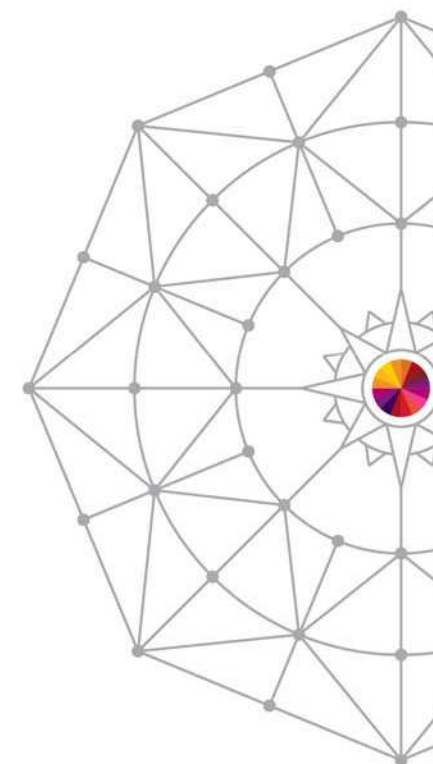


Expand your IMS worldview with the **IMS Enterprise Suite**


Evgeni Liakhovich, IMS Developer



#SHAREorg



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Agenda



- IMS SQL Support + DRDA DDM Support
- **IMS Enterprise Suite 3.1**
 - IBM IMS Data Provider for Microsoft .NET **NEW !**
 - SOAP Gateway Updates
 - Connect API for Java V2.2 Updates
 - Explorer for Development Updates
 - Java Message Service (JMS) API
 - IMS 13 sync program switch support
 - Mobile Feature Pack **EVEN NEWER !**
- IBM IMS Explorer for Administration
 - Extension to the IBM Tools Base v1.4 Administration Console component



How to find Enterprise Suite 3.1



ibm.com/ims → IMS Enterprise Suite



The IMS™ Enterprise Suite is a set of components that support open integration technologies to enable new application development and extend access to IMS transactions and data. The IMS Enterprise Suite provides user-friendly standard interfaces, simplifies IMS metadata generation, and enables IMS business event data and monitoring. The IMS Enterprise Suite simplifies and expands IMS development (including Java™ and XML), administration, and access. Graphical user interfaces and standards-based programming models are provided through tooling support from the WebSphere® and Rational® product families.

The IMS Enterprise Suite includes components that are available for both z/OS® and distributed platforms, and is a no-cost product for unlimited installs. The IMS Enterprise Suite components are designed to complement [IMS 13](#), [IMS 12](#) and [IMS 11](#).

IMS Enterprise Suite Components

[IMS Enterprise Suite Data Provider for Microsoft .NET](#) enables you to use standard SQL queries to access IMS data from .NET applications. It delivers high-performing, secure access to IMS data and simplifies the development of Microsoft .NET applications (for example, C# and Visual Basic) that access IMS.

Contact IBM

Considering a purchase?

[Email IBM](#)

[Request a quote](#)

[Or call us at: 1-877-426-3774](#)
Priority code: 109HH03W

Resources

[→ IMS Enterprise Suite download](#)

[→ Release Notes](#)

[→ IMS Enterprise Suite information center](#)

Highlights

[Brochure: IMS Explorer \(273KB\)](#)

[→ IMS Newsletter](#)

[→ IRM Redbook: IMS Version 12 Technical](#)

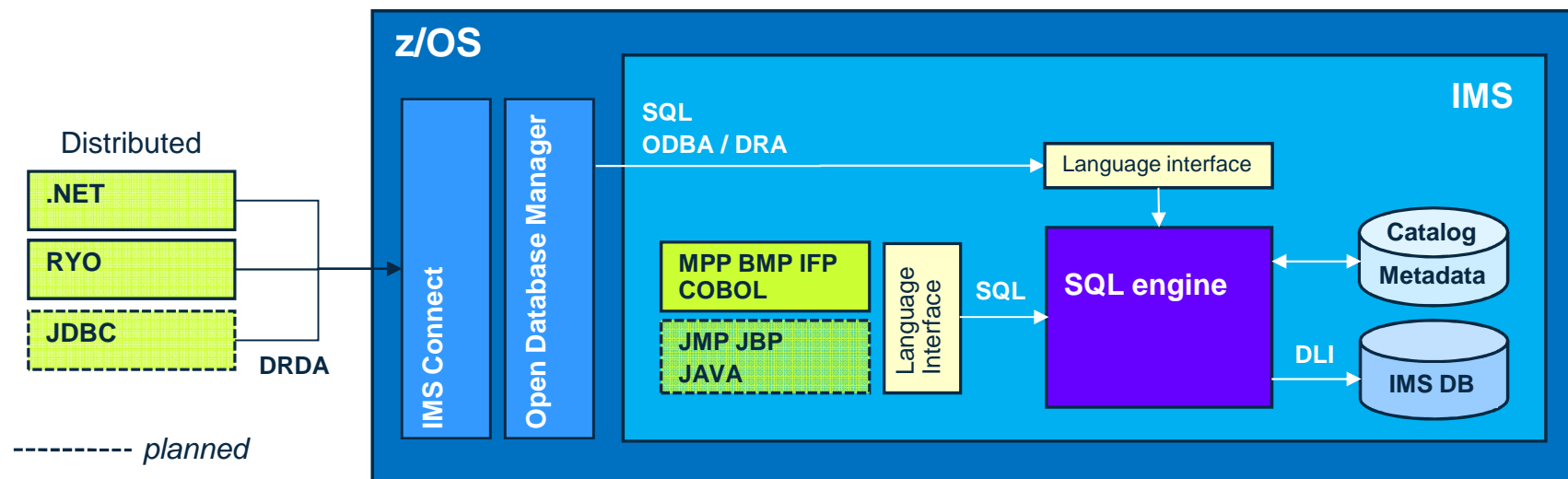


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IMS SQL Support



- SQL Engine for COBOL and distributed applications (.NET/JDBC)
- Provides standard SQL keywords to easily access IMS data
 - ✓ SELECT, INSERT, UPDATE, DELETE
 - ✓ Uses Dynamic SQL programming model
 - ✓ Converts SQL statements to DLI calls
 - ✓ Supports a subset of SQL keywords that are currently supported by IMS Universal JDBC driver
- Uses database metadata in IMS Catalog
 - ✓ No need to generate metadata for use in applications



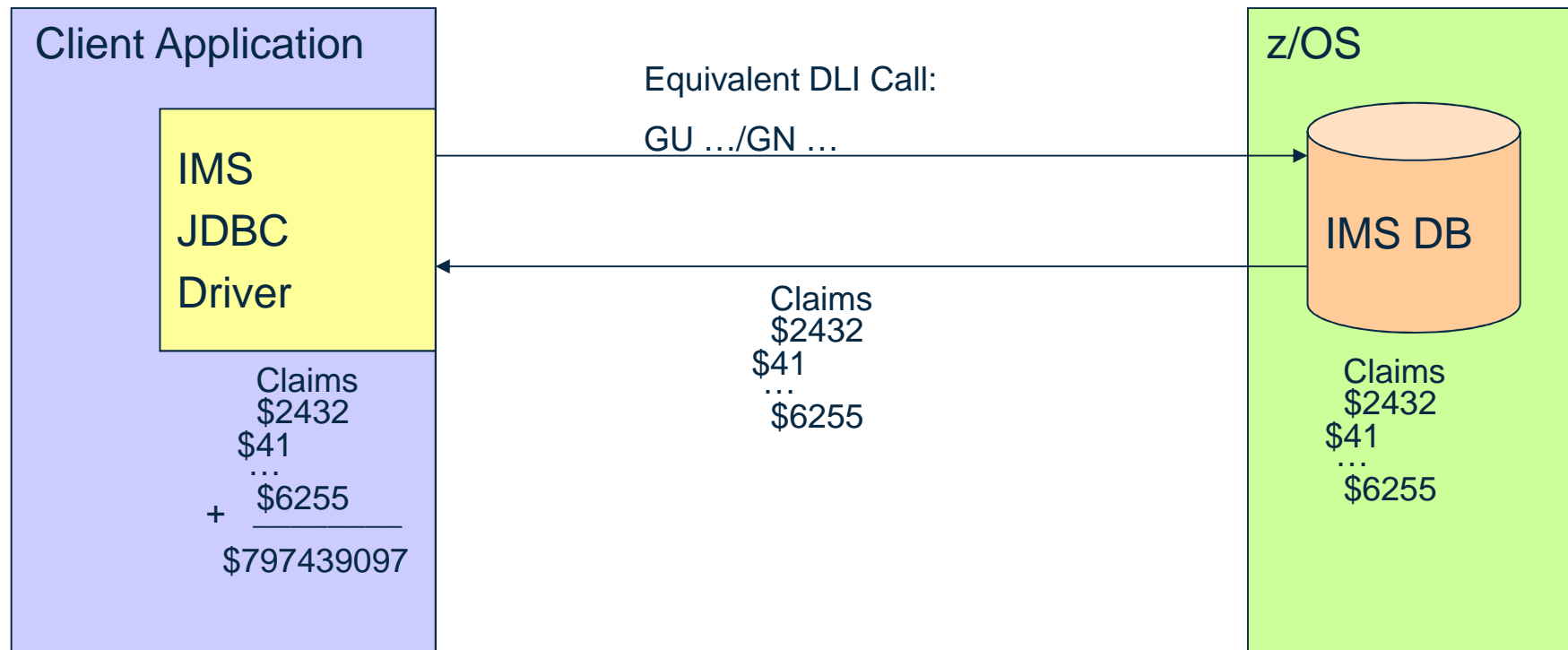
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SQL Parsing in IMS Java Code



