

# IMS Soap Gateway: a cost-effective way to get to IMS data

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TAKE BACK **CONTROL** 

- JK Motor Scenario
- IMS SOAP Gateway
- Features
- Customer Value
- Where to start
- Requirements













- **JK Motor Scenario**
- IMS SOAP Gateway
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# Cathy's challenge



Streamline the process for placing a web order for a car from JK Motors







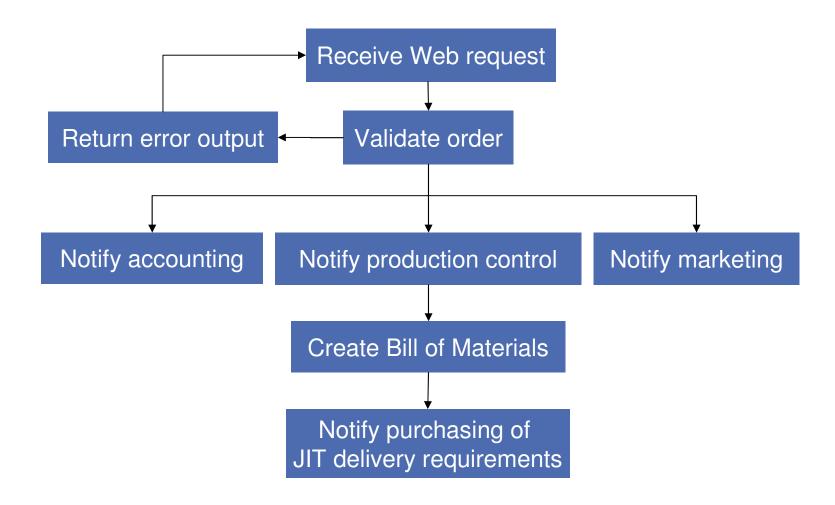








### JK Motors Web ordering process









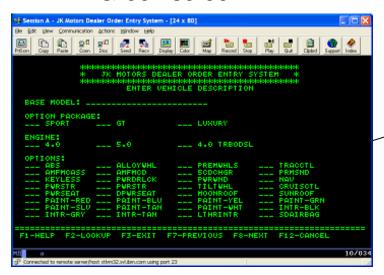


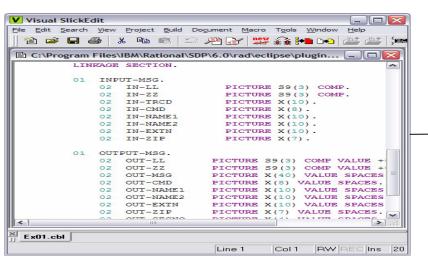




#### Front End

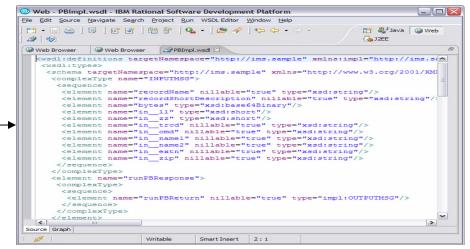
#### 'Green screen'





#### 'Browser view'





















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### **IMS SOAP Gateway Overview**

- Lightweight Web Service solution for accessing IMS transactions in SOA environment
- IMS transactions can be used as-is or can be modified to better integrate into SOA environment
- Excellent tooling support
- Supports a variety of clients
  - Java
  - SAP
  - NET











