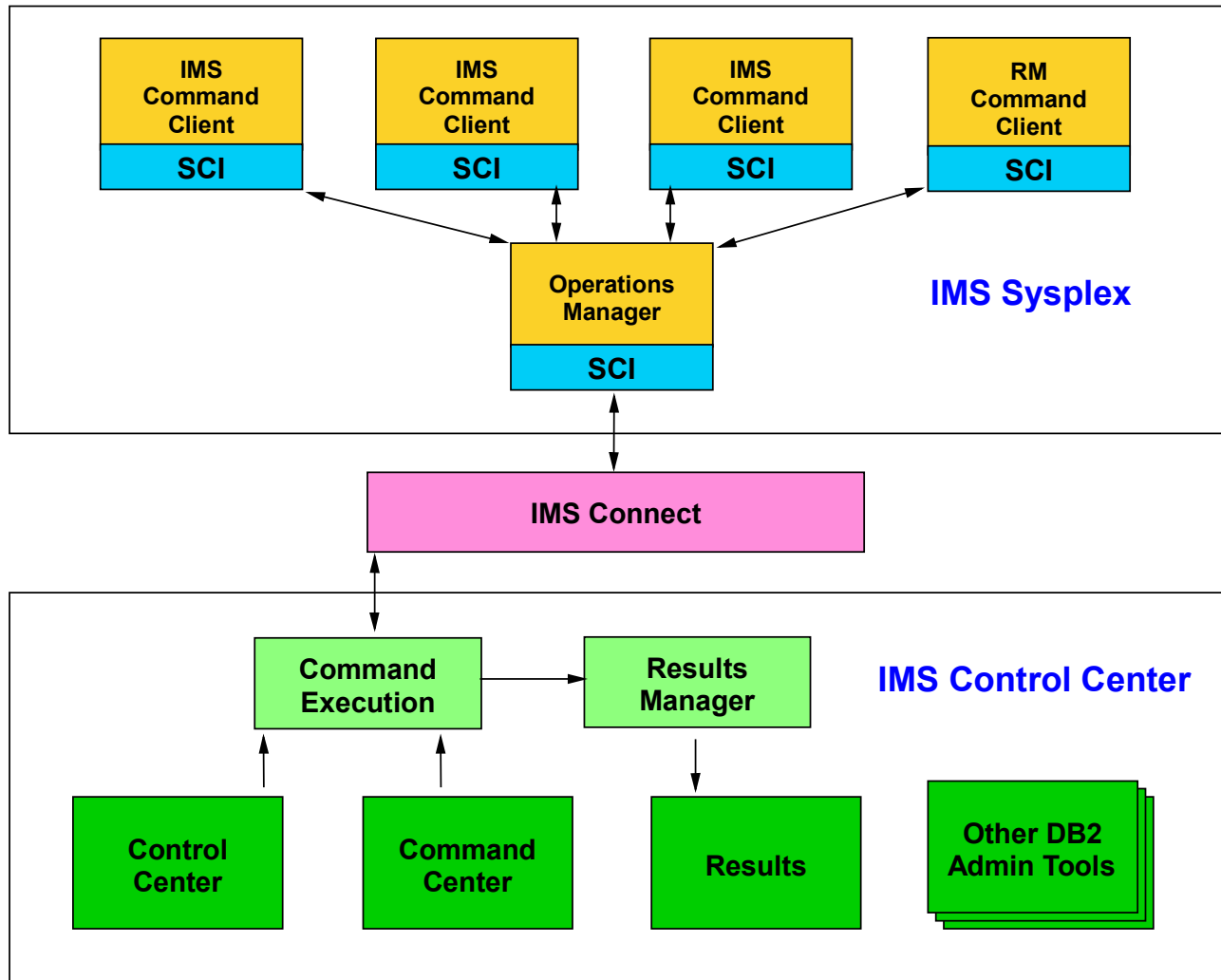
# Goals of IMS Control Center

- Help to simplify the management of IMSplex operations and problem determination
- Provide an easy to use GUI for the new V8 Single-Image Operations Manager
- Provide a platform for modernization of the IMS systems management user interface

# Context of IMS Control Center

- Within the scope of the resource types addressed in the V8 systems management
- Guided by the user demand for more consistency and integration of user interfaces
- DB2 Control Center as the IBM solution for data management ease of use

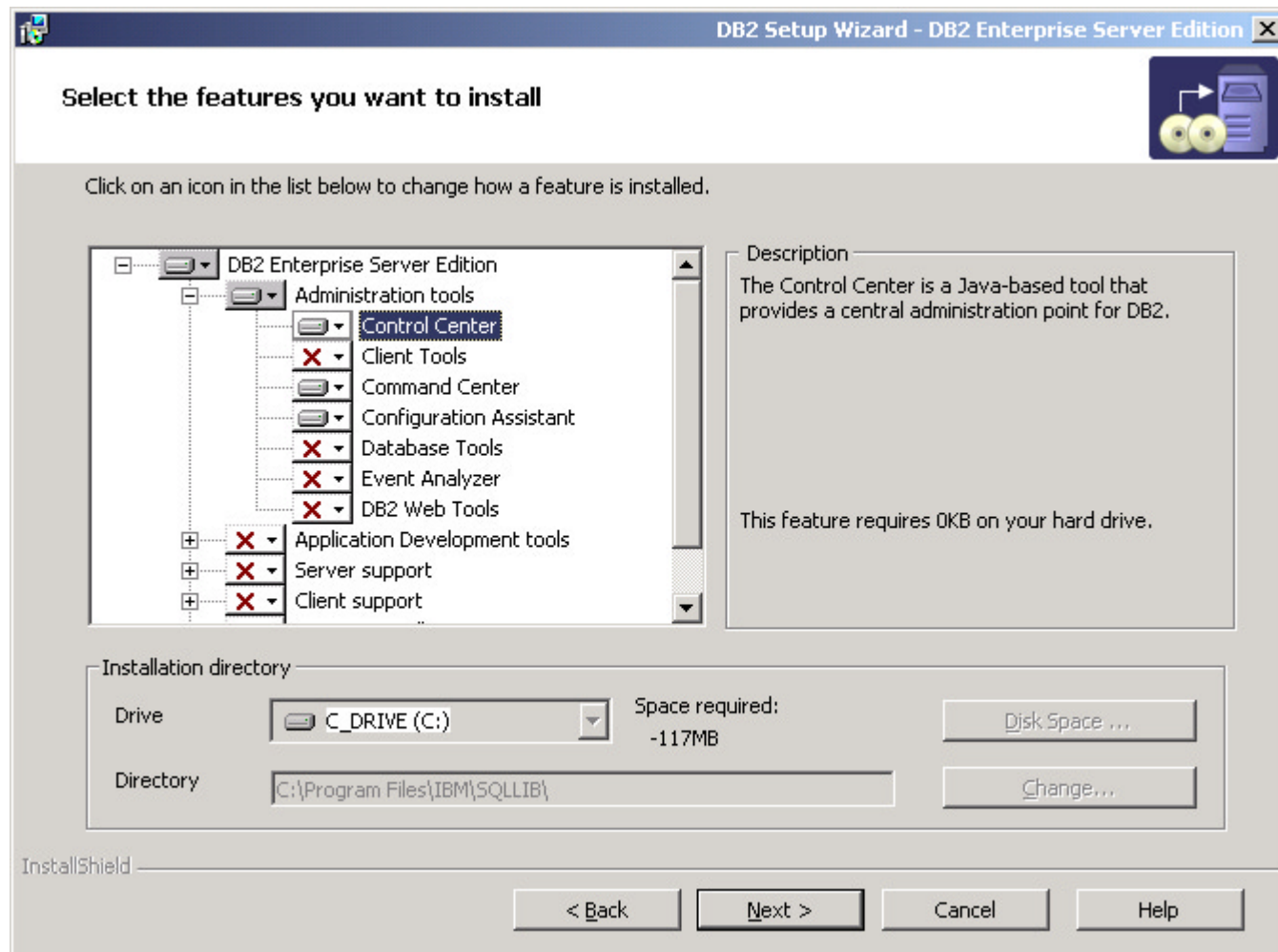
# IMS Control Center Overview



# IMS Control Center Up and Running

- Install IMS V8
- Configure V8 Operations Manager (OM)
- Install IMS Connect
  - APAR PQ62379 to precondition OM support
  - APAR ?? to enable support when IMS CC ships
  - Two statements in the configuration file
- Install DB2 V8 GUI Administration Tools
  - No DB2 engine installation required
  - Part of any DB2 license
  - DB2 for z/OS V7 is packaged with DB2 Connect includes an upgrade to the V8 GUI Admin Tools