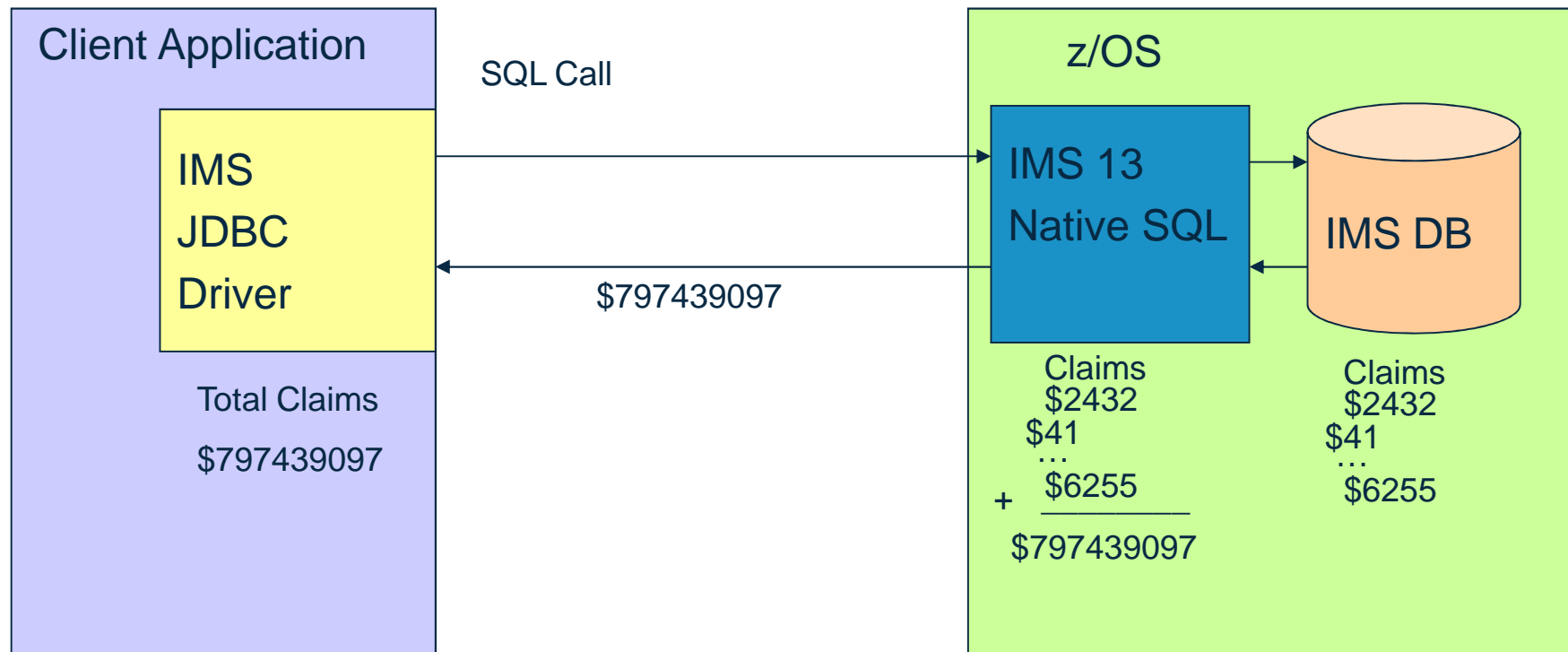
- **Requirement** - Improve performance for SQL data aggregation
- Example
 - How much money has my insurance company paid out in claims for the year 2011?
 - `SELECT SUM(CLAIMAMOUNT) FROM CLAIMS WHERE YEAR=2011`



SQL Parsing in IMS



- **Solution IMS Java intends to use IMS 13 Native SQL**
 - IMS Service Process
- Example with IMS SQL call handler
 - How much money has my insurance company paid out in claims for the year 2011?
 - `SELECT SUM(CLAIMAMOUNT) FROM CLAIMS WHERE YEAR=2011`



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IMS DRDA DDM command support for native SQL enhancement



- The DDM command support for native SQL requires the Open Database Manager (ODBM) component of the IMS Common Service Layer (CSL).
 - ODBM translates the DDM commands into SQL and then routes the SQL calls to the appropriate IMS system.
 - The receiving IMS system's native SQL translates the SQL into DL/I.
- IMS Data Provider for Microsoft .NET uses this support
- IMS Universal Drivers to be updated via service process
 - Enables SQL processing to be handled directly by IMS instead of on the client side,
 - Results in increased performance for the IMS Open Database solution.



DLIModel

- IMS Enterprise suite for z/OS, **V2.1** is the last release to provide the **DLIModel Utility plug-in**.
- Explorer provides ability to import DLIModel projects
 - Explorer does not support XML DB or DB Web Services
- Customers using **IMS Database Web Services** should transition to using the IBM Data Studio which leverages the IMS Universal Drivers

IMS Data Provider for Microsoft .NET

Introducing

IBM IMS Data Provider for Microsoft .NET



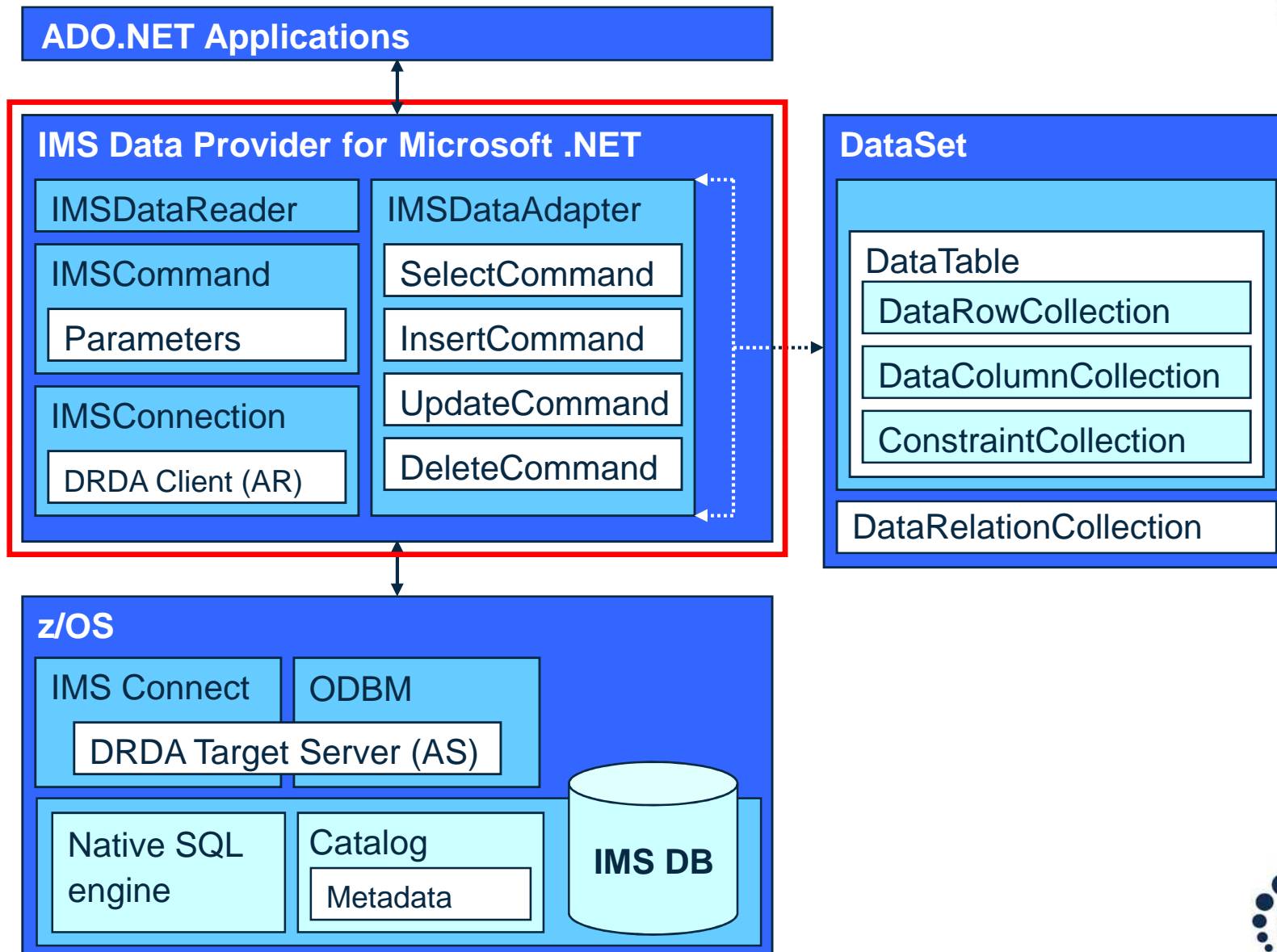
- **IBM IMS Data Provider for Microsoft .NET**
 - a component of IMS Enterprise Suite
- This product enables standard ADO.NET SQL access to IMS data from .NET applications in a simple, fast, well proven way
 - Develop and reuse .NET applications (written in any .NET language, e.g. C#, VB, VC++) to access IMS data
 - Perform CRUD operations via SQL directly against IMS data
 - No need for intermediate steps/tools (such as DB2 stored procedures, web services, or 3rd party products) to access IMS databases from .NET



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IMS Data Provider Architecture



Complete your session evaluations online at www.SHARE.org/Pittsburgh-Eval



C# Application Example (SELECT)



```
Example.cs ×
using IBM.Data.IMS;

static void IMSReader()
{
    // Use connection string to configure connection properties
    IMSConnection connection = new IMSConnection("Data source = MyIMS,5555;
        Database = Insurance");
    // Establish connection to IMS database
    connection.Open();

    // Specify SQL query in the IMSCommand object
    IMSCommand command = new IMSCommand("SELECT * FROM PCB01.CUSTOMERS",
        connection);

    // Execute query and return a DataReader object
    IMSDataReader reader = command.ExecuteReader();

    // Iterate through results and output on the screen
    while (reader.Read())
        Console.WriteLine(reader.GetString(0));

    // Close the reader
    reader.Close();

    // Close the connection
    connection.Close();
}
```



C# Application Example (INSERT)



```
Example.cs X
using IBM.Data.IMS;

static void IMSWriter()
{
    // Use connection string to configure connection properties
    IMSConnection connection = new IMSConnection("Data source = MyIMS,5555;
        Database=Insurance");
    // Establish connection to IMS database
    connection.Open();

    // Specify SQL command in the IMSCommand object
    IMSCommand command = new IMSCommand("INSERT INTO PCB01.CUSTOMERS (NAME,
        POLICY) VALUES ('EVGENI', 1210050000)", connection);

    // Execute command, return number of affected rows
    int i = command.ExecuteNonQuery();

    // Close the connection
    connection.Close();
}
```

- INSERT, UPDATE and DELETE commands are used identically



More features



- Dynamic **Parameters**
- **Local Transactions**
- **Connected** and **disconnected** modes
- **Generic coding** (factory based) interface
- **Connection pooling** for improved performance
- Access to **Metadata** (result set or entire database)
- RACF **authentication** and AT-TLS **encryption** supported

IBM IMS Data Provider for Microsoft .NET



Complete your session evaluations online at www.SHARE.org/Pittsburgh-Eval

GUI / Web Development



- Visual Studio is a powerful environment for developing GUI and web applications
 - Interactive applications that work with IMS data are easy to develop

My ASP.NET APPLICATION

Home About

WELCOME TO IMS AND ASP.NET!

