



IBM Software Group

Identifying and Deploying your assets for SOA

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Introducing the IBM SOA Foundation

Provides What You Need to Get Started with SOA

IBM SOA Foundation: Integrated, open set of software, best practice, and patterns

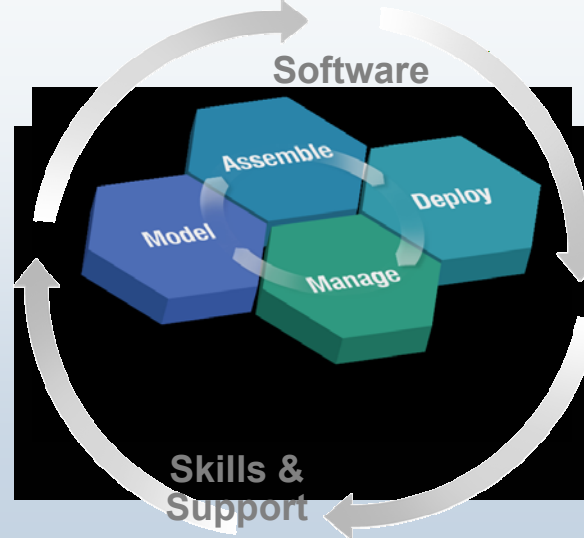
Supports complete lifecycle with a **modular** approach

Extends value of your existing investments, regardless of vendor

Scalable; start small and grow as fast as the business requires

Extensive business and IT standards support; facilitating greater **interoperability & portability**

IBM SOA Foundation



Leveraging existing IT Infrastructure



CICS



IMS

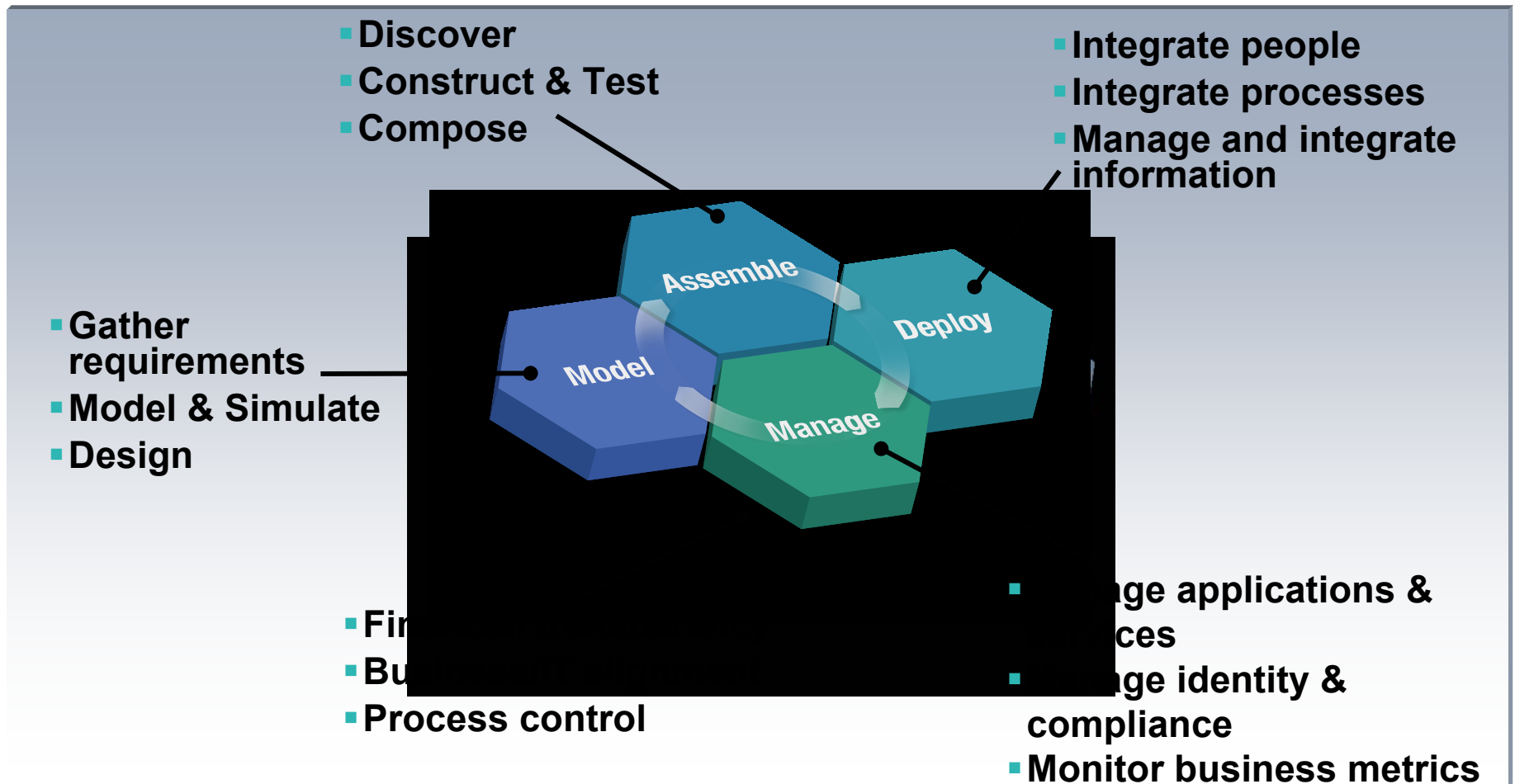


Custom Apps.