# DB2 Control Center Installation



# Control Center – DB2 System Tree

- Manage DB2 workstation systems / instances
- Manage DB2 for z/OS subsystems
- Create databases and related objects
- Explorer-style tree structure for navigation
- Wizards and simple dialogs for ease of use
- Launch the other GUI admin tools
  - Command Center
  - Health Center
  - Event Analyzer
  - Task Center and Journal
  - Data Warehouse Center
  - Information Catalog Center
  - Development Center
  - Replication Center

# Control Center – DB2 System Tree

The screenshot displays the IBM Control Center interface. On the left, a tree view shows the hierarchy: Systems > MCBRIDE > Instances > DB2 > Databases > SAMPLE > Tables. The 'Tables' folder is selected. On the right, a table view titled 'MCBRIDE - DB2 - SAMPLE - Tables' displays a list of tables. The table has columns for Name, Schema, Type, Table space, and Index ta. The list contains 15 tables, all with Schema 'MCBRIDE' and Type 'T'. The status bar at the bottom indicates '115 of 115 items displayed'.

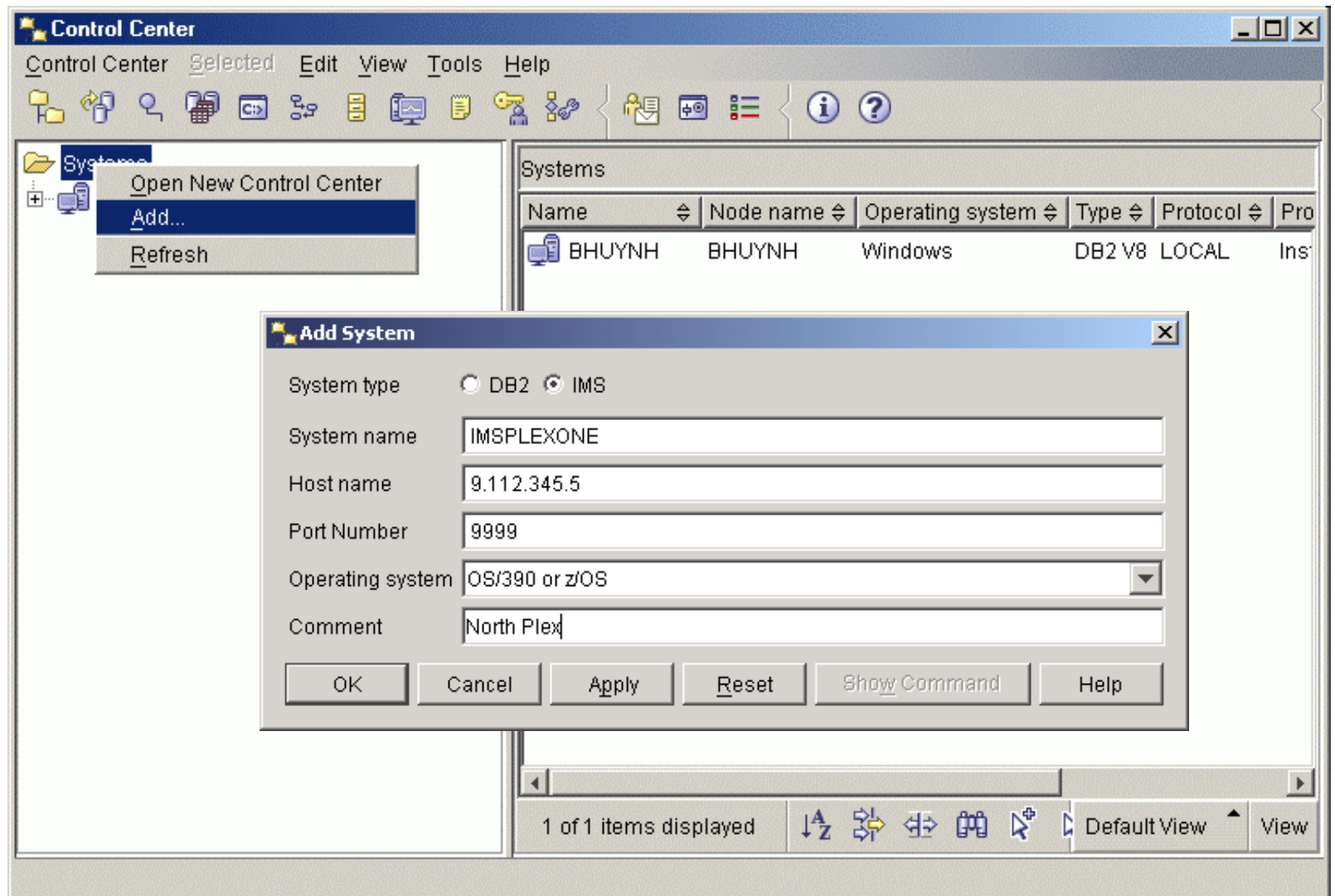
Name	Schema	Type	Table space	Index ta
ADVISE_AST	MCBRIDE	T	USERSPACE1	
ADVISE_IN...	MCBRIDE	T	USERSPACE1	
ADVISE_W...	MCBRIDE	T	USERSPACE1	
CL_SCHED	MCBRIDE	T	USERSPACE1	
DEPARTME...	MCBRIDE	T	USERSPACE1	
EMP_ACT	MCBRIDE	T	USERSPACE1	
EMP_PHOTO	MCBRIDE	T	USERSPACE1	
EMP_RESU...	MCBRIDE	T	USERSPACE1	
EMPLOYEE	MCBRIDE	T	USERSPACE1	
EXPLAIN_A...	MCBRIDE	T	USERSPACE1	
EXPLAIN_I...	MCBRIDE	T	USERSPACE1	
EXPLAIN_O	MCBRIDE	T	USERSPACE1	



# Control Center – Add IMSplex System

- Add an IMSplex from a pop-up menu of the Systems root of the Control Center tree
- Specify the IMSplex name
- Specify the z/OS host IP address
- Specify the port where IMS Connect is listening