	WARDNAME	WARDNO	HOSPNAME	HOSPCODE
Edit	GENERAL	0001	ALEXANDRIA	R1210010000A
Edit	SPECIAL	0002	ALEXANDRIA	R1210010000A
Edit	INTERNAL	0003	ALEXANDRIA	R1210010000A
Edit	SURGICAL	0004	ALEXANDRIA	R1210010000A
Edit	COSMETIC	0005	ALEXANDRIA	R1210010000A
Edit	INTENSIVE	0007	ALEXANDRIA	R1210010000A
Edit	GENERAL MED	0001	SANTA TERESA	R1210020000A
Edit	DERMATOLOGY	0002	SANTA TERESA	R1210020000A
Edit	PEDIATRICS	0003	SANTA TERESA	R1210020000A
Edit	ORTHOPEDICS	0004	SANTA TERESA	R1210020000A

1 2

Query: SELECT HOSPNAME,HOSPCODE,HOSPLL FROM PCB01.HO!

Name: OrderId

	HOSPNAME	HOSPCODE	HOSPLL
▶	ALEXANDRIA	R1210010000A	900
	SANTA TERESA	R1210020000A	900
	SANTA CLARA	R1210030000A	900
	NEW ENGLAND	R1210040000A	900
	SAINT VINCENT	R1210060000A	900
*			

Insert Update Delete

IBM



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Getting Started



- Documentation:

http://publib.boulder.ibm.com/infocenter/dzichelp/v2r2/topic/com.ibm.ims.net31.doc/net_intro.htm

- “Verifying installation” page is a good place to start
- Look for `getting_started.txt` and a `sample project` in the installation directory after installing the .NET Data Provider
- Video tutorials and demos on **YouTube**:
 - http://bit.ly/IMS_YouTube



System Requirements



- Software requirements
 - IMS DB v13, APARs PM96324 and PI05437
 - IMS Connect, ODBM
 - Catalog
 - .NET Framework 4.0
 - Windows XP, Windows 7
- Hardware requirements
 - For IMS DB - same as IMS v13
 - For .NET Data Provider and Visual Studio
 - Computer that has a 1.6GHz or faster processor
 - 1 GB (32 Bit) or 2 GB (64 Bit) RAM (Add 512 MB if running in a virtual machine)
 - 3GB of available hard disk space
- Tooling
 - Microsoft Visual Studio

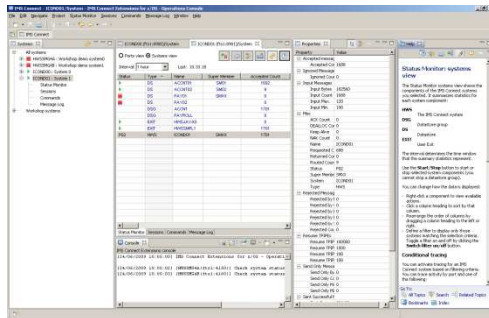


IMS ES Explorer for Development

IMS User Interface

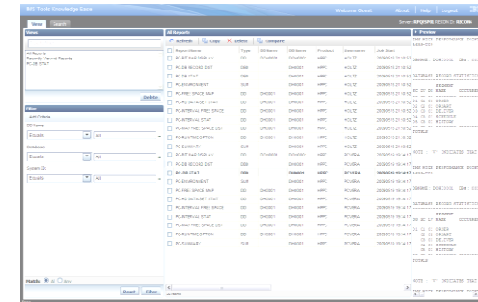


Explorer for Development (Eclipse)

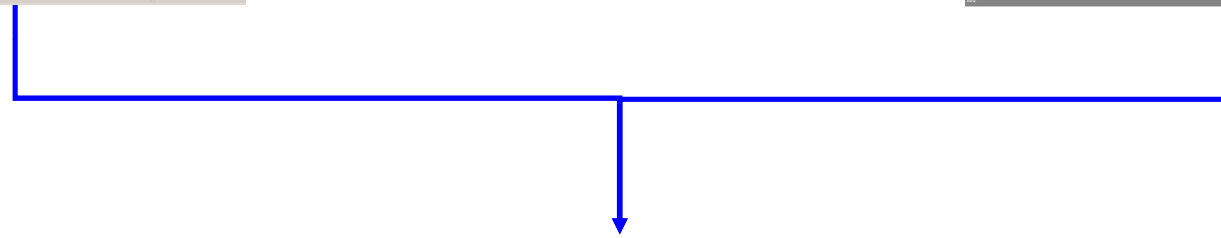


Developer

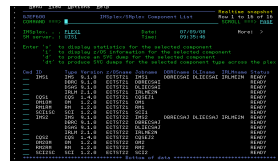
Explorer for Administration (Web Browser)



Administrator



• ISPF



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IMS Enterprise Suite V3.1 Explorer for Development



The screenshot displays the IMS Enterprise Suite V3.1 Explorer for Development interface. On the left, a SQL query window shows a query: `SELECT HOSPNAME, HOSPCODE, HOSPLL FROM PCB01.HOSPITAL`. Below the query, a table of results is shown:

Status	Operation	Da	Status	Result1
✓	Succes select * from pcb...	8/2:	1	L_w HOSPLL
✓	Succes select * from pcb...	8/2:	2	L_w HOSPCODE
			3	L_w HOSPNAME
			4	L_w HOSPNAME

The central part of the interface shows a database schema diagram for 'DEALERDB'. It includes tables such as DEALER, MODEL, SALES, STOCK, SALESINF, ORDER, SALESERP, SALESEMP, EMPINFO, and STOCSALE. Relationships are indicated by lines connecting fields in different tables. A green arrow points to the 'EMPINFO' table, with the text: 'See database relationships change DBD field attributes'.

At the bottom right, a window titled 'Editing view of the current PCB' shows a detailed view of the 'DEALER' table structure, including fields like DLRNO, DLR-NAME, CITY, ZIP, and PHONE. A green arrow points to this window with the text: 'Edit PSB sensitive segments and attributes'.

At the bottom left, a green arrow points to the SQL query window with the text: 'Generate SQL to access IMS data'.

Ability to access the IMS Catalog

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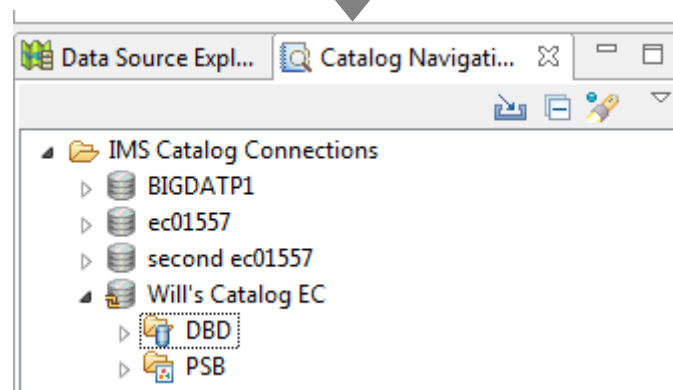
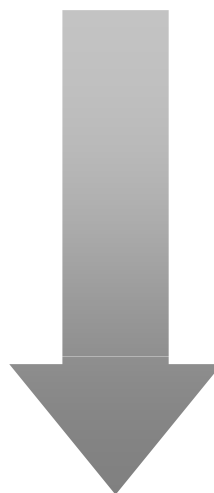


IMS Enterprise Suite Explorer for Development

- Enhancements for V3.1 include:
 - Ability to import large numbers of DBDs and PSBs.
 - Automatic imports of referenced DBDs when DBDs and PSBs from the IMS catalog or the host are imported.
 - Ability to import COBOL and PL/I data structures from the host.
 - Support for transaction unit testing.
 - Uses IMS Connect API for Java
 - Can be used in addition to IBM IMS Batch Terminal Simulator
 - Support for IMS catalog navigation.
 - View IMS resources in an IMS catalog-enabled system
 - Import IMS resources into IMS Explorer projects from the view.
 - Show all instances of a given resource or find referenced DBDs or PSBs
 - A Problems View for troubleshooting information
 - Shows resource problems and missing files

IMS Catalog Navigation View

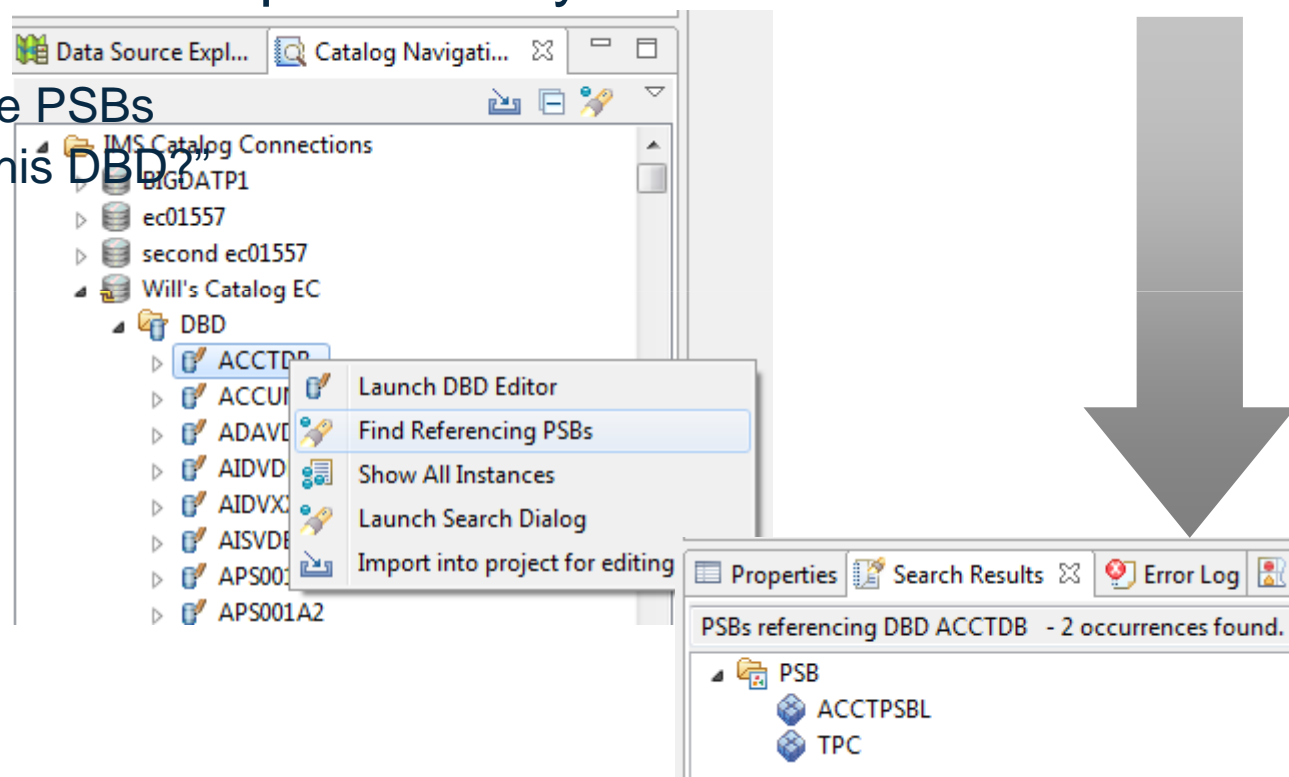
- Get a list of all the PSBs/DBDs in the system.