How are customers thinking technically about flexible IT through SOA?

The SOA Lifecycle



SOA Foundation

Part of a broader portfolio to meet your every need

WebSphere Integration Developer*
Rational Application Developer*

Z Note: WDz could be used in place
of RAD



WebSphere Business Modeler*
CICS Interdependency Analyzer *

WebSphere Business Monitor*
Tivoli Composite Application Manager*
Tivoli Identity & Access Manager

Process:

WebSphere Process Server*
WebSphere ESB* & Message Broker*

People:

WebSphere Portal*
WebSphere Everyplace Deployment*
Workplace Collaboration Services*

Information:

CICS Business Event Publisher *

Application Infrastructure:

CICS Transaction Server
IMS
DB2
WebSphere Application Server & XD*

*** New or Enhanced**



Transform your CICS applications

**Extend and modernize
CICS applications
efficiently**

**Improve programmer
productivity**

**Increase customer
satisfaction**

Enable IT for SOA

CICS Application Modernization Tools

CICS Business Event Publisher for MQSeries®

- Create and manage outbound events using WebSphere MQ without changing existing CICS applications

CICS Interdependency Analyzer

- Understand your active application inventory for efficient maintenance and upgrades



Today's Business Challenges

- **Unconnected infrastructure investments**
 - Provide seamless integration with new business units
 - Link packaged applications with legacy systems
- **Accelerated costs of managing disparate systems**
 - Integrate across heterogeneous islands of automation
 - Mitigate people and skill shortages
- **Increased industry and government regulations**
 - Such as Sarbanes-Oxley
- **Reaching new markets with critical speed**
 - Support new standards like process automation
 - Maintain system and asset security

*IT projects can take too long and cost too much
Achieving 'Time to Value' is critical to business success*