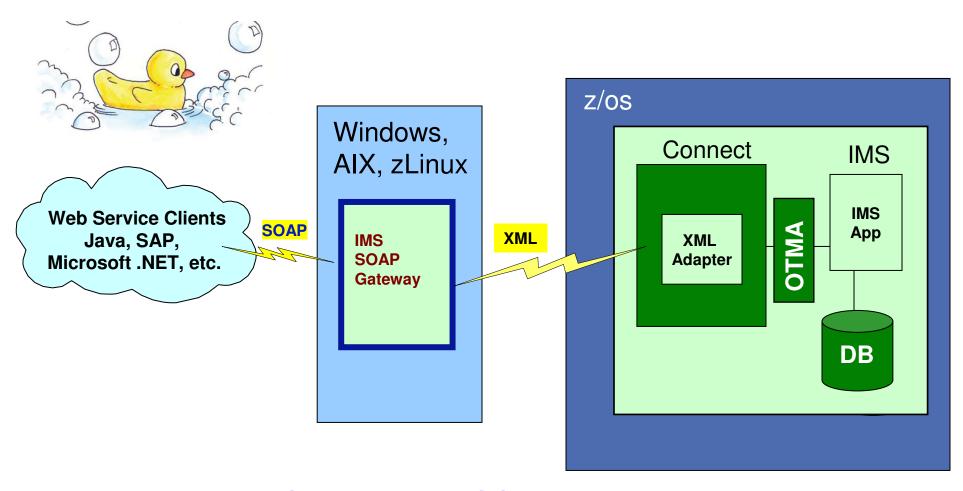








### SOAP up! A clean way to get to IMS



Integrates IMS assets into SOA by providing a standard Web Services interface to your IMS TM applications