Built-in queries

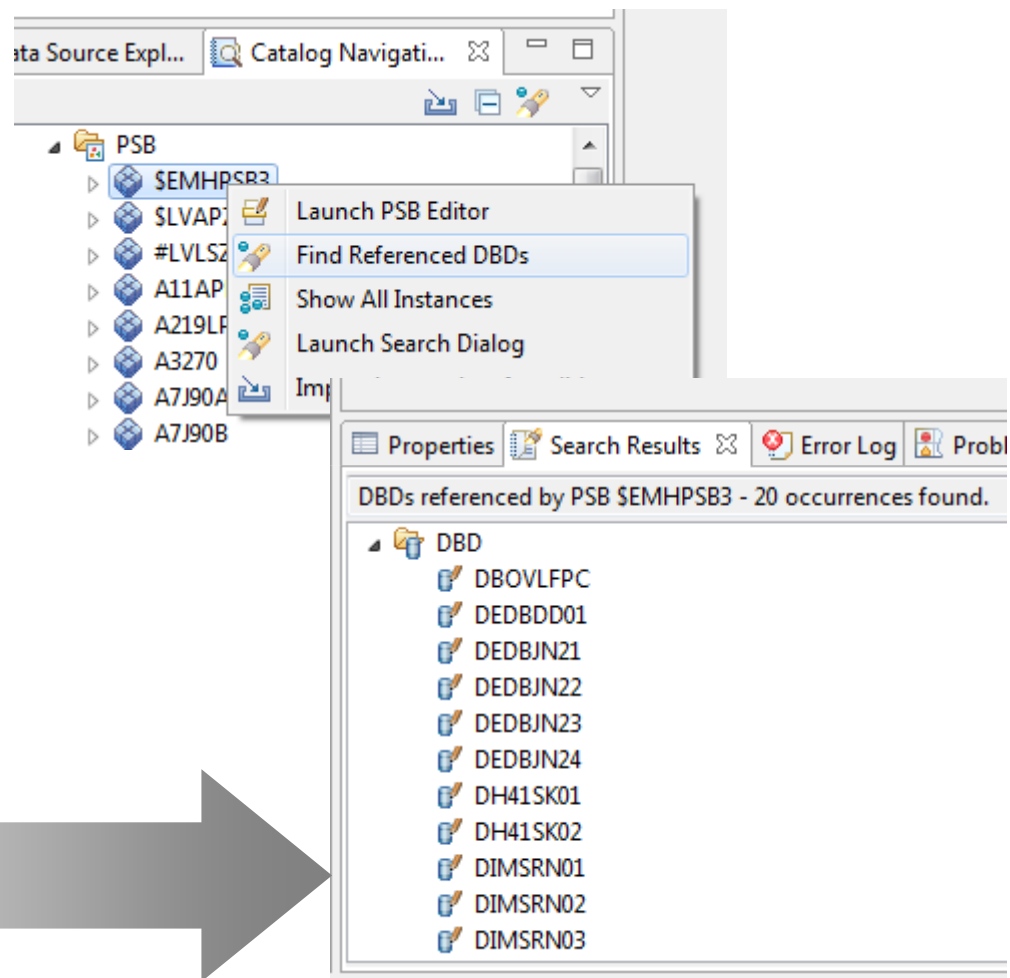
- Several built-in queries have been added to assist with resource and relationship discovery

– “What are all the PSBs that reference this DBD?”

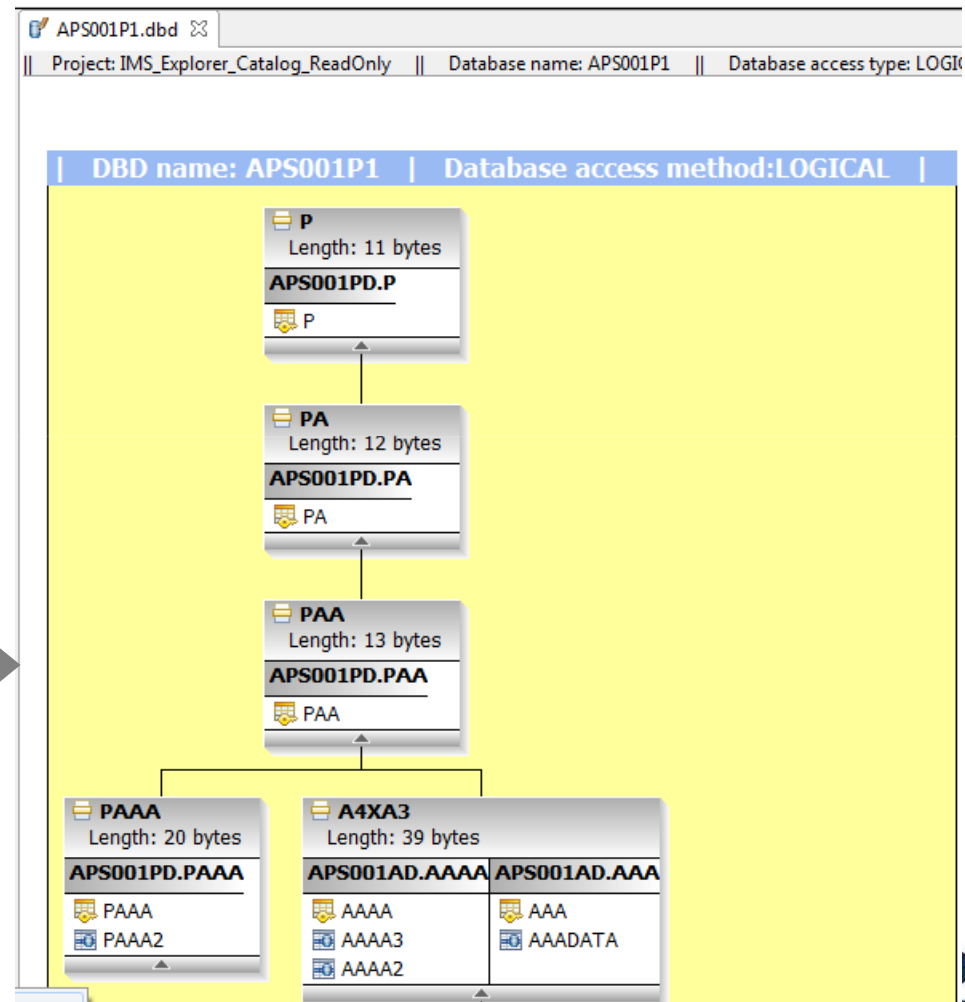
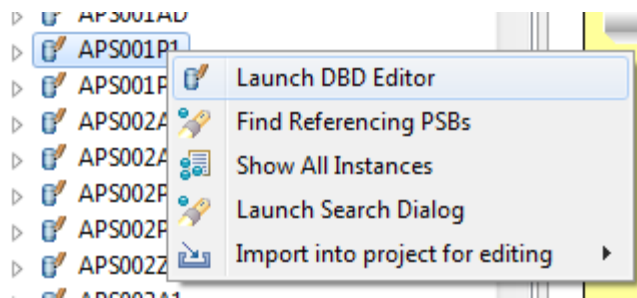


Built-in queries continued

- “What are all the DBDs referenced by this PSB?”



Graphically view resources directly from the IMS catalog



IMS Transaction Unit Test Support



- In a Transaction test project you can define a transaction and import application data structures to specify the layout of the input messages it consumes and output messages it returns.



IVTNO.trn

IMS Explorer Transaction Message Editor

Define all the input and output messages for the transaction and import the application data structures for those messages.

Trancode:

- Input Messages
 - Display
 - Segments
 - Segment 1
 - Data Structures
 - INPUT_MSG
 - IN_LL
 - IN_ZZ
 - IN_TRCD
 - IN_CMD
 - IN_NAME1
 - IN_NAME2
 - IN_EXTN
 - IN_ZIP

- Output Messages
- Display out
 - Segments
 - Segment 1
 - Data Structures
 - OUTPUT_MSG

Buttons: Import data structure..., Add..., Edit..., Copy, Paste, Remove, Move Up, Move Down



IMS Transaction Unit Test Support



- You can then create a test case to script a dialog between a virtual client application and the transaction.
- You can specify the input message payload with human readable values at the field level. Explorer does the data conversion at invocation time.
- Test cases can be duplicated and changed in order to build up a test bucket to drive different code paths in the transaction.



Input and Output Message Pair	Field Value
Input and Output Message Pair	
Display	
Display	
Segment 1	
INPUT_MSG	
IN_LL	59
IN_ZZ	0
IN_TRCD	IVTNO
IN_CMD	DISPLAY
IN_NAME1	LAST1
IN_NAME2	
IN_EXTN	
IN_ZIP	
Display out	
D2	
D3	

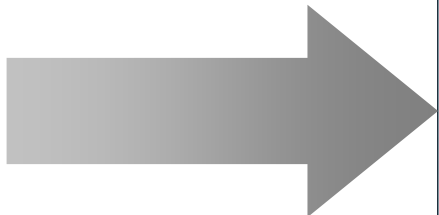


IMS Transaction Unit Test Support



SHARE

Use the runtime console to tweak input message field values, invoke the transaction, and inspect the output message.