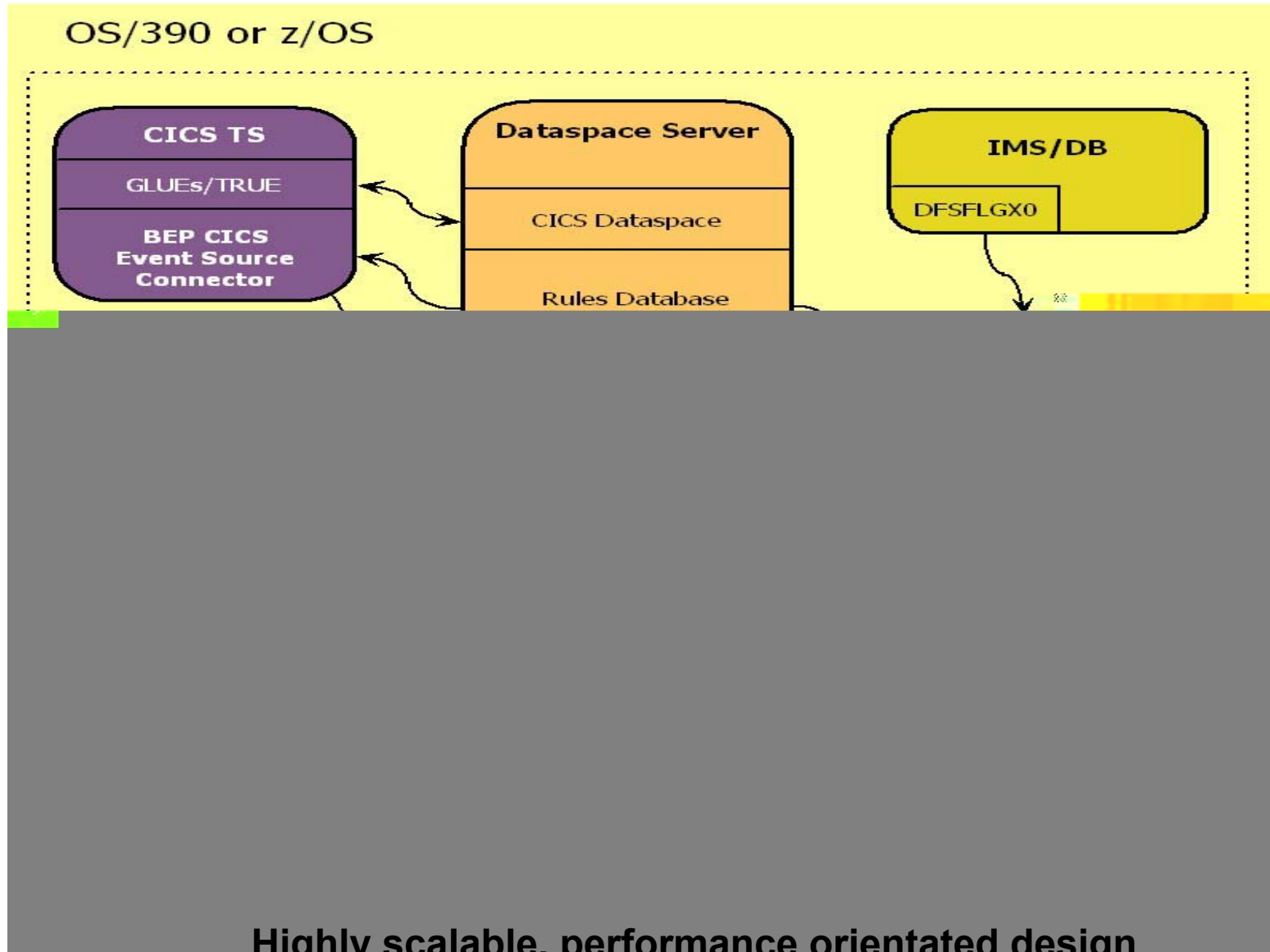


What is CICS Business Event Publisher for MQSeries?

- CICS Business Event Publisher for MQSeries (CICS BEP)
 - ▶ Creates MQPUT messages for MQSeries queue from events and associated information
 - ▶ Based on user-specified message content rules, Queue names and MQPUT options
 - ▶ Provides easy to use workstation GUI for selection and rules creation
- Helps integrate legacy applications and data to new environments (CICS, IMS and DB2 events)
 - ▶ Real time action and results
 - ▶ Offers low cost, low risk integration strategy
- Current version - CICS Business Event Publisher for MQSeries V1.2
 - ▶ GA May 2004



CICS BEP V1.2 Architecture



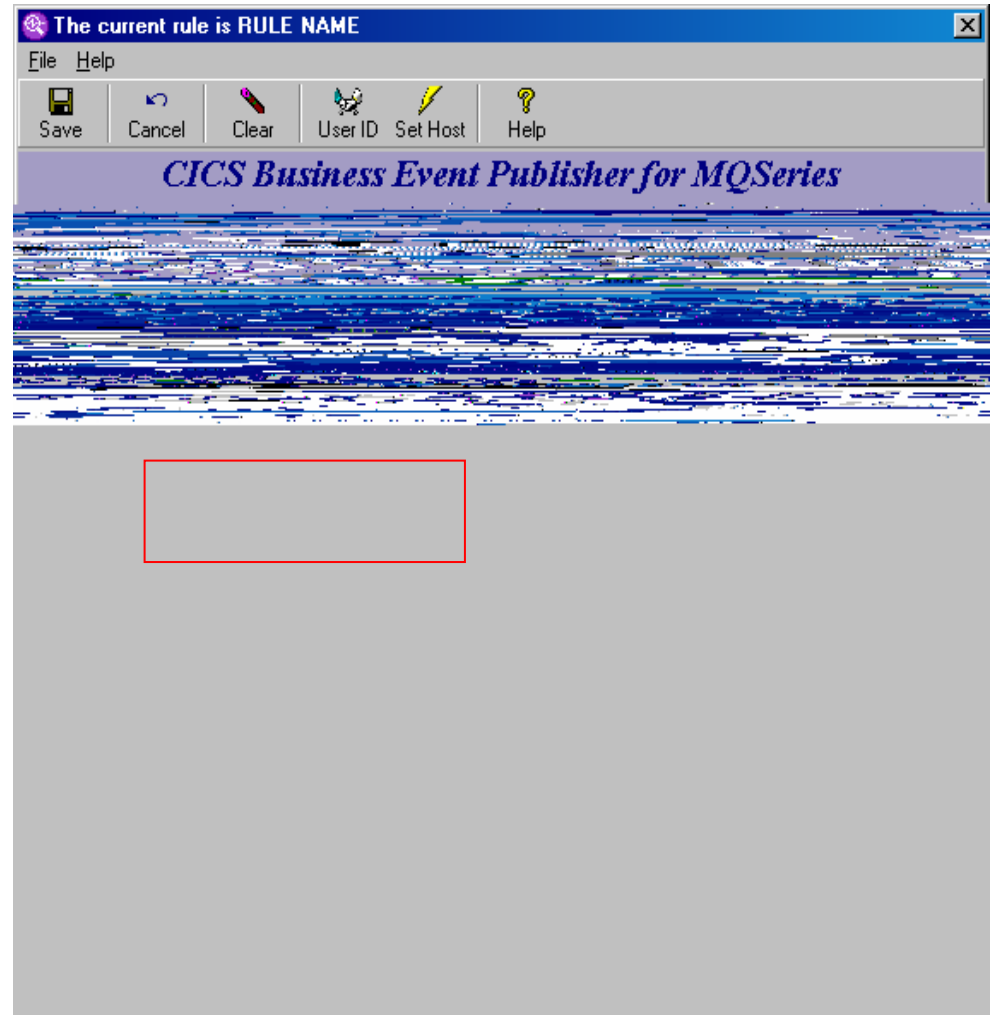
Highly scalable, performance orientated design