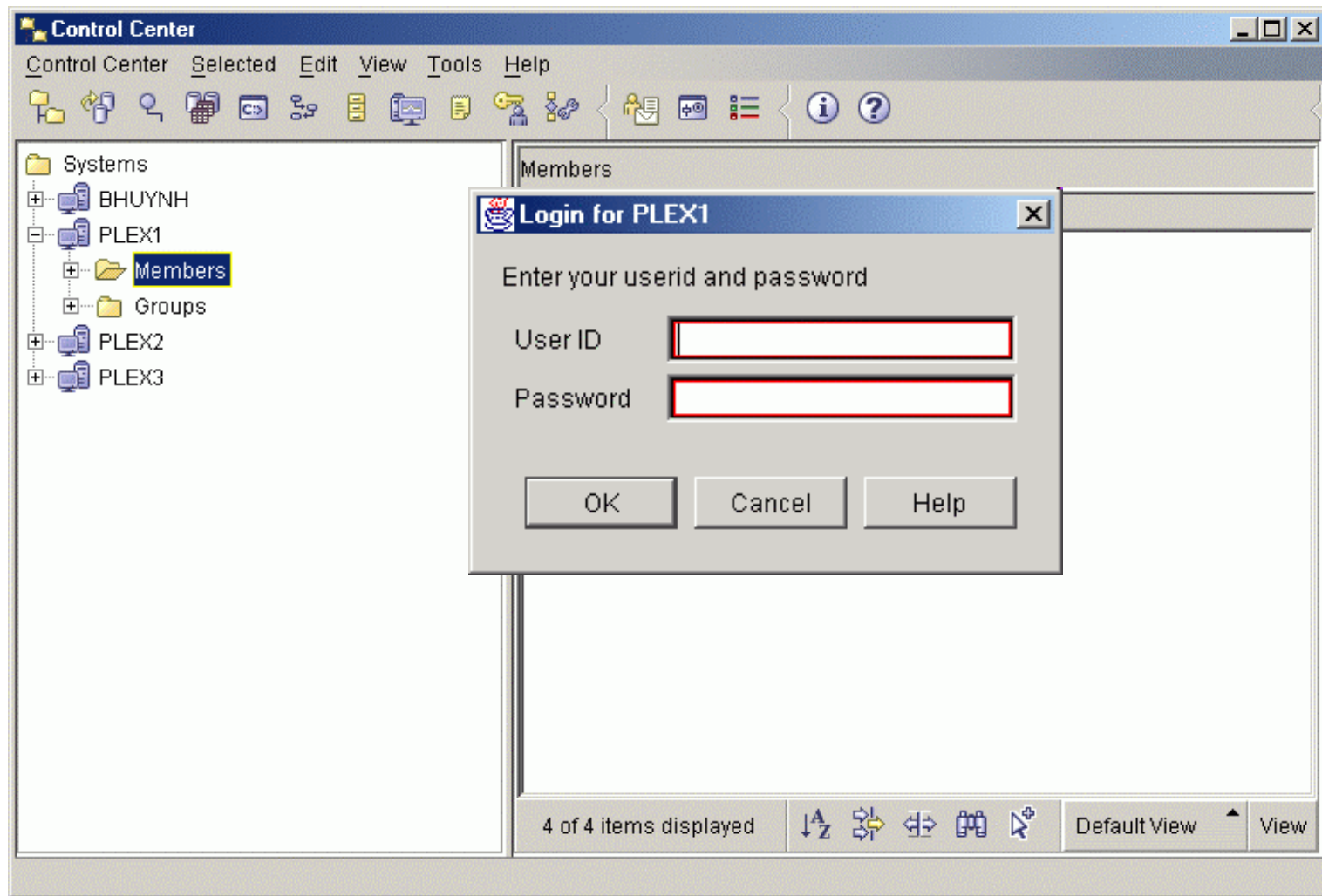
# Control Center – Add IMSplex System



# IMSpdex Login

- Security provided on z/OS by RACF or equivalent security tool
- User ID and Password entered on client
- Login required for every session before active members become visible

# Control Center – IMSplex Login



# IMSpLex Tree

- Lists the IMSpLexes you have added
- Lists active IMSpLex command client members (in V8, IMS and RM type members)
- Lists resource types for each member
  
- During a session, the list of members can be updated using Refresh from the IMSpLex menu
- All IMSpLex members can be listed using Query... from the IMSpLex pop-up menu

# Control Center – IMSplex and Members

The screenshot displays the IBM Control Center interface. The left pane shows a tree view of the system structure under 'Systems' > 'BHUYNH' > 'PLEX1' > 'Members'. The 'Members' folder is selected and highlighted. The right pane shows a table of members with columns for Name, Type, Subtype, and Version.

Name	Type	Subtype	Version
All_Members			
IMS3	IMS	DBDC	00080100
IMS2	IMS	DBDC	00080100
SYS3	IMS	DBDC	00080100

4 of 4 items displayed

# IMSpIex Member Groups

- Named groups for any subset of members
- All\_Members group provided as the single-point-of-control (SPOC)
- A command sent to a group is sent to all members of that group
- OM gathers all member responses before returning results to the Control Center



# Control Center – IMSplex Member Groups

The screenshot shows the IBM Control Center interface. The main window has a menu bar (Control Center, Selected, Edit, View, Tools, Help) and a toolbar. The left pane shows a tree view of systems: Systems > BHUYNH > PLEX1 > Members > All\_Members > Language Environment, Online Change, Resource Structure, Transaction; IMS3; IMS2; SYS3; Groups; South > Language Environment, Online Change, Resource Structure, Transaction. The 'Groups' pane shows a table with columns Name, Members, and Comment. A group named 'South' has members 'IMS3,IMS2'. An 'Add Group' dialog is open, showing 'Group Name' as 'North'. The 'Available' list contains 'SYS3', and the 'Selected' list contains 'IMS2' and 'IMS3'. The 'Comment' field contains 'Northern Region Production Systems'. Buttons for OK, Cancel, Apply, Reset, and Help are at the bottom.

Name	Members	Comment
South	IMS3,IMS2	

**Add Group**

Group Name: North

Available: SYS3

Selected: IMS2, IMS3

Comment: Northern Region Production Systems

Buttons: OK, Cancel, Apply, Reset, Help



# New IMSplex Commands

- Query IMSplex
- Query Member
- Query LE
- Update LE
- Delete LE
- Initiate Online Change
- Query Online Change
- Terminate Online Change
- Query Structure
- Query Tran
- Update Tran

# Control Center – New IMSplex Commands

The screenshot displays the IBM Control Center interface. The left pane shows a tree view of systems: Systems > BHUYNH > PLEX1 > Members > All\_Members > Transaction. A context menu is open over the Transaction folder, showing 'Query...' and 'Update...' options. The right pane shows a table of Members with columns: Name, Type, Subtype, and Version. The table contains three rows: All\_Members, IMS3, IMS2, and SYS3. The bottom status bar indicates '4 of 4 items displayed' and includes navigation icons and a 'View' button.

Name	Type	Subtype	Version
All_Members			
IMS3	IMS	DBDC	00080100
IMS2	IMS	DBDC	00080100
SYS3	IMS	DBDC	00080100

# New IMSplex Command Wizards

- Wizards for each of the new commands
- Query wizards displayed automatically when clicking on a resource type folder
- Launched from pop-up menus in Control Center or objects in Results window
- Provide step-by-step prompts and instructions
- Previous names remembered in history list

# New IMSplex Command Wizards

The screenshot displays the IBM Control Center interface. On the left, a tree view shows the system hierarchy: Systems > PLEX1 > Members > Transaction. A context menu is open over the 'Transaction' folder, with 'Query...' selected. The main window is the 'Query Transaction Wizard' dialog box, which is currently on the 'Name' step. The dialog title is 'Query Transaction Wizard'. The main heading is 'Which transactions do you want to see?'. Below this, there is a 'Task overview' link and a paragraph of instructions: 'Use the Query Transaction wizard to list the transactions that you want displayed. [Task overview](#). Type a transaction name in the Transaction name field and click Add, or press Enter, to add it to the Selected list. You can also select previous transactions from the History list and you can use the wildcard character(\*) to display all transactions or to filter the transactions. For example, specifying ABC\* displays all transactions starting with the characters ABC. The command keyword associated with your input on this page is NAME.' Below the text, there is a 'Transaction names' input field with an 'Add' button. To the left is a 'History' list containing: TRANC, TRANB, TRANA, TRAN\*, TRAN3, TRAN2, and TRAN1. To the right is a 'Selected' list containing: SKS\*. Between the lists are navigation buttons: '>', '>>', '<', and '<<'. On the right side of the dialog, there is an illustration of a magnifying glass over a box containing several green items. At the bottom of the dialog are 'Next >', 'Finish', and 'Cancel' buttons.