Run an IMS Transaction Test Case

Execution time is 0.92800 seconds for the input and output message pair Display.

Test case name:

Input messages

Input and Output Message Pair	Field Value	Field Length
Display		
D2		
Segment 1		
INPUT_MSG		
IN_LL	59	2
IN_ZZ	0	2
IN_TRCD	IVTNO	10
IN_CMD	DISPLAY	8
IN_NAME1	LAST1	10
IN_NAME2		10
IN_EXTN		10

Output messages

View output message with:

Input and Output Message Pair	Field Value	Field Length
Display		
Segment 1		
OUTPUT_MSG		
OUT_LL	93	2
OUT_ZZ	0	2
OUT_MSG	ENTRY WAS DISPLAYED	40
OUT_CMD	DISPLAY	8
OUT_NAME1	LAST1	10
OUT_NAME2	FIRST1	10
OUT_EXTN	8-111-1111	10

Cross-product integration

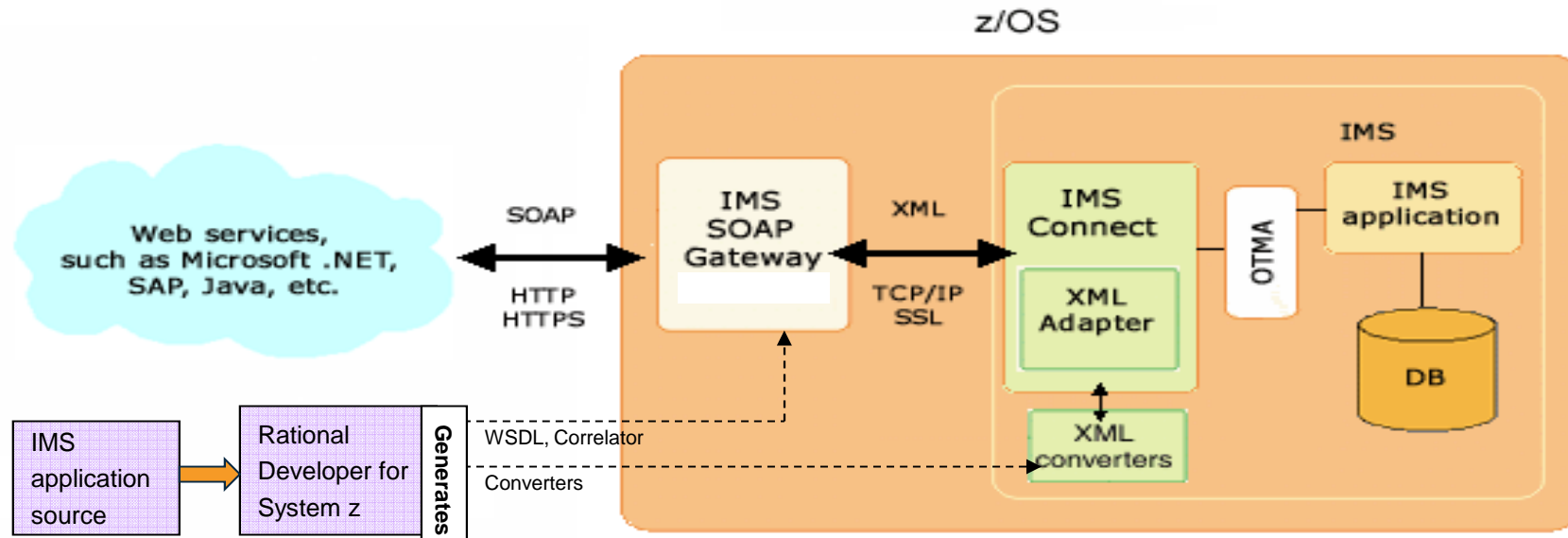
- The IMS Explorer supports cross-product integration (shell-sharing) with the following products:
 - IBM® Rational® Developer for System z®
 - IBM Data Studio
 - IBM Problem Determination Tools Plug-ins for Eclipse
 - IBM Explorer for z/OS®
 - IBM CICS Explorer® Software Development Kit (SDK)
 - IBM Rational Team Concert™

IMS ES SOAP Gateway

IMS SOAP Gateway



- Direct web service solution
 - SOAP engine supporting industry web service standards
 - HTTP(S), SSL, SOAP 1.1, WSDL 1.1, WS-I BP 1.0, WS-Security with UNTP
 - Parse and transform XML messages in IMS Connect
 - Run on multiple platforms (z/OS, zLinux, AIX and Windows)
 - Recommended when Java EE server not used



ES 3.1 - SOAP Gateway



- **64-bit support for z/OS**
 - SOAP Gateway now runs on the z/OS platform in 64-bit mode, allowing organizations to take advantage of their 64-bit operating environment for extended memory usage.
- **Send-only with ACK support for synchronous callout**
 - Send-only with acknowledgement protocol support for synchronous callout allows SOAP Gateway to receive a final confirmation that the response message was delivered to the original IMS application that issued the callout request. This confirmation provides SOAP Gateway users additional information about whether a callout response message was sent to IMS and whether IMS received the message.



ES 3.1 - SOAP Gateway



- **SOAP Gateway management utility batch mode support**
 - Administrators can now use the batch mode of the management utility to facilitate web service deployment and server management for better performance and manageability
 - **iogmgmt** - batch command read file for execution as a batch in one JVM instance
- **Enhanced security cipher suite support**
 - SOAP Gateway is enhanced to use the FIPS 140-2 approved cryptographic provider(s); IBMJCEFIPS (certificate 376) and/or IBMJSSEFIPS (certificate 409) for cryptography.
 - SOAP Gateway also adds the support for Transport Layer Security (TLS) V1.2 and for cipher suites with key length of 2048 and key strength of 112 bit, as required by NIST SP800-131A.



Transaction tracking

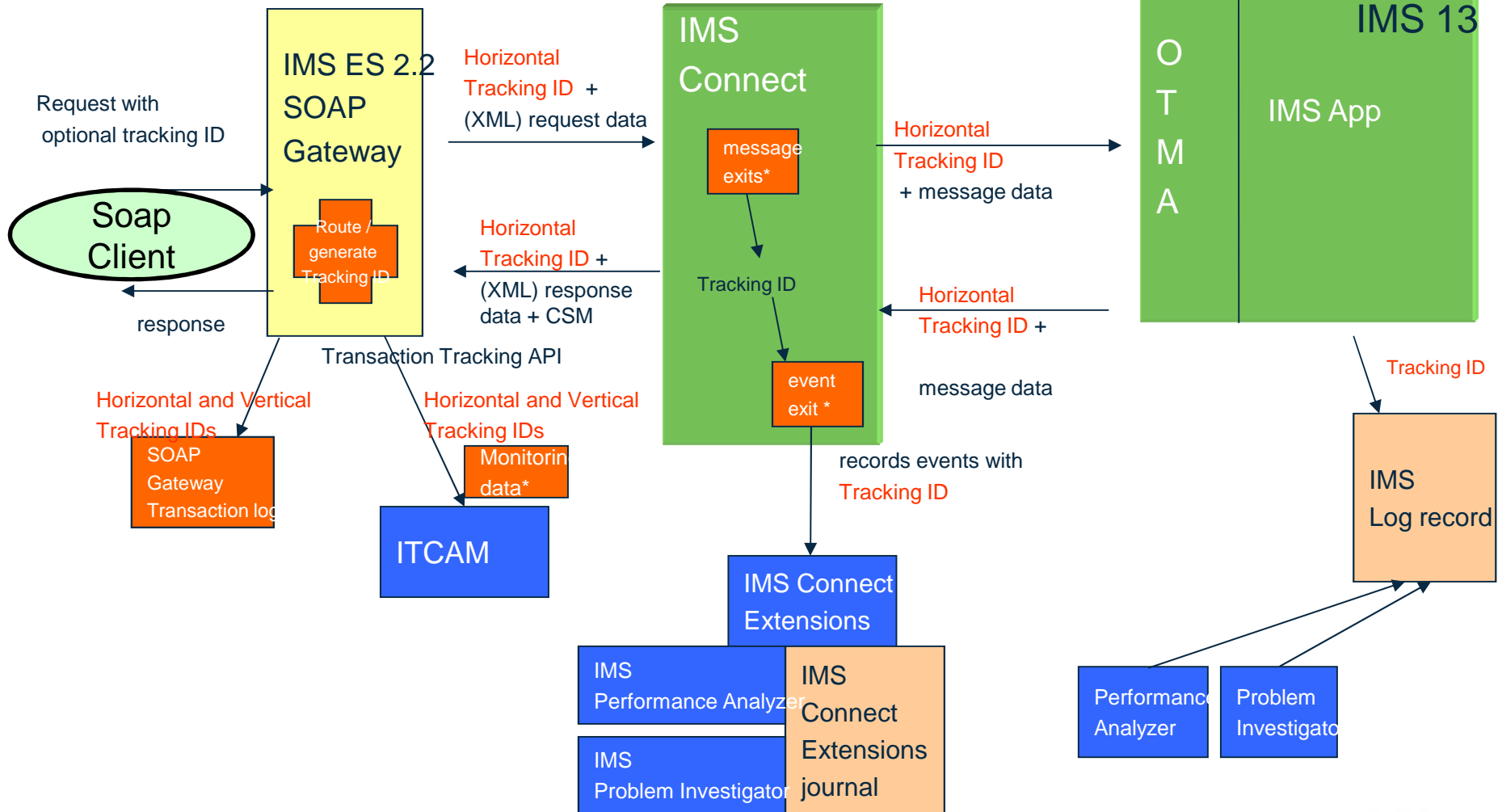


- SOAP Gateway transaction tracking IDs and logging
 - SOAP Gateway can attach 40 byte *horizontal* tracking ID to inbound web service request
 - ID is sent with the inbound request through IMS Connect to the target IMS application and returned with the response message to SOAP Gateway
 - IMS Connect tracking ID captured by the IMS Connect Event Recorder exit routine (HWSTECL0).
 - This information can be consumed by the IBM IMS Connect Extensions for z/OS and equivalent tools.
 - For IMS 12 requires APAR PM69983 applied to IMS Connect
 - IMS log records for transactions include the tracking ID
 - IBM IMS Performance Analyzer for z/OS and IBM IMS Problem Investigator for z/OS, or equivalent tools, to inspect IMS log records.
 - Benefits
 - Correlates transactions between SOAP Gateway, IMS Connect, and IMS
 - Provides information for diagnostic purposes