CICS BEP Workstation Client

Rule Type Tab

- CICS, DB2 and IMS categories



CICS BEP Workstation Client

Selection Criteria Tab

- For CICS events

The current rule is NEW ORDER

File Help

Save Cancel Clear UserID Set Host Help

CICS Business Event Publisher for MQSeries™

Rule Type **Selection Criteria** MQPUT Options Message Options Return Options

File Name: ORDRFILE

Enter Selection Criteria

Selection Criteria Enabled

All fields below are case sensitive

Select by Transaction ID

Include Exclude ORDA

Select by User ID

Include Exclude

Select by Terminal ID

Include Exclude

Select by APPLID

Include Exclude

Advanced Selection Criteria

Intercept These Request Types

WRITE

REWRITE

READ

READ With Update

STARTBR

RESETBR

READNEXT

READNEXT With Update

READPREV

READPREV With Update

ENDBR

DELETE

UNLOCK



Advanced Selection Criteria for NEW ORDER

Resource Name: Resource Type:

Current Selection Criteria

| And/Or | Field Name/Type | Index | Offset | Length | OP | Compare to |
|--------|-----------------|-------|--------|--------|----|------------|
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

Move Up / Remove and Edit Message Field
Move Down / Remove from List

Datamap Fields

| Level | Field name | Occu... | Type | Picture | Usage | Length |
|-------|----------------|---------|-----------------|---------|---------------|--------|
| 03 | ORDER-DATE-SEC | | Numeric: zoned | 9(2) | Display | 2 |
| 02 | ORDER-ITEMS | 10 | Group | | Display | 54 |
| 03 | ITEM-NUMBER | 10 | Numeric: zoned | 9(8) | Display | 8 |
| 03 | ITEM-QUANTITY | 10 | Numeric: binary | S9(4) | Binary (CO... | 2 |
| 03 | ITEM-ON-HAND | 10 | Numeric: binary | S9(8) | Binary (CO... | 4 |
| 03 | ITEM PRICE | 10 | Numeric: zoned | 9(8) | Display | 8 |

Datamap Name:

Download Datamap / Remove Datamap from Criteria List

AND / OR

| Field Name | Length | Index | Operator | Compare to Data Type | Compare to |
|--------------|--------|-------|----------|----------------------|------------|
| ITEM-ON-HAND | 4 | 1 | EQ | Fullword Number | 0 |

Add to Criteria

Fields by Offset/Length

| Offset | Length | Operator | Compare to Data Type | Compare to |
|--------|--------|----------|----------------------|------------|
| 0 | | | | |

Add to Criteria

Create a message on these conditions: Conditions Selected:

NORMAL
 ERROR
 CHANGED

Action:

Enable Complex Selection Criteria

OK / Cancel



Advanced Selection Criteria for NEW ORDER

Resource Name: ResourceType:

Current Selection Criteria

| And/Or | Field Name/Type | Index | Offset | Length | OP | Compare to |
|--------|-----------------|-------|--------|--------|----|------------|
| | ITEM-ON-HAND | 1 | | 4 | EQ | 0 |
| | | | | | | |
| | | | | | | |
| | | | | | | |

Datamap Fields

| Level | Field name | Occu... | Type | Picture | Usage | Length |
|-------|---------------|---------|-----------------|---------|---------------|--------|
| 02 | ORDER-ITEMS | 10 | Group | | Display | 54 |
| 03 | ITEM-NUMBER | 10 | Numeric: zoned | 9(8) | Display | 8 |
| 03 | ITEM-QUANTITY | 10 | Numeric: binary | S9(4) | Binary (CO... | 2 |
| 03 | ITEM-ON-HAND | 10 | Numeric: binary | S9(8) | Binary (CO... | 4 |
| 03 | ITEM-PRICE | 10 | Numeric: zoned | 9(6)... | Display | 8 |
| 03 | ITEM COMMENTS | 10 | Alphanumeric | V(32) | Display | 32 |

Datamap Name:

Fields by Offset/Length

Create a message on these conditions: Conditions Selected:

NORMAL
 ERROR
 CHANGED

Action:

Enable Complex Selection Criteria



The current rule is NEW ORDER

File Help

Save Cancel Clear UserID Set Host Help

CICS Business Event Publisher for MQSeries™

Rule Type Selection Criteria **MQPUT Options** Message Options Return Options

Queue Name

new.orders.queue



CICS Business Event Publisher – Possible Uses

- Event notification – new customer added, account = zero
- Activity Audits – who, what, when is accessing the file?
- Error notification – create message when error detected
- Threshold notification – stock running low
- Automation – removal of manual activity or latency in business process
- Data source for Message Brokers
- Data transfer
- External logging or notification

Value:

- No change to existing application programs or data
- Extends legacy to new environments





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**Improve programmer
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CICS Interdependency Analyzer

- Understand your active application inventory for efficient maintenance and upgrades



What is CICS Interdependency Analyzer ?