**Control Center**  
Control Center Selected Edit View Tools Help

**Query Transaction Wizard**

1. Name  
2. Select  
3. Class  
4. Show  
5. Summary

### Which transactions do you want to see?

Use the Query Transaction wizard to list the transactions that you want displayed. [Task overview](#).

Type a transaction name in the Transaction name field and click Add, or press Enter, to add it to the Selected list. You can also select previous transactions from the History list and you can use the wildcard character(\*) to display all transactions or to filter the transactions. For example, specifying ABC\* displays all transactions starting with the characters ABC.

The command keyword associated with your input on this page is NAME.

Transaction names  
 Add

History  
TRANC  
TRANB  
TRANA  
TRAN\*  
TRAN3  
TRAN2  
TRAN1

Selected  
SKS\*

Next > Finish Cancel

# Wizard Help for Command Options

- Select command options from lists
- Help pop-ups for each option
- Option keywords listed for learning commands



# Wizards – Help Selecting Command Options

**Query Transaction Wizard**

1. Name  
2. Select  
3. Status  
4. Show  
5. Summary

## Which transaction statuses do you want to see?

Click the LIST radio button if you want to select the transaction status types you want to query.

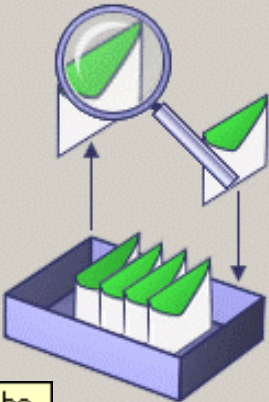
The command keyword associated with your input on this page is STATUS.

If you are ready to issue the command, click Finish.

DEFAULT - All

LIST - Select from list

- BAL - Balancing
- CONV - Conversational
- CPIC - CPI-C
- DYN - Dynamic
- FPE - Fast Path exclusive
- FPP - Fast Path potential
- IOPREV - I/O previous
- LCK - Lock
- QERR - Queue error
- RESP - Response mode
- RMT - Remote
- SUSPE - Suspended
- STOQ - Stopped for queue
- STOSCHD - Stopped for scheduling



Transaction is stopped for scheduling. This might be due to a previous UPDATE TRAN, /PSTOP TRAN or /STO TRAN command or an application abend.

◀ Back   Next ▶   Finish   Cancel

# Wizard Generated Command

- Command generated by user selections is displayed on the Summary page
- IMSplex and Route are also displayed
- Finish button sends command to OM through IMS Connect

# Wizards – Generated Command

**Query Transaction Wizard**

1. Name
2. Select
3. Status
4. Show
5. Summary

## Do you want to query your transactions now?

Review the command syntax in the Command field. Click Finish to perform all specified actions and close the wizard, when all required fields are complete. If you opened your wizard by right-clicking the resource member in the Control Center tree, your command results, if error-free, appear in the right-hand pane of the Control Center. If errors result from issuing your command, or if you opened the wizard by clicking on the resource member in the Control Center tree, your results, with the errors, are returned to you in a separate window.

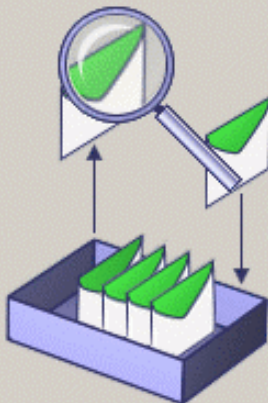
Click Back to go to the previous wizard page. Click Cancel to cancel any changes and close the wizard.

IMS sysplex:

Route:

Command: 

```
QUERY TRAN
      NAME(SKS*)
      STATUS(STOQ, STOSCHD )
```





# Displayed Resources in Control Center

- Resources displayed as the contents of the resource type folder
- Resources displayed in a tabular format
- Resources ordered by member as they were returned by OM
- Columns can be reordered by drag and drop or using the customize columns dialog
- Find enables search for specific values

# Control Center – Displayed Transactions

The screenshot shows the IBM Control Center application window. The title bar reads "Control Center". The menu bar includes "Control Center", "Selected", "Edit", "View", "Tools", and "Help". The toolbar contains various icons for navigation and actions. On the left, a tree view shows the system hierarchy: Systems > BHUYNH > PLEX1 > Members > Transaction. The main area displays a table of transactions with the following columns: Trancode, MbrName, CC, PSBname, LCIs, LQCnt, LLCT, and LPLC. The table contains 16 rows of data, showing transactions for IMS3 and IMS2 members. The status bar at the bottom indicates "27 of 27 items displayed" and includes navigation icons and a "View" button.

Trancode	MbrName	CC	PSBname	LCIs	LQCnt	LLCT	LPLC
SKS3	IMS3	0	STLDDLT3	3	0	65535	65535
SKS6	IMS3	0	STLDDLT6	6	0	65535	65535
SKS4	IMS3	0	STLDDLT4	4	0	65535	65535
SKS7	IMS3	0	STLDDLT7	7	0	65535	65535
SKS1	IMS3	0	STLDDLT1	1	0	65535	65535
SKS2	IMS3	0	STLDDLT2	2	0	65535	65535
SKS5	IMS3	0	STLDDLT5	5	0	65535	65535
SKS8	IMS3	0	STLDDLT8	8	0	65535	65535
SKS9	IMS3	0	STLDDLT9	9	0	65535	65535
SKS3	IMS2	0	STLDDLT3	3	0	65535	65535
SKS6	IMS2	0	STLDDLT6	6	0	65535	65535
SKS4	IMS2	0	STLDDLT4	4	0	65535	65535
SKS7	IMS2	0	STLDDLT7	7	0	65535	65535
SKS1	IMS2	0	STLDDLT1	1	0	65535	65535

# Command Results Sorting

- Resources can be sorted on any column by clicking on the column header
- Click again to reverse ascending/descending
- Sort dialog available from view toolbar enables multi-level sorting and grouping

# Control Center – Results Sorting

The screenshot displays the IBM Control Center interface. On the left is a tree view showing a hierarchy of systems: Systems > BHUYNH > PLEX1 > Members > All\_Members > Language Environment > Online Change > Resource > Transact. Other folders include IMS3, IMS2, SYS3, and Groups.

The main window shows a table titled "Transaction" with the following data:

Trancode	MbrName	CC	PSBname	LCIs	LQCnt	LLCT	LPLC
SKS1	IMS2	0	STLDDLT1	1	0	65535	65535
SKS1	IMS3	0	STLDDLT1	1	0	65535	65535
SKS1	SYS3	0	STLDDLT1	1	0	65535	65535
SKS2	IMS2	0	STLDDLT2	2	0	65535	65535

A "Sort" dialog box is open in the foreground, showing the configuration for sorting the results. The "Available columns" list includes MbrName, CC, PSBname, LCIs, LLCT, LPLCT, LCPRI, LNPRI, LLPRI, LSegSz, and LSegNo. The "Sort columns" list shows "Trancode" selected with an upward arrow (Ascending) and "LQCnt" selected with a downward arrow (Descending). The "Descending" radio button is selected.

At the bottom of the main window, it indicates "27 of 27 items displayed" and provides navigation icons and a "View" button.

# Command Results Filtering

- Filter dialog available from view toolbar
- Filter resources on any columns
- All resource information is saved locally, allows applying any number of successive filters to study data



# Control Center – Results Filtering

The screenshot displays the IBM Control Center interface. On the left, a tree view shows the hierarchy: Systems > PLEX1 > Members > Transaction. The main pane shows a list of transactions with columns for Trancode and LPLC. A 'Filter' dialog box is open, allowing users to define search criteria for the transaction list.