End-to-end Transaction Tracking – Provider Scenario

(correlation based on Tracking ID)



WS-Security



- WS-Security SAML unsigned tokens for synchronous callout applications
 - Originating Userid (**PSTUSID**) for the IMS synchronous callout application is passed to the external web service for further authentication and authorization
 - **Benefit**
 - Provides message-level security for synchronous callout
- WS-Security enhancement for provider web services
 - support for Security Assertion Markup Language (SAML) 2.0 sender-vouches signed tokens
 - **Benefit**
 - Provides additional message integrity for service provider processing
 - Extends SOAP Gateway support of WS-Security standards



IMS ES 2.2 SOAP Gateway New Samples



- IMS Exchange web site updated
- Link on IMS Enterprise Suite SOAP Gateway web page

The screenshot shows the IBM developerWorks website. The main content area is titled "IMS Exchange" and displays a list of blog posts. The first post is "New sample for IMS Enterprise Suite 2.1 SOAP Gateway custom authentication modules" by David Hanson, dated Mar 26. The second post is "A new example is available for IMS Enterprise Suite 2.1 SOAP Gateway: administrative script samples" by David Hanson, dated Feb 1. The third post is "A new example for SOAP Gateway 2.1 is available: Top-down application development with Rational Developer for System Z" by David Hanson, dated Nov 10 2011. The fourth post is "A new SOAP Gateway 2.1 example is available: Getting started with synchronous callout" by David Hanson, dated Nov 9 2011. The sidebar on the left contains navigation links for "IMS Exchange", "Overview", "Members", "Blog", "Bookmarks", and "Files". The sidebar on the right includes a "Join now" button, a "Follow this blog" button, and a "Similar Blogs" section with links to "EGL Blog", "WebSphere and...", "Asset Managem...", "ECM Community...", and "Build your SK...".

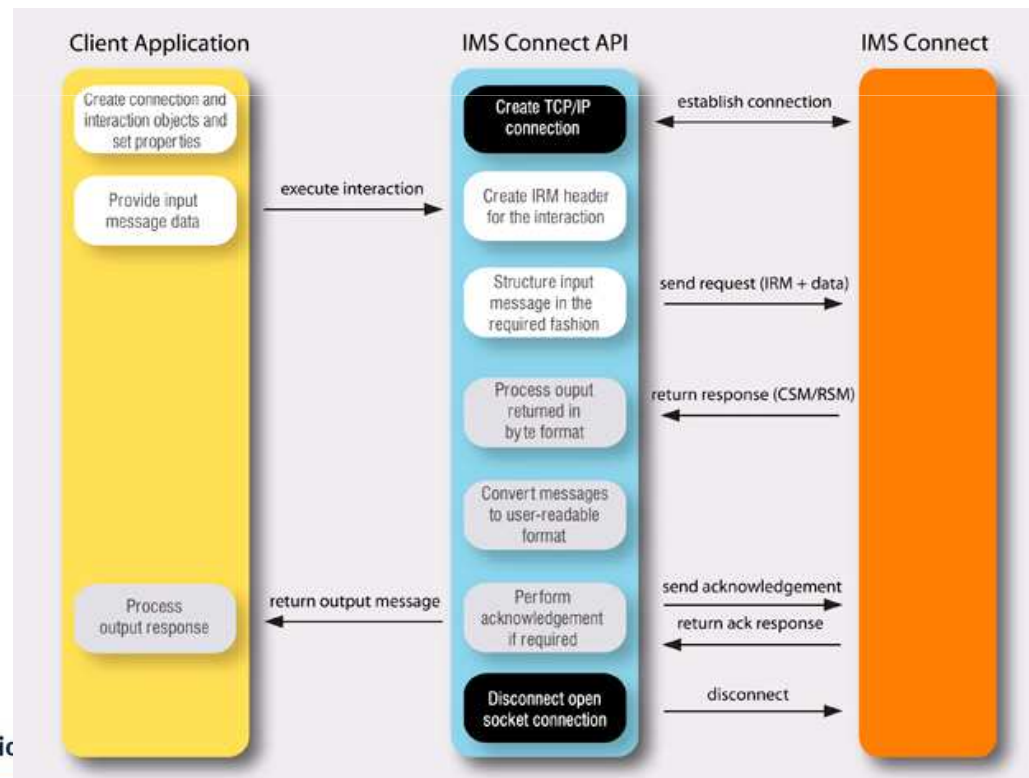
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IMS ES Connect API for Java

IMS Connect API for Java, C

- Provides simple, easy to use, light weight solution to build User-written IMS Connect client application to interact with IMS through IMS Connect using TCP/IP
- Used to invoke IMS transactions, OTMA supported IMS Commands, and IMS Connect supported commands
- Shields users from IMS Connect protocol, Message and header formats (IRM, CSM, RSM, etc.), and low-level socket communications



IMS ES Connect API for Java



- IMS and IMS Connect type-2 commands
- Performance Enhancements
- Support for SendOnly synchronous callout response messages with acknowledgement
 - Function requires that both the following APAR/PTFs are applied
 - IMS Connect 12: PM39569/UK74666
 - IMS OTMA 12: PM39562/UK74653
- Benefits
 - Custom written IMS Connect TCP/IP Java client applications
 - Can send and receive commands to IMS and IMS Connect
 - Can request and receive an indication of response delivery to IMS for synchronous callout processing



IMS ES Connect API for Java



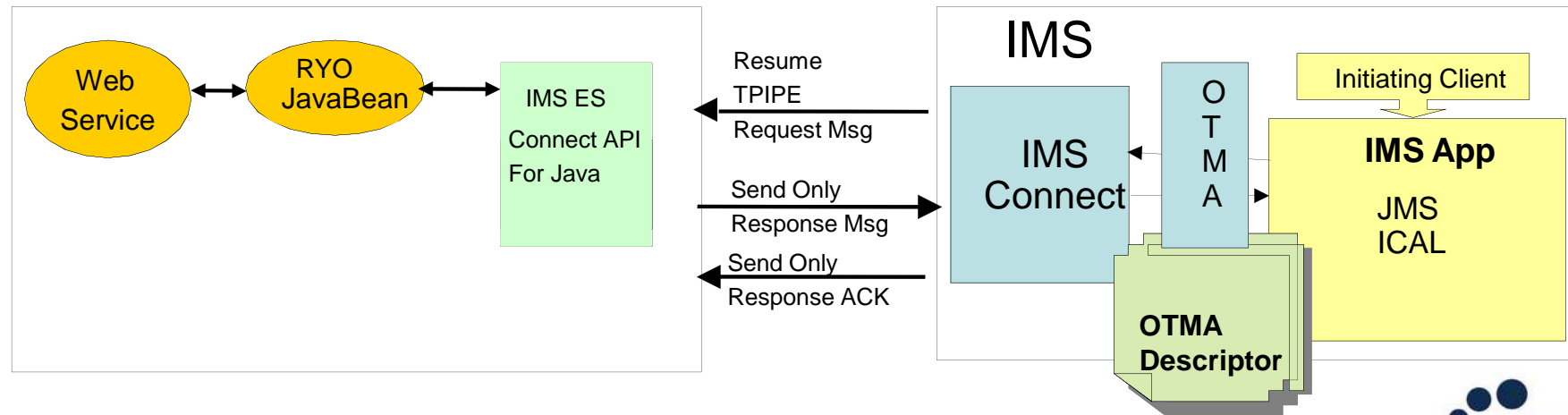
- SendOnly synchronous callout response messages with acknowledgement
 - client application gets acknowledgement when the response message is received by IMS

INTERACTION_TYPE_DESC_SENDOONLYACK_CALLOUT_RESPONSE

IMS Service Consumer

DL/I ICAL or JMS -> Synchronous

z/OS



Complete your session evaluations online at www.SHARE.org/Pittsburgh-Eval

Performance data



- For inbound, 16,000 transactions per second using V2R2 which is a 3% improvement over V2R1
- For callout, 11,000 transactions per second using V2R2 which is a 56% improvement over V2R1