- CICS Interdependency Analyzer for z/OS (CICS IA)
 - ▶ Run-time and batch reporting tool
 - ▶ Captures resource relationships such as
 - what programs have potential affinities due to the CICS API commands within them
 - which resources (Programs, Files, TSQs TDQs etc) are required by a transaction
 - what resources are no longer used
 - which transactions have affinities to other transactions and the type and lifetimes of these affinities
 - the sequencing of transactions within an application
 - which transactions have affinities to particular CICS regions
 - Includes CICS, DB2, WebSphere MQ and IMS DB resources
 - ▶ Relationship data loaded onto a DB2 data base
 - Ad hoc analysis
 - ▶ Loadlib Scanner and VSAM File Reporter
- CICS IA 2.1 GA - November 2005
 - ▶ Product number - 5697-J23



Why do you need CICS Interdependency Analyzer?

Maintaining, extending and enhancing your CICS applications more efficiently

Does any of this apply to you?

- CICS systems and applications evolved over many years (as many as 30!)
- Many changes to the applications went undocumented
- Some documentation went missing
- Source code is missing
- Even if the source code and documentation are available, the runtime application behavior differs from the original design (e.g. changed by use of exits)
- You have been through a merger/acquisition, so the information about inherited CICS systems is not available, or, if some available, time spent on the discovery process is critical to avoid business disruption
- You are providing outsourcing services, and need a complete picture of CICS resource relationships in your customer systems
- You are implementing workload balancing and need to identify affinities
- You need to minimize impact of CICS application maintenance for your customers

Potential problems:

- Costly and lengthy manual investigation
- Errors during the application changes
- High application maintenance costs
- ...even outages

Information provided by CICS IA can help to:

- Use CICS resources more efficiently
- Split workload for continuous availability
- Improve the speed and reduce cost of application maintenance
- Reduce time of problem resolution
- Minimize the impact of routine application maintenance for the end user
- Gain better understanding of how CICS components can be aggregated to form services for SOA implementations.



How do customers use CICS IA

- Large retail company
 - ▶ Complex business applications handling POS terminals, high number of regions
 - ▶ DB2 skills
 - ▶ Need to allow any transaction to run in any CICS region to improve availability
 - All of the transactions must be examined to eliminate restrictions or affinities that may exist today
 - ▶ Time pressure
 - ▶ Solution – CICS IA
 - Automates collection of the data they need
 - Loads data in a DB2 database for ease of processing
 - Helps create CSD definitions when applications are moved to a different region
 - Post-change ‘health check’
 - Also, help speed problem determination
 - E.g. Easily determining the logical flow of programs within a transaction
- Large bank
 - ▶ Need to consolidate data centres following mergers/acquisitions
 - ▶ Hundreds of CICS regions, transactions not following naming conventions
 - ▶ Solution – CICS IA
 - Used to define applications to clarify the picture of transaction and resource flow
- Large outsourcing company
 - ▶ Incorporate the workloads of their customers into their data centers
 - ▶ These workloads are often not documented well and need ‘cleaning up’ following acquisitions/mergers and other changes
 - ▶ CICS IA is used to understand the workloads and identify potentially dead code





CICS IA - Eclipse-based graphical user interface

The screenshot displays the Eclipse IDE interface with the CICS IA Query Wizard open. The wizard is in the 'Custom Query' mode, showing a table of resources and a list of fields to be queried.

| HOMESYSID | PROGRAM | OBJECT | RMTSYSID |
|-----------|----------|--------|----------|
| T304 | CAMI710C | EQRA | ---- |
| T304 | CAMI710C | EQSQ | ---- |
| T304 | CAMI715C | EQRA | ---- |
| T304 | CAMT220C | EQSQ | ---- |

The 'Build Custom Query' section of the wizard shows the following configuration:

- Fields to select:** SYSID, PROGRAM, RMTSYSID (checked).
- Where clause:** PROGRAM = CAM%
- Function dropdown:** DELETEDQ, DEL POOL, DEQ, DEQSYS, DISABLE (DELETEDQ is selected).