Column	Comparison	Values (separated by a blank)
Trancode	In	
And MbrName	In	
And CC	In	
And PSBname	In	
And LCIs	In	
And LQCnt	Equal to	10
And LLCT	In	
And LPLCT	In	
And LCPRI	In	
And LNPRI	In	
And LLPRI	In	
And LSegSz	In	
And LSegNo	In	
And LParLim	In	
And RegCnt	In	
And LMaxRgn	In	
And LclStat	In	

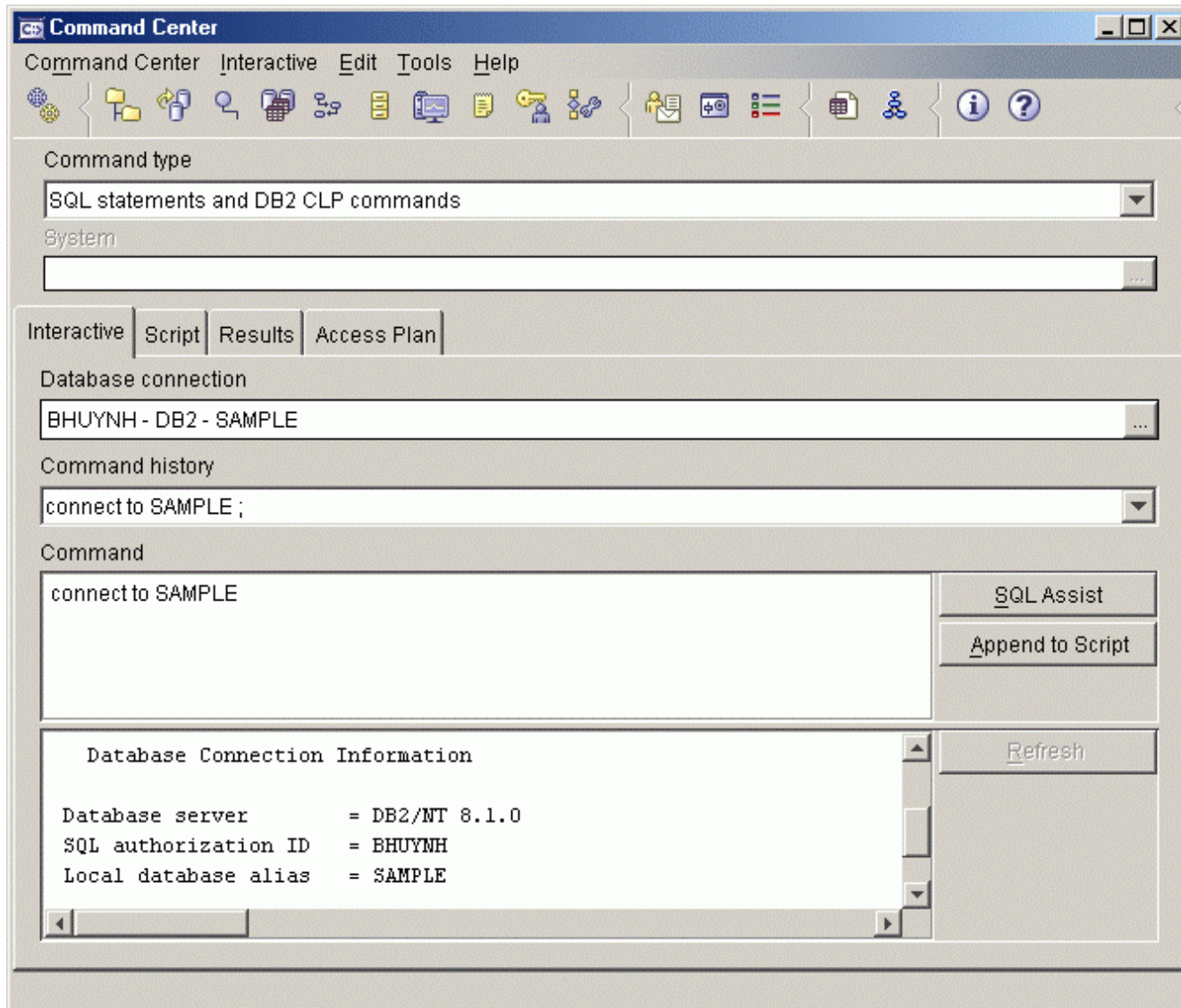
Enable filter

Buttons: OK, Cancel, Help

# Command Center

- Command types
  - SQL statements and DB2 CLP commands
  - IMSplex and IMS classic commands
  - Host commands
- Command and response log
- Command script  
(not currently supported for IMS)

# Command Center – DB2 Commands

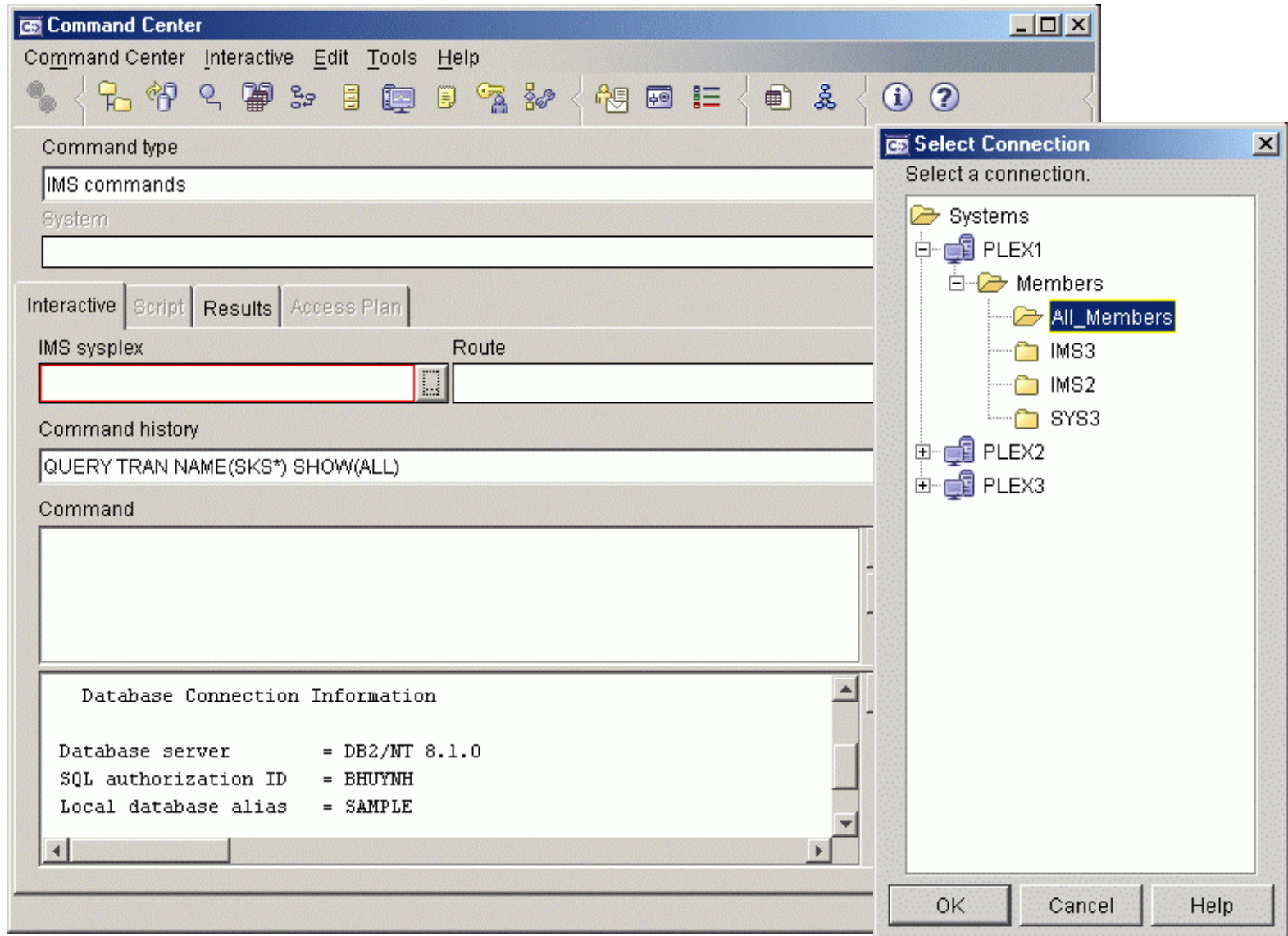




# IMS Commands

- Select the IMS commands type
- Select IMSplex connection
- Select member route
- Type command or select from history
- Commands executed asynchronously – you do not need to wait for a response before executing the next command