Complete your session evaluations online at www.SHARE.org/Pittsburgh-Eval



Mobile Feature Pack

Available now

Business Value Provided



Target Market

IMS customers expanding to leverage mobile access

Challenge Addressed

Lack of integrated platform providing a mobile and cloud solution

Solution Statement

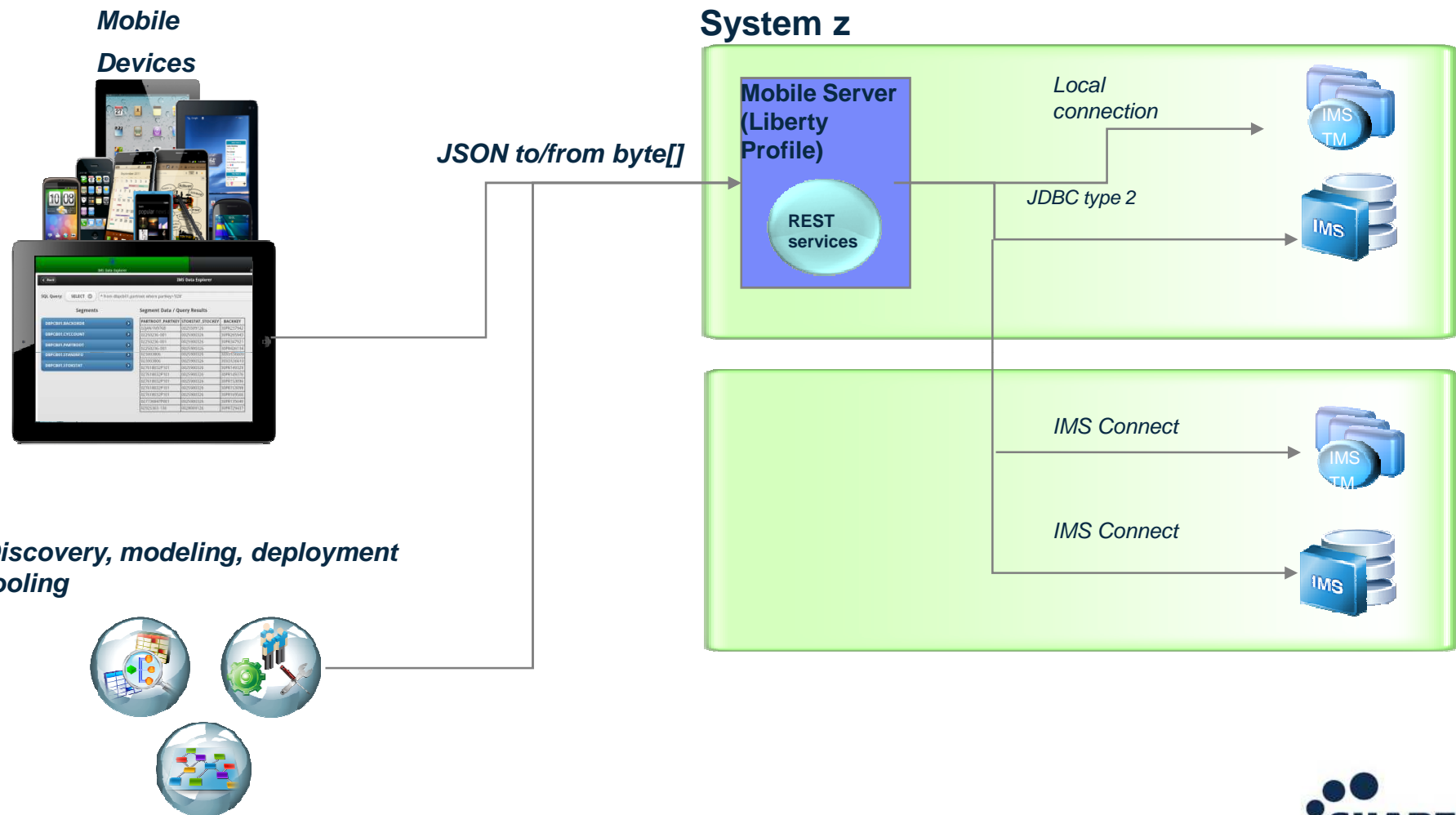
- Integrated platform for full discovery, modeling, deployment, and execution of transaction and data assets for RESTful consumption
- Complements IBM Worklight for mobile access with zEnterprise

Business Value

Dependable platform by which our clients can easily enable transaction and data assets for mobile consumption.



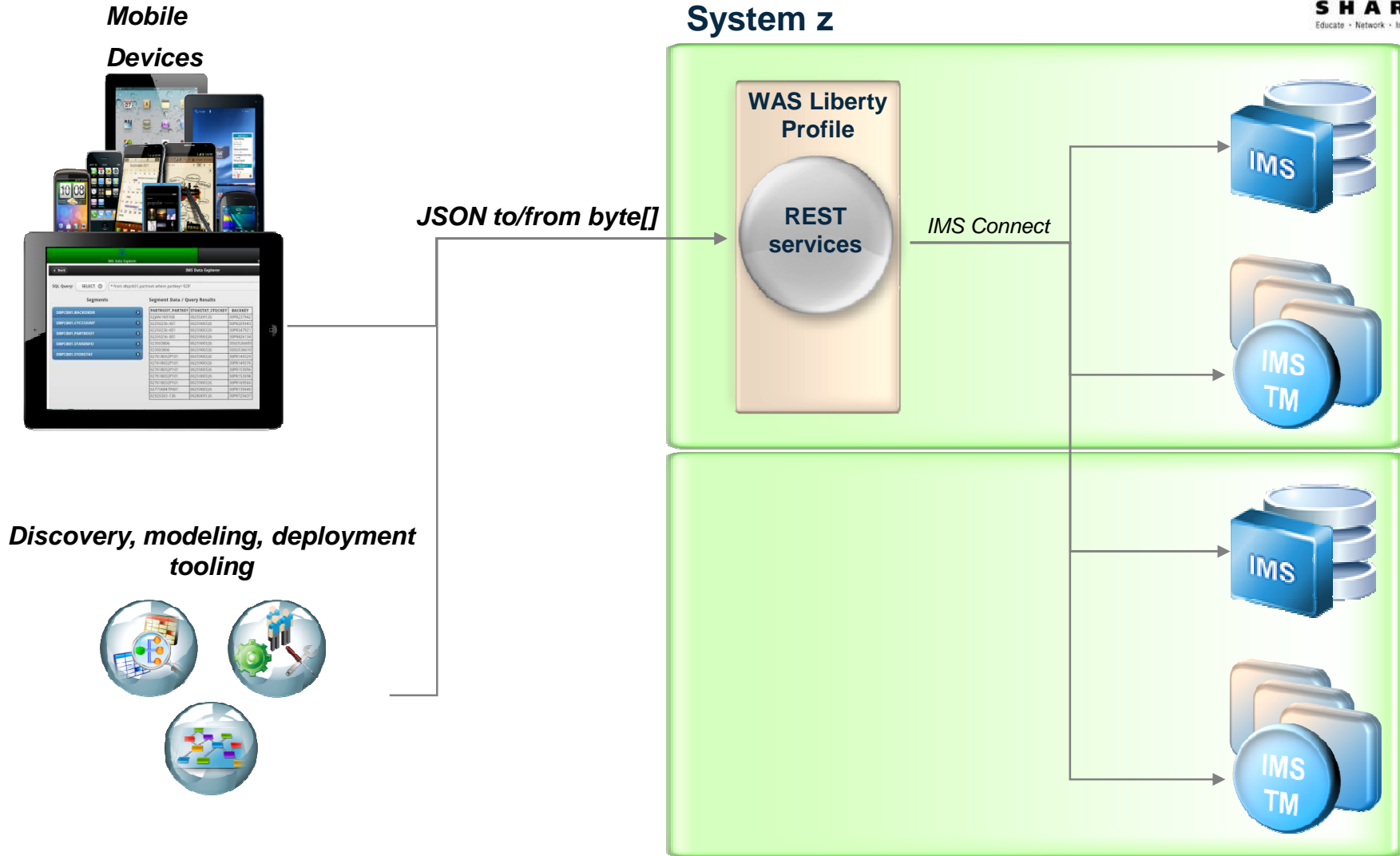
IMS Mobile Enablement Planned Platform



Complete your session evaluations online at www.SHARE.org/Pittsburgh-Eval



IMS mobile enablement – intended direction



IBM Confidential



Complete your session evaluations online at www.SHARE.org/Pittsburgh-Eval

IMS Mobile Enablement Overview



- Provide native mobile enablement to access IMS assets (transaction and database)
- **Mobile Server (feature on WebSphere Liberty Profile):**

Mobile Services

- Execute IMS Mobile Services – (IMS TRAN & DB)
- Manage IMS Mobile Services
- Discover IMS resources (Sysplex, transactions and databases)
- Governance – Resource versioning, administration history and statistics

Security

- Transport level security via HTTPS
- Front-end authentication via UNTP, Basic authentication, Open ID and service authorization
- Transport level SSL with IMS Connect
- Traditional IMS authentication and authorization for transactions and data access

- **Tooling:**

IMS Explorer for Development

- Generate, deploy & manage IMS transaction message metadata
- Deploy & manage mobile services backed by IMS transactions and databases.
- Unit Test of deployed mobile services
- Import/Export IMS Mobile resources across IMS Mobile Servers

Future Integration with IMS Explorer for Administration:

- Sharing Sysplex environment definitions
- Administer IMS resources(query/start/stop, transaction, database, etc)

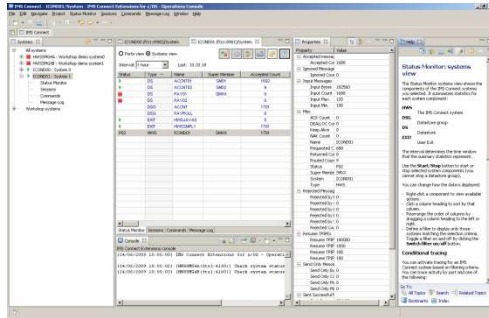


IBM IMS Explorer for Administration

IMS User Interface

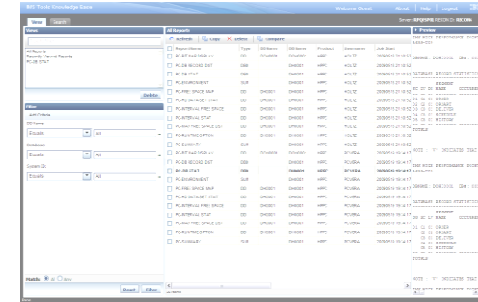


Explorer for Development (Eclipse)

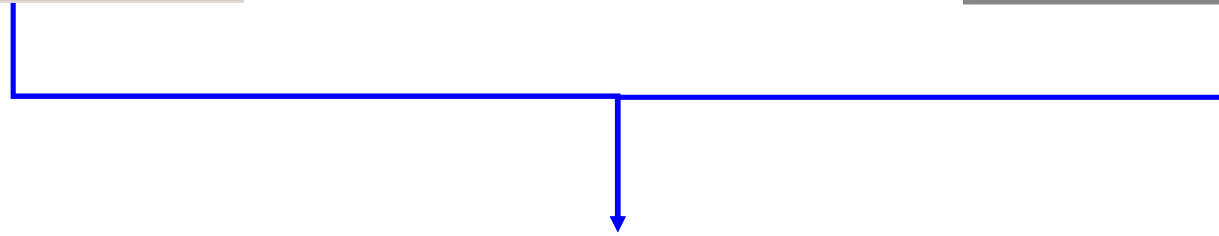


Developer

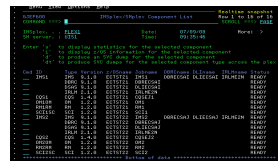
Explorer for Administration (Web Browser)



Administrator



• ISPF



Complete your session evaluations online at www.SHARE.org/Pittsburgh-Eval



Administration vision



- Provide IMS system programmers and DBAs a state-of-the-art user interface to manage, configure, and deploy IMS systems
- Full operational control over all IMS address spaces
- Full command of IMS resources
 - Programs, transactions, databases, etc
- Immediately react to and resolve issues in the system
- Cloud-style IMS system management
 - IMS region profiling, application profiling, application deployment