The Explorer View on the right shows a tree structure of CICS resources:

- Inquire on CICS Resources
 - Transactions
 - Programs
 - TSQs
 - TDQs
 - Maps
 - Files
 - Applications
 - Regions
- Inquire on DB2 Resources
- Inquire on MQ Resources
- Inquire on IMS Resources
- Inquire on CICS Affinities



CICS IA - Timer based collector control

```
Session C - [24 x 80]
CIU280      CICS Interdependency Analyzer for z/OS - V2R1M0      2005/10/18
              Time and Date Options for                          11:22:27AM
              CICS Sysid: TSTA      CICS Applid: IYCYZC3A
Modify the options and press Enter to accept. F10 = Cancel. F12 = Help.
```



CICS IA - ISPF Customization

```
A - mvs2e
File Edit View Communication Actions Window Help
***** CICS Interdependency Analyzer for z/OS - V2R1M0 *****
Command ==> _____ More: +

Press ENTER to proceed, PF3 to exit or PF1 for Help
Press PF8 to Scroll Down, PF7 to Scroll Up

Please update the following:

Output Datasets:

OUTPUT DSN FOR SCIOUSAMP : JAMESE.D397.SCIUSAMP.OUT7_____
OUTPUT DSN FOR SCIUCLIS  : JAMESE.D397.SCIUCLIS.OUT7_____
OUTPUT DSN FOR SCIUSQL   : JAMESE.D397.SCIUSQL.OUT7_____
OUTPUT DSN FOR SCIUDAT1  : JAMESE.D397.SCIUDAT1.OUT7_____
OUTPUT DSN FOR SCIUDAT1  : JAMESE.D397.SCIUDAT2.OUT7_____
OUTPUT DEVICE TYPE      : SYSDA_

CICS IA variables:

IA PRODUCT QUALIFIER    : JAMESE.TESTV2
IA VSAM FILE QUALIFIER  : JAMESE.CICS_____

DB2 variables:

DB2 QUALIFIER           : SYS2.DB2.V710_____
DB2 RUNLIB.LOAD HLQ     : DSN7102E_____
DB2.PROCLIB.QUALIFIER   : DSN7102E_____
```



CICS IA - ISPF Customization

```
***** CICS Interdependency Analyzer for z/OS - V2R1M0 *****  
Command ===> _____ More: - +  
  
CICS variables:  
CICS_HEROTOM _____ CICS_HEROTOM
```



Why use CICS IA?

- Helps you understand your active Application Inventory
 - ▶ Documentation lost or incomplete
 - ▶ Time pressure
 - ▶ Merger / Acquisition
- Helps you maintain or enhance Applications
 - ▶ Identifies the resources that are affected directly and indirectly
 - Transactions, programs, data elements:
 - Files , Queues , Screens, ...
 - ▶ Helps formulate the request for change
 - What to change, what to build, what to test, what needs to be communicated to roles involved
 - ▶ Looks across boundaries, including through shared data - files, databases or queues
- Need to balance CICS work across regions for greater availability?
 - ▶ CICS IA helps quickly identify resource relationships which need to be changed to enable transactions run anywhere
 - ▶ CICS IA helps quickly clone regions
- Version to version migration assistance
 - ▶ Build a database of application topology knowledge to reference throughout the migration process
 - ▶ Make applications threadsafe
 - CICS IA provides information needed to understand which applications conform to threadsafe standards
 - ▶ Identify OS/VS COBOL programs
 - LE enabled?
- CICSplex SM enablement
 - CICS IA identifies system and transaction affinities



CICS IA Overview - Application Query

```

CIU580  CICS Interdependency Analyzer for z/OS and OS/390 - V1R2M0  2003/09/10
For your CICS Query                                           12:54:56PM
WHICH RESOURCES ARE IN CallCoordinator/CICS                    Page  1 of  33

In  Tran Program  Resource Resource
Regn      Type      Name
CORF VA40 CAMA400C MAP      CAM4001
      VA40 CAMA400C PROGRAM  CAMA430C
      VA40 CAMA400C PROGRAM  CAMA800C
      VA40 CAMA400C PROGRAM  EZPSCCIL
      VA40 CAMA430C FILE     CAMAAGTV
      VA40 CAMA430C MAP      CAM4301
      VA40 CAMA430C PROGRAM  CAM4301
      VA40 CAMA430C TRANSID  VA43
      VA40 CAMA430C TS       +TE+UMAP
      VA40 CAMA430C TS       +TE+VA44
      VA40 CAMA800C MAP      CAM8001
      VA40 CAMA800C PROGRAM  EZPSCCIL
      VA40 CAMA800C TRANSID  V800

CICS Sysid:  TLS3  CICS Applid:  IYCLZC03  TermID:  TC13

F1=          F2=          F3=End      F4=Exit     F5=          F6=
F7= Page Up  F8= Page Down F9=          F10=         F11=         F12=End
    
```



Why use CICS IA in SOA projects

- Help migrate to CICS TS V3.1 – the platform for CICS-based SOA projects
 - ▶ Prepare for migration: prioritize and optimize
 - Application understanding (resources needed to by a particular application)
 - ▶ Improve speed of migration
 - Migrate through Test, Quality Assurance regions and into production faster
 - CICS Interdependency Analyzer information as input into CICS CM and as a way of comparing your current CICS region contents with the new V3.1 regions
- Identify candidate applications for new function exploitation
 - ▶ Make applications thread safe
 - Can you run your programs on Multiple TCBs?
 - ▶ Identify OS/VS COBOL programs
 - Are your programs LE enabled?
 - ▶ Provide detailed information to help create web services



Why use CICS IA in SOA projects

•What is a 'threadsafe' program ?