# Command Center – IMS Commands



# Member Route

- Route commands to selected members
  - All\_members
  - Individual members
  - Defined groups

# Command Center – Member Route

The screenshot displays the IBM Command Center application window. The main window has a menu bar with 'Command Center', 'Interactive', 'Edit', 'Tools', and 'Help'. Below the menu is a toolbar with various icons. The 'Command type' dropdown is set to 'IMS commands'. The 'System' field is empty. The 'Interactive' tab is selected, with sub-tabs for 'Script', 'Results', and 'Access Plan'. The 'IMS sysplex' field is empty, and the 'Route' field is also empty. The 'Command history' shows 'QUERY TRAN NAME(SKS\*) SHOW(ALL)'. The 'Command' field is empty. The 'Database Connection Information' section shows:

```
Database server      = DB2/NT 8.1
SQL authorization ID = BHUYNH
Local database alias = SAMPLE
```

The 'Select Route' dialog box is open, titled 'Select Route'. It contains the text: 'Choose the IMSplex members to which you want to send commands.' Below this text are two list boxes: 'Available' and 'Selected'. The 'Available' list contains 'IMS3', 'IMS2', 'SYS3', and 'South'. The 'Selected' list contains 'All\_Members'. Between the lists are four arrow buttons: a single right arrow, a double right arrow, a single left arrow, and a double left arrow. At the bottom of the dialog are 'OK', 'Cancel', and 'Help' buttons.

# Command History

- Recent commands saved and selectable from the Command history drop-down list
- User can specify the number of commands saved in the Command Center options

# Command Center – IMS Command History

The screenshot displays the IBM Command Center application window. The title bar reads "Command Center". The menu bar includes "Command Center", "Interactive", "Edit", "Tools", and "Help". The toolbar contains various icons for navigation and actions. The main interface is divided into several sections:

- Command type:** A dropdown menu set to "IMS commands".
- System:** An empty text input field.
- Navigation tabs:** "Interactive" (selected), "Script", "Results", and "Access Plan".
- IMS sysplex:** A text input field containing "PLEX1".
- Route:** A dropdown menu set to "All\_Members".
- Command history:** A list of commands with the following entries:
  - QUERY TRAN NAME(SKS\*) SHOW(PSB, CLASS, STATUS)
  - QUERY TRAN NAME(SKS\*) SHOW(PSB, CLASS, STATUS) (highlighted)
  - UPDATE TRAN NAME(SKS1) START(Q)
  - DIS ACT
  - query tran name(sks\*) show(all)
- Output area:** A text area displaying the results of the selected command:

```
QUERY TRAN NAME(SKS*) SHOW(PSB, CLASS, STATUS)
RC = 00000000
RSM = 00000000
```
- Refresh button:** A button labeled "Refresh" located to the right of the output area.



# IMS Command Results

- Results tab in the Command Center
- By default, appears automatically when results are available
- Shows IMSplex, command master, and route
- Same sorting, grouping, filtering, and column customizing as in the Control Center

# Command Center – Results Tab

The screenshot displays the IBM Command Center interface, specifically the Results Tab. The window title is "Command Center". The menu bar includes "Command Center", "Interactive", "Edit", "Tools", and "Help". The toolbar contains various icons for navigation and actions. The "Command type" dropdown is set to "IMS commands". The "System" field is empty. The "Results history" dropdown shows the command "QUERY TRAN NAME(SKS\*) SHOW(ALL)". The "IMS sysplex" field is "PLEX1", the "Command master" field is "IMS3", and the "Route" field is "ALL\_MEMBERS". The "Results" tab is active, showing a table with the following data:

Trancode	MbrName	CC	PSBname	LCIs	LQCnt
SKS3	IMS3	0	STLDDLT3	3	0
SKS6	IMS3	0	STLDDLT6	6	0
SKS4	IMS3	0	STLDDLT4	4	0
SKS7	IMS3	0	STLDDLT7	7	0
SKS1	IMS3	0	STLDDLT1	1	0
SKS2	IMS3	0	STLDDLT2	2	0
SKS5	IMS3	0	STLDDLT5	5	0
SKS8	IMS3	0	STLDDLT8	8	0

At the bottom of the table, it indicates "27 of 27 items displayed". The "Default View" button is selected. A "Display Results in New Window" button is located at the bottom of the interface.



# Classic Command Results

- Scrollable text box showing the same command response as a terminal

# Command Center – Classic Command Results

The screenshot shows the IBM Command Center interface. The title bar reads "Command Center". The menu bar includes "Command Center", "Interactive", "Edit", "Tools", and "Help". The toolbar contains various icons for navigation and actions. The "Command type" dropdown is set to "IMS commands". The "System" field is empty. The "Results" tab is selected, and the "Results history" dropdown shows "DIS ACT". The "IMS sysplex" field contains "PLEX1", the "Command master" field contains "IMS3", and the "Route" field contains "ALL\_MEMBERS". Below these fields are tabs for "Results", "Errors", and "Time". The "Results" tab is active, displaying a table of message data.

Member	Message Data
IMS3	REGID JOBNAME TYPE TRAN/STEP PROGRAM STATUS CLASS
IMS3	JMPRGN JMP NONE
IMS3	MSGRGN TP NONE
IMS3	JBPRGN JBP NONE
IMS3	BATCHREG BMP NONE
IMS3	FPRGN FP NONE
IMS3	DBTRGN DBT NONE
IMS3	DBRRCTCC DBRC
IMS3	DLIRCTCC DLS
IMS3	VTAM ACB CLOSED
IMS3	IMSLU=N/A.N/A APPC STATUS=DISABLED TIMEOUT= 0
IMS2	OTMA CROUD-N/A STATUS=NOTACTIVE

At the bottom of the results area, there is a button labeled "Display Results in New Window".

# Command Center Result Options

- Automatically display results
- Display results in a separate results window
- Specify the number of command responses to be saved in the results history

# Command Center – Result Options

Command Center Options dialog box configuration:

- History | Execution | **Results** | Access Plan
- Verbose (echo command text to output)
- Display SQLCA data
- Display SQL statement warning messages
- Display SQLCODE
- Display SQLSTATE
- Pipe output to file
- Automatically display query results on the query results page
- Size of result fields: 50 kilobytes
- IMS results options:
  - Automatically display IMS results
  - Display results in separate window
- Size of IMS result history: 1000 entries

Main Command Center window details:

- Command type: IMS commands
- System: [Empty]
- Results history: QUERY TRAN NAME(SKS\*) SHOW(ALL)
- IMS sysplex: PLEX1 | Command mast: IMS3
- Results table:

Trancode	MbrName	CC
SKS3	IMS3	0
SKS6	IMS3	0
SKS4	IMS3	0
SKS7	IMS3	0
SKS1	IMS3	0
SKS2	IMS3	0
SKS5	IMS3	0
SKS8	IMS3	0

27 of 27 items displayed

Display Results in New Window

# Separate Results Window

- Separate results window displayed for
  - Results from wizards (except folder queries)
  - Command Center when option selected
  - Display Results in New Window button
- Multiple windows can be open simultaneously
- Enables side-by-side comparisons

# Separate Results Window

The screenshot shows the 'IMS Results Window' interface. At the top, the title bar reads 'IMS Results Window'. Below it, the 'Results history' section contains a dropdown menu with the text 'QUERY TRAN NAME(SKS\*) SHOW(ALL)'. The 'IMS sysplex' field is set to 'PLEX1', the 'Command master' field is 'IMS3', and the 'Route' field is 'ALL\_MEMBERS'. There are three tabs: 'Results', 'Errors', and 'Time', with 'Results' selected. A table displays the results with columns: Trancode, MbrName, CC, PSBname, LCIs, LQCnt, and LLc. The table contains 17 rows of data. At the bottom, there is a status bar showing '27 of 27 items displayed', a toolbar with various icons, and buttons for 'Display Results in New Window', 'Close', and 'Help'.