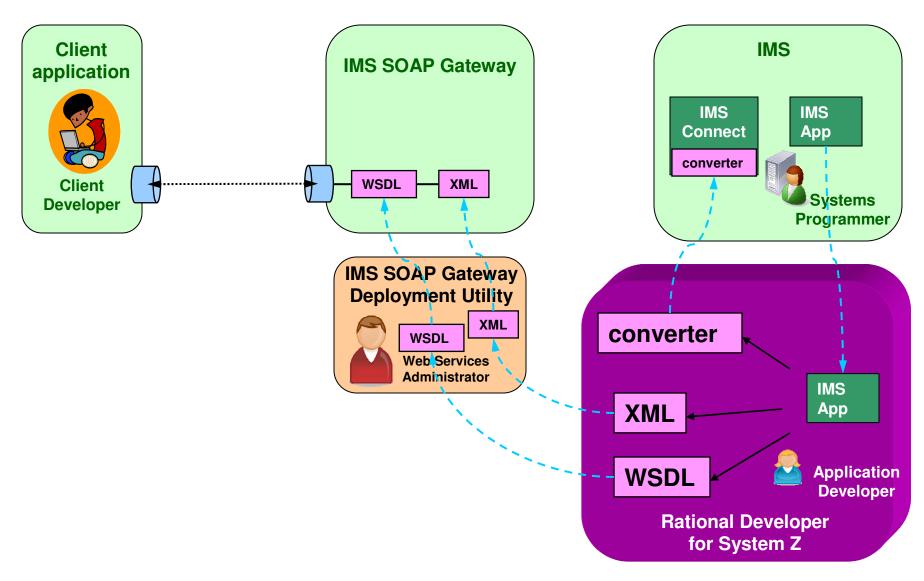








### Development and Deployment









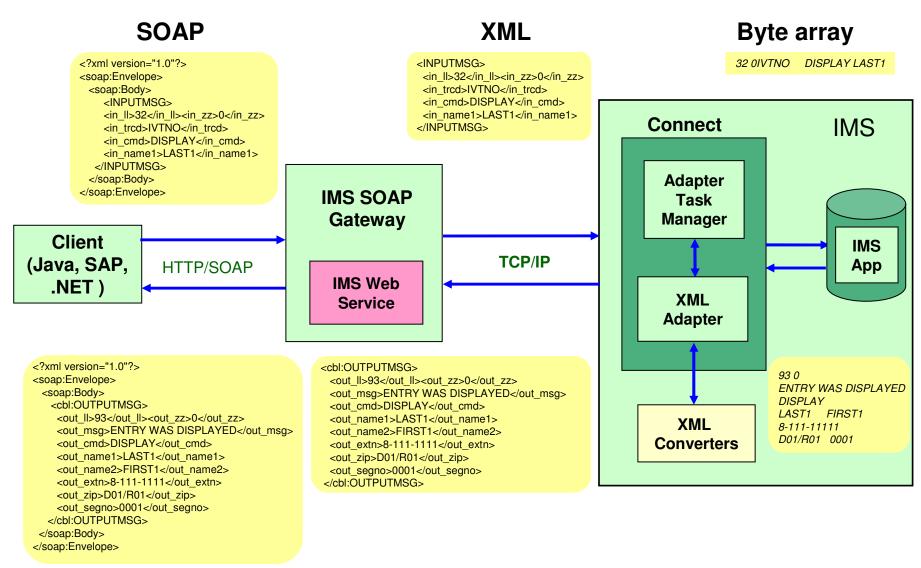








#### Scenario 1: With XML Adapter









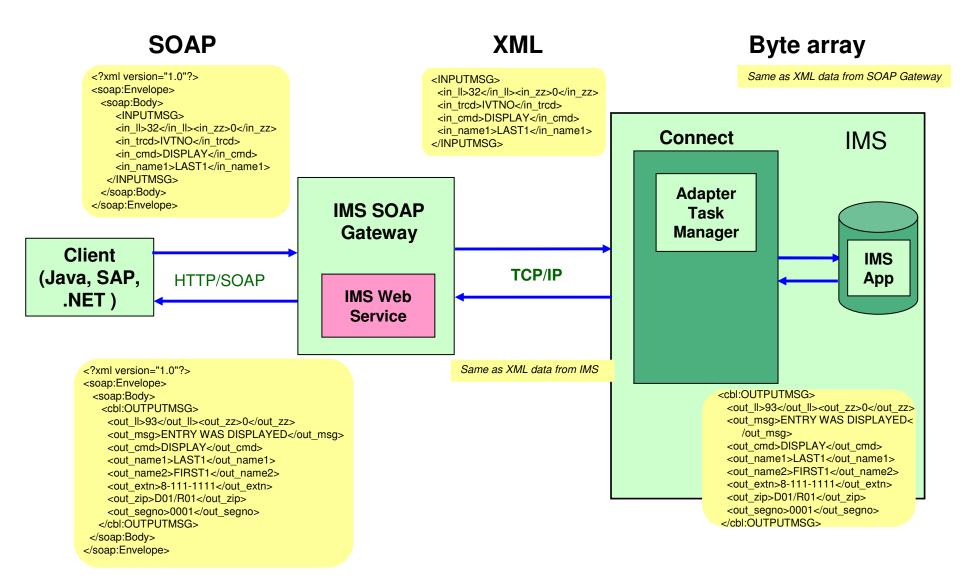








#### Scenario 2: Without XML Adapter



















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#### Web Service-related Features

 Provides HTTP/SOAP endpoint to accept and process SOAP requests (supporting IMS as a SOAP server)

- SOAP 1.1, WSDL 1.1
- WS-I BP (Web Services-Interoperability Basic Profile) 1.1
- Flexible tooling support
  - IBM-provided tooling, such as IBM Rational Developer for System Z (RDz)
    - · Generates Web Service artifacts such as WSDL files and XML converters from your IMS application's COBOL and PL/I copybook(s)
  - User-provided or third party tooling















#### **IMS-related Features**

- Transaction and message types supported:
  - Commit mode 1 (Send-then-commit) with Sync Level NONE
    - non-conversational IMS transactions
    - Single-segment message
- Socket types supported
  - Supports Persistent Socket connections
    - · Socket identifier is generated internally in IMS **SOAP Gateway**
- Timeout support
  - Supports Socket Timeout and Execution Timeout (to set IMS Connect IRM Timer)
- IMS application languages supported:
  - COBOL
  - PL/I



















#### **IMS-related Features**

#### Asynchronous callout support:

- Allows IMS applications to act as Web Service clients
- Correlates callout requests to external Web Services
- Restricts access to callout requests with authorization checking in IMS OTMA
- Provides assistance with OTMA destination routing for callout requests, minimizing customization of user exits













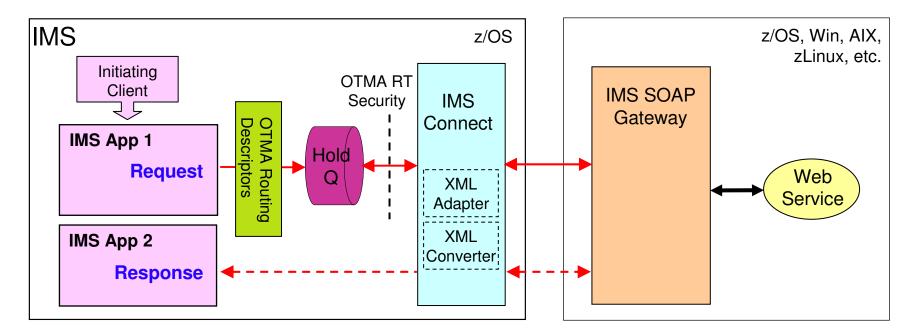






### IMS V10 Asynchronous Callout

- IMS applications issues ISRT ALTPCB calls to send callout requests to Web Service
- Receive output from external Web service application
  - Optional
  - Web service response routed to appropriate IMS application