- A threadsafe program
 - Must be written to threadsafe standards.
 - Must use appropriate serialization techniques when accessing any shared resources.
 - Must be Language Environment-conforming or assembler programs.
 - Capable of executing concurrently on multiple TCBs
 - Cannot rely on QR to serialize access to **shared resources** and storage.
 - Use serialization techniques
 - Compare and swap
 - Enqueue/Dequeue
 - All programs accessing a **shared resource** must be threadsafe.



Why use CICS IA in SOA projects

What are the shared resources ?

- Typical examples of shared resources are the CICS CWA, global user exit global work areas and storage acquired explicitly by the application program with the shared option.
- You can check whether your application programs use these types of shared storage by looking for occurrences of the following EXEC CICS commands:
 - ADDRESS CWA
 - EXTRACT EXIT GASET
 - GETMAIN SHARED
 - LOAD
- CICS IA collects and records this information



Why use CICS IA in SOA projects

How can CICS IA help ?

CICS IA collects resource information on the previously mentioned resources. This data is stored in the DB2 database tables and can be queried using SQL. For example :-

- Show me all programs which execute an 'ADDRESS CWA' command.
 - `SELECT PROGRAM OBJECT FROM CIU3_CICS_DATA WHERE FUNCTION='ADDRESS';`
- Or
- Show me all transactions and programs that use [shared resources](#)
 - `SELECT TRANSID , PROGRAM , FUNCTION, OBJECT FROM CIU3_CICS_DATA WHERE FUNCTION IN ('LOAD ', 'EXTRACT ', 'GETMAIN ', 'ADDRESS ');`



Why use CICS IA in SOA projects

| TRANSID | PROGRAM | FUNCTION | OBJECT |
|---------|----------|----------|----------|
| VA90 | EQZ1RCV | LOAD | EQZTSCT |
| VA90 | EQZ1REL | LOAD | EQZTSCT |
| VA90 | EQZ1SET | LOAD | EQZTSCT |
| V220 | EQZ1IDEN | LOAD | EQZTSCT |
| V220 | EQZ1IPGV | LOAD | EQZTSCT |
| V220 | EQZ1MONS | LOAD | EQZTSCT |
| V220 | EQZ1RCV | LOAD | EQZTSCT |
| V220 | EQZ1REL | LOAD | EQZTSCT |
| V895 | CAMA895C | LOAD | CAMTACTH |
| V895 | CAMA895C | LOAD | CAMTAPTH |
| V895 | CAMA895C | LOAD | CAMTAXTH |
| V200 | EQZ1SWCH | LOAD | EQZTSCT |
| V800 | CAMA800C | LOAD | EZPSCCIL |
| V800 | EZPACTLC | GETMAIN | ADDR |
| V800 | EZPACTLC | LOAD | CAMLICIL |
| V800 | EZPACTLC | LOAD | CAMLMTSL |
| V800 | EZPACTLC | LOAD | CAMNL01L |
| V800 | EZPACTLC | LOAD | EZPLD01L |
| V800 | EZPACTLC | LOAD | EZPNL01L |
| V800 | EZPACTLC | LOAD | EZPSLNGL |
| TST4 | EMSTEST4 | ADDRESS | CWA |



Why use CICS IA in SOA projects

What else can CICS IA do ?

CICS IA reports the current TCB mode for each EXEC CICS (or DB2, MQ, DLI) call.

| Tran | Program | Offset | Command | Resource | | | | Term | TCBmode |
|------|----------|----------|----------------|------------|----------|------------|----------|------|---------|
| | | Sysid | Usage | First Run | Last Run | | | | |
| TS01 | TS010001 | 00000366 | READQ TSQUEUE | TS1A+TE+ | | | | | |
| | | ---- | 33 | 2004-12-21 | 17.43.59 | 2004-12-21 | 17.44.14 | Y QR | |
| | | 000004D0 | READQ TSQUEUE | TS1M+TE+ | | | | | |
| | | ---- | 33 | 2004-12-21 | 17.43.59 | 2004-12-21 | 17.44.14 | Y QR | |
| | | 000007C4 | WRITEQ TSQUEUE | TS1A+TE+ | | | | | |
| | | ---- | 320 | 2004-12-21 | 17.43.59 | 2004-12-21 | 17.44.15 | Y QR | |
| | | 0000088C | WRITEQ TSQUEUE | TS1M+TE+ | | | | | |
| | | ---- | 320 | 2004-12-21 | 17.43.59 | 2004-12-21 | 17.44.15 | Y QR | |



How can CICS IA assist with migration to CICS TS 3.1?