Trancode	MbrName	CC	PSBname	LCIs	LQCnt	LLc
SKS3	IMS3	0	STLDDLT3	3	0	65:
SKS6	IMS3	0	STLDDLT6	6	0	65:
SKS4	IMS3	0	STLDDLT4	4	0	65:
SKS7	IMS3	0	STLDDLT7	7	0	65:
SKS1	IMS3	0	STLDDLT1	1	0	65:
SKS2	IMS3	0	STLDDLT2	2	0	65:
SKS5	IMS3	0	STLDDLT5	5	0	65:
SKS8	IMS3	0	STLDDLT8	8	0	65:
SKS9	IMS3	0	STLDDLT9	9	0	65:
SKS3	IMS2	0	STLDDLT3	3	0	65:
SKS6	IMS2	0	STLDDLT6	6	0	65:
SKS4	IMS2	0	STLDDLT4	4	0	65:
SKS7	IMS2	0	STLDDLT7	7	0	65:
SKS1	IMS2	0	STLDDLT1	1	0	65:
SKS2	IMS2	0	STLDDLT2	2	0	65:



# Results Errors

- Displays return and reason codes for IMSplex and each member
- If no errors, all return and reason codes are 0
- If errors occurred, Error tab displays first
- Displays message ID, text, and help from Messages and Codes book



# Results Window – Error Messages

The screenshot shows the 'IMS Results Window' interface. At the top, the title bar reads 'IMS Results Window'. Below it, the 'Results history' section contains a dropdown menu with the text 'UPDATE TRAN NAME(SKS111) START(Q)'. Underneath, there are three input fields: 'IMS sysplex' with the value 'PLEX1', 'Command master' with the value 'IMS3', and 'Route' with the value 'ALL\_MEMBERS'. A tabbed interface below these fields has three tabs: 'Results', 'Errors', and 'Time', with 'Errors' currently selected. The main content area is titled 'IMS Sysplex Error' and contains a table with the following data:

Message	Message ID	Return Code	Reason Code	
No requests were successful.	CSLN024I	00000008	0000200C	<a href="#">Explain</a>

Below this, the 'IMS Member Errors' section contains another table:

Member	Message	Message ID	Return Code	Reason Code	
IMS1	The command entered contained an invalid primary keyword.	CSLN029W	02000008	00002028	<a href="#">Explain</a>
IMS2	The command entered contained an invalid primary keyword.	CSLN029W	02000008	00002028	<a href="#">Explain</a>
SYS3	The command entered contained an invalid primary keyword.	CSLN029W	02000008	00002028	<a href="#">Explain</a>

The 'IMS Sysplex Error Help' section contains a text box with the following content:

**CSLN024I No requests were successful.**

**Explanation:** The entries were processed but no information was returned. The command you just issued was routed to multiple clients but none of the clients were able to process the request successfully.

At the bottom of the window, there are three buttons: 'Display Results in New Window', 'Close', and 'Help'.

# Command Time

- Host start time, stop time, and duration
- Workstation start time, stop time, and duration

# Results Window – Command Time

The screenshot shows the 'IMS Results Window' interface. At the top, the title bar reads 'IMS Results Window'. Below it, the 'Results history' section contains a dropdown menu with the text 'UPDATE TRAN NAME(SKS111) START(Q)'. Underneath, there are three input fields: 'IMS sysplex' with the value 'PLEX1', 'Command master' with the value 'IMS3', and 'Route' with the value 'ALL\_MEMBERS'. A tabbed interface below these fields has three tabs: 'Results', 'Errors', and 'Time', with 'Time' being the active tab. The main content area is divided into two sections: 'Host time' and 'Workstation time'. The 'Host time' section includes three input fields: 'Start' with the value 'August 15, 2002 4:56:33:825 PM PDT', 'Stop' with 'August 15, 2002 4:56:35:211 PM PDT', and 'Duration' with '1 second(s) 386 millisecond(s)'. The 'Workstation time' section includes three input fields: 'Start' with 'August 15, 2002 4:46:00:716 PM PDT', 'Stop' with 'August 15, 2002 4:46:01:57 PM PDT', and an empty 'Duration' field. At the bottom of the window, there are three buttons: 'Display Results in New Window', 'Close', and 'Help'.

Results history

UPDATE TRAN NAME(SKS111) START(Q)

IMS sysplex: PLEX1    Command master: IMS3    Route: ALL\_MEMBERS

Results   Errors   Time

Host time

Start: August 15, 2002 4:56:33:825 PM PDT

Stop: August 15, 2002 4:56:35:211 PM PDT

Duration: 1 second(s) 386 millisecond(s)

Workstation time

Start: August 15, 2002 4:46:00:716 PM PDT

Stop: August 15, 2002 4:46:01:57 PM PDT

Duration:

Display Results in New Window    Close    Help

# Results History

- Lists up to 1000 previous results by command
- Results include all data, errors, time stamps
- Most recent results at the top
- Pop-up shows complete command and workstation start time to aid identification

# Results Window – Results History

The screenshot shows the 'IMS Results Window' with a 'Results history' section. The history list contains several SQL commands, with the most recent one highlighted: 'UPDATE TRAN NAME(SKS1) START(Q)'. A tooltip is visible over the highlighted command, displaying the date and time: 'August 15, 2002 4:33:41:283 PM PDT'. Below the history list is a table with 7 columns and 17 rows of data. The table contains transaction details for various SKS (SKS6, SKS4, SKS7, SKS1, SKS2, SKS5, SKS8, SKS9, SKS3, SKS6, SKS4, SKS7, SKS1, SKS2) across different IMS instances (IMS3 and IMS2). Each row includes a transaction ID, IMS instance, a value of 0, a transaction name (e.g., STLDDLT6), a count (e.g., 6), another value of 0, and a status of 65.

Results history

UPDATE TRAN NAME(SKS111) START(Q)

UPDATE TRAN NAME(SKS111) START(Q)

DIS DB

QUERY TRN NAME(SKS\*) SHOW(ALL)

QUERY TRAN NAME(SKS\*) SHOW(ALL)

DIS ACT

QUERY TRAN NAME(SKS\*) SHOW(ALL)

August 15, 2002 4:33:41:283 PM PDT

QUERY TRAN NAME(SKS\*) SHOW(PSB, CLASS, STATUS)

UPDATE TRAN NAME(SKS1) START(Q)

SKS6	IMS3	0	STLDDLT6	6	0	65:
SKS4	IMS3	0	STLDDLT4	4	0	65:
SKS7	IMS3	0	STLDDLT7	7	0	65:
SKS1	IMS3	0	STLDDLT1	1	0	65:
SKS2	IMS3	0	STLDDLT2	2	0	65:
SKS5	IMS3	0	STLDDLT5	5	0	65:
SKS8	IMS3	0	STLDDLT8	8	0	65:
SKS9	IMS3	0	STLDDLT9	9	0	65:
SKS3	IMS2	0	STLDDLT3	3	0	65:
SKS6	IMS2	0	STLDDLT6	6	0	65:
SKS4	IMS2	0	STLDDLT4	4	0	65:
SKS7	IMS2	0	STLDDLT7	7	0	65:
SKS1	IMS2	0	STLDDLT1	1	0	65:
SKS2	IMS2	0	STLDDLT2	2	0	65:

27 of 27 items displayed

Default View View

Display Results in New Window

Close Help

# Results Grouping

- Results can be grouped on any column using the Group checkbox in the Sort dialog
- Combines all rows with the same column value into an expandable roll-up row
- Can be grouped on multiple levels



# Results Window – Grouping Results

The screenshot displays the 'IMS Results Window' with a query 'QUERY TRAN NAME(SKS\*) SHOW(ALL)'. The window shows a table of results grouped by 'Trancode'. The 'Sort' dialog box is open, showing 'Available columns' and 'Sort columns'. The 'Sort columns' list includes 'Trancode' (Ascending) and 'LQCnt' (Descending).