IBM IMS Explorer for Administration



IMS Explorer for Administration is an extension to the [IBM Tools Base v1.4 Administration Console for System z](#)

- **Enterprise System View**
 - IMS Resource and IMSplex discovery
 - Hierarchical representation starting from the SYSPLEX to the IMS Resources
- **Enterprise Search**
 - Search across the entire enterprise on any type of resource
- **Visual Status**
 - Quickly see the status of any IMS Resource with colored status icons
 - Hover and click status icons for reason codes and corrective actions
 - Filter IMS Resources
- **Manage IMS Resources**
 - Start/Stop and update IMS Resource Attributes
 - Multi select IMS Resources to manage and update
- **Resource Relationships**
 - View relationships between IMS Resources
 - At a glance understand why a transaction is having a problem
- **Customize**
 - Change the column attribute defaults

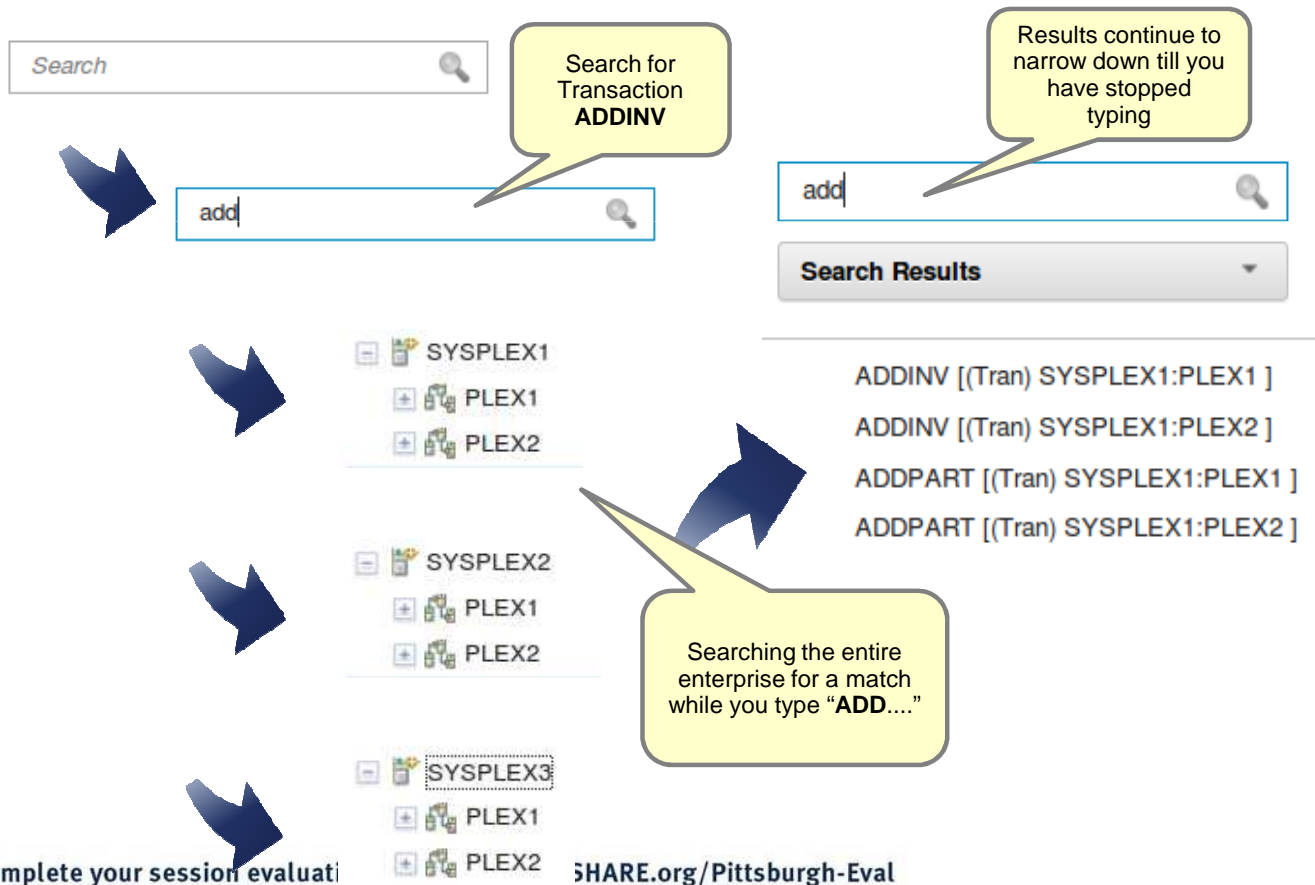
Complete your session evaluations online at www.SHARE.org/Pittsburgh-Eval



Search the enterprise



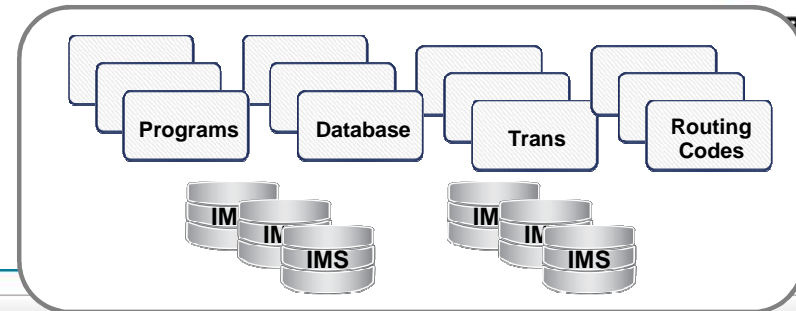
- Search for any resource that has been configured or discovered
 - Resources include IMS Transactions, Databases, Programs and Routing Codes
 - Search result types are identified by keyword
 - Instantly view the found resource and drill further into the resource



Resource relationship



- At a glance see how resources are related
- Relationships between resources in one view
- Quickly diagnose problems between resources



Search

Enterprise View

- SYSPLEX1
 - PLEX1
 - HWS1
 - IMS2
 - Transactions
 - Programs
 - Routing Codes
 - Databases
 - HWS2
 - IMS1
 - Transactions
 - Programs
 - Routing Codes
 - Databases
 - PLEX2
 - HWS1
 - HWS3
 - IMS3
 - Transactions
 - Programs
 - Routing Codes
 - Databases

SYSPLEX1 > PLEX1 > IMS1 > Transactions > EMHTX2

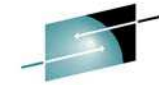
Transaction: EMHTX2		Related Program		Related Routing Code	
IMS Attribute	Value	IMS Attribute	Value	IMS Attribute	Value
Transaction Code	EMHTX2	PGM Name	EMHPSB2	Routing Code	EMHTX2
Status	✓	Status	✓	Status	...
Commit Mode	SNGL	BMP Type	N	Program	EMHPSB2
Fast Path	E	Dynamic Option	N	Inquiry	N
Class	1	Definition Type	MODBLKS	Last Access Time	
Conversational	N	Region type	IFP	Time Created	2013.105 10:31:46.86
Message Queue Count	0	Member	IMS1	Definition Type	MODBLKS
Limit Count	0	Fast Path	E	Last Import Time	
PSB	EMHPSB2	Local Scheduled Type	PARALLEL	Completion Code	0
Member	IMS1	Completion Code	0	Last Update Time	
AOI Command Support	N	Generated PSB	N	Member	IMS1

Related Databases													
Database Name	Database Type	Status	Access Type	Resident	Member	Definition Type	Last Access Time	Area Name	Last Imported Time	Completion Code	Time Created	Last Updated Time	
MSDBLM01	MSNR	✓	EXCL	Y	IMS1	MODBLKS				0	2013.105 10:31:45.67		
MSDBLM02	MSNR	✓	EXCL	Y	IMS1	MODBLKS				0	2013.105 10:31:45.67		
MSDBLM03	MSNR	✓	EXCL	Y	IMS1	MODBLKS				0	2013.105 10:31:45.67		
MSDBLM04	MSNR	✓	EXCL	Y	IMS1	MODBLKS				0	2013.105 10:31:45.67		

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52

Manage IMS



IBM Tools Base Administration Console for z/OS View Manage Configure admin

Resources Enterprise Search Customize Manage Resources

Sysplex2 > PLEX1 > IMS1 > Transactions
Resource Type: Transactions

Select Attributes

No filter applied.

Transaction Code	Status	Commit Mode	Conversational	Fast Path	Region Class	Limit Count	Message Queue Count	IMSplex Member Name	Associated Program Name
<input type="checkbox"/> 3270S	Warning	MULT	N	N	1	65535	0	IMS1	A3270
<input type="checkbox"/> A1111111	Warning	SNGL	Y	N	1	65535	0	IMS1	A11APP
<input type="checkbox"/> A3270	Warning	MULT			1	65535	0	IMS1	A3270
<input type="checkbox"/> ADDINV	Critical	MULT	N	N	4	2	0	IMS1	DFSSAM04
<input type="checkbox"/> ADDPART	Normal	MULT	N	N	4	2	0	IMS1	DFSSAM04
<input type="checkbox"/> AOBMP	Critical	SNGL	N	N	23	65535	0	IMS1	TS2IAOB0
<input type="checkbox"/> AOP	Normal	SNGL	N	N	4	4	0	IMS1	TS1IAOP0
<input type="checkbox"/> AP11	Normal				1	65535	0	IMS1	APOL1
<input type="checkbox"/> AP11	Normal	MULT	N	N	1	65535	0	IMS1	APOL1
<input type="checkbox"/> AP14	Normal	MULT	N	N	1	65535	0	IMS1	APOL1
<input type="checkbox"/> AP17	Normal	MULT	N	N	1	65535	0	IMS1	APOL1
<input type="checkbox"/> APOL11	Normal	MULT	N	N	1	65535	0	IMS1	APOL1
<input type="checkbox"/> APOL12	Normal	MULT	N	N	1	65535	0	IMS1	APOL1

Enterprise View

Select Resources

Visual Status



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IBM IMS Explorer for Administration



- Software requirements
 - IMS Tools Admin Console (no-charge)
 - IBM IMS Explorer for Administration is available through APAR PM94292 as an extension of the Administration Console component of IBM Tools Base for z/OS, V1.4
 - IMS Version 12
 - IMS Connect
 - Common Service Layer OM and SCI
 - Supported web browser
 - Firefox, Internet Explorer, Safari





Thank You!

Your Feedback is Important to Us

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