What else can CICS IA do ?

You could also use the list of API calls that are not threadsafe and query the DB2 table to identify programs that use these calls.

You can also use the CIULMS scanner to detect possible commands by populating the DB2 table CIU3_SCAN_DETAIL. Then use the following query :

-

```
SELECT DSNAME, PROGRAM, COMMAND, RESOURCE_TYPE  
FROM CIU3_SCAN_DETAIL  
WHERE COMMAND IN ('LOAD ', 'EXTRACT ', 'GETMAIN ', 'ADDRESS ');
```



How can CICS IA assist with migration to CICS TS 3.1?

Sample output -

| DSNAME | PROGRAM | COMMAND | RESOURCE_TYPE |
|---------------------|----------|---------|---------------|
| CIU.TEST.LOADLIB | EMSPLT | EXTRACT | EXIT |
| CIU.TEST.LOADLIB | EMSTERM | EXTRACT | EXIT |
| CIU.TEST.LOADLIB | EMSTESTS | ADDRESS | CWA |
| CIU.TEST.LOADLIB | EMSTEST4 | ADDRESS | CWA |
| CIU.TEST.LOADLIB | EMS1XT13 | GETMAIN | SHARED |
| CIU.TEST.LOADLIB | EMS1XT22 | GETMAIN | SHARED |
| CIU.TEST.LOADLIB | EMS1XT23 | GETMAIN | SHARED |
| CIU.TEST.LOADLIB | EMS2XT13 | GETMAIN | SHARED |
| CIU.TEST.LOADLIB | EMS2XT22 | GETMAIN | SHARED |
| CIU.TEST.LOADLIB | EMS2XT23 | GETMAIN | SHARED |
| CIU.TEST.LOADLIB | EMS3XT13 | GETMAIN | SHARED |
| CIU.TEST.LOADLIB | EMS3XT22 | GETMAIN | SHARED |
| CIU.TEST.LOADLIB | EMS3XT23 | GETMAIN | SHARED |
| CIU.TEST.LOADLIB | EMS4XT13 | GETMAIN | SHARED |
| CIU.TEST.LOADLIB | EMS4XT22 | GETMAIN | SHARED |
| CIU.TEST.LOADLIB | EMS4XT23 | GETMAIN | SHARED |
| CIU.TEST.LOADLIB | OIUA300C | LOAD | PROGRAM |
| PTF.V2R1M0.SEZPLOAD | CAMAA00C | LOAD | PROGRAM |



How can CICS IA assist with migration to CICS TS 3.1?

• Is your program LE enabled ?

- The CICS IA scanner now tells you whether your COBOL or PLI programs are LE enabled.
- You can use the summary report produced by the scanner

| Module Name | Module Length | Module Language | Language Version | Possible statements..... Affinities | Dependencies | MVS POSTs | Comment |
|-------------|---------------|-----------------|------------------|--|--------------|-----------|---------|
| CAMAA00C | 000086F0 | COBOL II | LE | 15 | 30 | 0 | |
| CAMAA10C | 0000B780 | COBOL II | LE | 19 | 46 | 0 | |
| CAMATRCC | 00004460 | ASSEMBLER | | 16 | 22 | 0 | |

- Or you can query the CIU3_SCAN_SUMMARY table :-
 - `SELECT * FROM CIU3_SCAN_SUMMARY
WHERE LANGUAGE='COBOL' AND LE NOT='LE';`



CICS Interdependency Analyzer – help with Sarbanes-Oxley Compliance

- Perform internal auditing across the CICS enterprise
- Help document CICS TS programs to achieve SOX compliance
- Be adopted quickly for SOX compliance
- Leverage other CICS TS; DB2 an/or IMS based compliance initiatives to reduce cost of SOX compliance
 - ▶ CICS IA reports on all resources (CICS programs; VSAM, DB2, IMS files; etc.) that occur within the CICS TS enterprise
 - ▶ CICS IA information is stored in a DB2 table (defined during CICS IA installation)
 - ▶ Users can quickly produce ad-hoc SQL reports (using the CICS IA DB2 table as input) for documentation



Summary

- We've looked at 2 CICS tools, which :
 - ▶ Assist with enabling SOA and SOAP
 - ▶ Assist with Sarbanes-Oxley Compliance
 - ▶ Assist with LE Enablement
 - ▶ Improve programmer productivity
 - ▶ Understand the complexities within your system
 - ▶ Identify performance issues within your system
 - ▶ Extend your CICS apps to new environments

More Information

- ▶ CICS tools web site , including library (user guides, manuals)
 - www.ibm.com/software/htp/cics/tools