Results history: QUERY TRAN NAME(SKS\*) SHOW(ALL)

IMS sysplex: PLEX1    Command master: IMS3    Route: ALL\_MEMBERS

Results | Errors | Time

Trancode	MbrName	CC	PSBname	LCIs	LQCnt	LLC
<b>SKS1</b>						
	IMS3	0	STLDDL1	1	0	65:
	IMS2	0	STLDDL1	1	0	65:
	SYS3	0	STLDDL1	1	0	65:
<b>SKS2</b>						
	IMS3					
	IMS2					
	SYS3					
<b>SKS3</b>						
	IMS3					
	IMS2					

Sort dialog box:

Available columns: MbrName, CC, PSBname, LCIs, LLCT, LPLCT, LCPRI, LNPRI, LLPRI, LSegSz, LSegNo

Sort columns:

Column	Group
↑ Trancode	<input checked="" type="checkbox"/>
↓ LQCnt	<input type="checkbox"/>

Sort options:  Ascending,  Descending

Buttons: Move Up, Move Down, OK, Cancel, Help

# Highlighting Result Differences

- Toolbar buttons
  - Highlight all column differences
  - Highlight selected column differences
  - Clear all highlights
- Groups results by resource name and compares column values across members
- If one cell value is different from the others, that cell is highlighted
- If more than one value differs, all cells in that column for that resource are highlighted

# Results Window – Highlighting Differences

IMS Results Window

Results history  
 QUERY TRAN NAME(SKS\*) SHOW(ALL)

IMS sysplex: MSPLEXB    Command master: IMS2    Route: ALL

Results | Errors | Time

Trancode	MbrName	CC	PSBname	LCIs	LQCnt	LLCT
<b>SKS1</b>						
	IMS2	1	STLDDLT1	1	0	65535
	SYS3	0	STLXDLT1	1	0	65535
	IMS3	0	STLDDLT1	1	0	65535
<b>SKS2</b>						
	IMS2	0	STLDDLT2	2	0	65535
	SYS3	0	STLDDLT2	2	0	65535
	IMS3	0	STLDDLT2	7	0	65535
<b>SKS3</b>						
	IMS2	0	STLDDLT3	3	0	65535
	SYS3	3	STLDDLT3	3	0	65535
	IMS3	12	STLDDLT3	3	0	65535
<b>SKS4</b>						

27 of 27 items displayed

Default View\* View

Display Results in New Window    Close    Help

# Results Window – Saved Views

- Sort, filter, grouping, and column settings can be saved as a ‘view’
- Views can be applied to any results
- User names a view using the View menu
- View pop-up list enables quick switching

# Results Window – Saved Views

IMS Results Window

Results history

QUERY TRAN NAME(SKS\*) SHOW(ALL)

IMS sysplex: PLEX1      Command master: IMS3      Route: ALL\_MEMBERS

Results | Errors | Time

Trancode	MbrName	CC	PSBname	LCIs	LQCnt	LLC
SKS3	IMS3	0	STLDDLT3	3	0	65:
SKS6	IMS3	0	STLDDLT6	6	0	65:
SKS4	IMS3	0	STLDDLT4	4	0	65:
SKS7	IMS3	0	STLDDLT7	7	0	65:
SKS1	IMS3	0	STLDDLT1	1	0	65:
SKS2	IMS3	0	STLDDLT2	2	0	65:
SKS5	IMS3	0	STLDDLT5	5	0	65:
SKS8	IMS3	0	STLDDLT8	8	0	65:
SKS9	IMS3	0	STLDDLT9	9	0	65:
SKS3	IMS2	0	STLDDLT3	3	0	65:
SKS6	IMS2	0	STLDDLT6	6	0	65:
SKS4	IMS2	0	STLDDLT4	4	0	65:
SKS7	IMS2	0	STLDDLT7	7	0	65:
SKS1	IMS2	0	STLDDLT1	1	0	65:
SKS2	IMS2	0	STLDDLT2	2	0	65:

27 of 27 items displayed

Default View  
 Trans Class 20  
 Trans Class 30  
 Trans Class 40  
 Trans QCnt > 9  
**Trans Stopped**  
 Trans DeadQ  
 Trans by PSB

Trans Class 20 View

Display Results in New Window      Close      Help

# Results View Menu

- Enables the naming and saving of views
- Alternative access to the Sort, Filter, Customize Columns dialogs
- Enables print of data as a report
- Enables export to a delimited ASCII file



# Results Window – View Menu

The screenshot shows the 'IMS Results Window' interface. At the top, there is a title bar with the window name and standard OS controls. Below the title bar, the text 'Results history' is displayed above a search input field containing 'QUERY TRAN NAME(SKS\*) SHOW(ALL)'. Three input fields are present: 'IMS sysplex' with 'IMSPLEXB', 'Command master' with 'IMS2', and 'Route' with 'ALL'. Below these are three tabs: 'Results', 'Errors', and 'Time', with 'Results' being the active tab. A table with 8 columns is shown: 'Trancode', 'MbrName', 'CC', 'PSBname', 'LCIs', 'LQCnt', and 'LLCT'. The table contains 15 rows of data. A context menu is open over the table, listing options: 'New...', 'Save As...', 'Saved Views', 'Filter...', 'Sort...', 'Customize Columns...', 'Page Setup...', 'Print...', and 'Export...'. At the bottom of the window, there is a status bar showing '27 of 27 items displayed' and a set of navigation icons. A 'Default View' dropdown is set to 'View'. At the very bottom, there are three buttons: 'Display Results in New Window', 'Close', and 'Help'.

Trancode	MbrName	CC	PSBname	LCIs	LQCnt	LLCT
SKS9	IMS2	0	STLDDLT9	9	0	65535
SKS7	IMS2	0	STLDDLT7	7	0	65535
SKS5	IMS2	0	STLDDLT5	5	0	65535
SKS3	IMS2	0	STLDDLT3	3	0	65535
SKS1	IMS2	1	STLDDLT1	1	0	65535
SKS8	IMS2	0	STLDDLT8	8	0	65535
SKS6	IMS2	0	STLDDLT6	6	0	65535
SKS4	IMS2	0	STLDDLT4	4	0	65535
SKS2	IMS2	0	STLDDLT2	2	0	65535
SKS3	SYS3	3	STLDDLT3	3	0	65535
SKS6	SYS3	0	STLDDLT6	6	0	65535
SKS4	SYS3	0	STLDDLT4	4	0	65535
SKS7	SYS3	0	STLDDLT7	7	0	65535

# Online Help

- Information Center article outlines IMS CC
- HTML Help for all tasks and dialog fields
- Wizard task overviews
- IMS Messages and Codes

# Translation Languages

- IMS Control Center user interface and help translated into the following languages

- Brazilian Portuguese
- Danish
- Finnish
- French
- German
- Italian
- Japanese
- Korean
- Norwegian
- Polish
- Russian
- Simplified Chinese
- Spanish
- Swedish
- Traditional Chinese