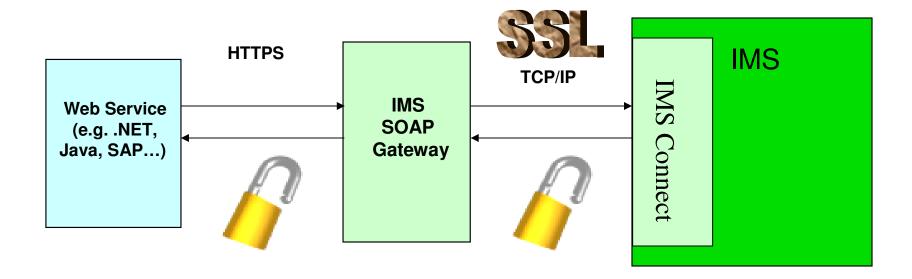


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### Security

- Secure HTTP (HTTPS)
- Secure Socket Layer (SSL)
  - To provide reliable, secure communication between IMS SOAP Gateway and IMS Connect
    - Client/Server Authentication (hand shake)
    - Data Encryption











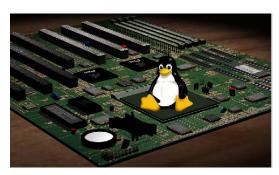






# IMS SOAP Gateway V10 platforms





**zLinux** – tested on SLES9 SP3 64-bit on z/OS





Windows – tested on Win 2000, Win XP



**AIX** – tested on AIX V5.3















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#### **Customer Value**

- IMS Transactions → Web services → SOA
- Doesn't require change to your IMS applications (although you may want to modify them)
- IMS transactions act as Web services consumers
- Tooling support provided at every stage
- Heterogeneous environments from M&A















### **RDz Licenses**



Two free licenses for Rational Developer for System z (not entitled to RDz support)

For use with IMS V10 & IMS SOAP Gateway V10 only



















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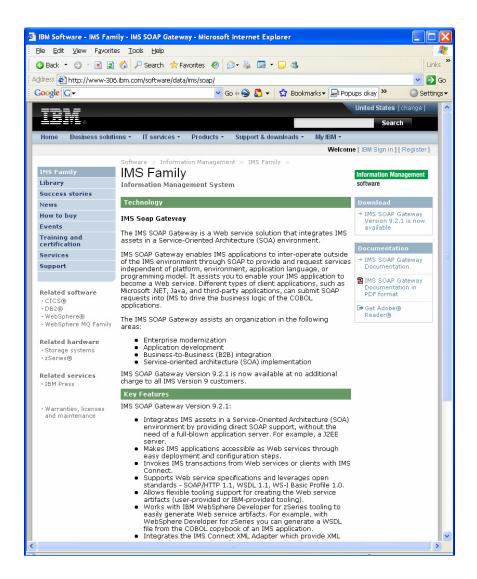








#### Where to start



- IMS SOAP Gateway can be downloaded from the IMS web site: <a href="http://www.ibm.com/ims">http://www.ibm.com/ims</a>
  - In the "What we offer" frame, click on IMS SOA Integration Suite
  - In the IMS SOA Integration
     Suite page, scroll down and
     click on the link to IMS SOAP
     Gateway
  - You will see a Download box in the right side column

















#### **Documentation**

- Can be accessed from the Start Menu for Windows
  - Start -> All Programs -> IBM IMS SOAP Gateway Version v.r.m -> Documentation
- Or, for IMS SOAP Gateway V9 only, access from IMS SOAP Gateway install directory
  - e.g., imssoap921.chm or imssoap921.pdf in C:\Program Files\IBM\IMS SOAP Gateway V9.2.1\docs\
- IMS SOAP Gateway documentation can also be viewed or downloaded from the web:
  - IMS SOAP Gateway 10.1 docs:
    - http://publib.boulder.ibm.com/infocenter/dzichelp/v2r2/index.jsp?topic=/com.ibm.etools.soap10.doc/soapoverview.htm
  - IMS SOAP Gateway 9.2.1 docs:
    - http://publib.boulder.ibm.com/infocenter/dzichelp/v2r2/index.jsp?topic=/com.ibm.etools.soap.doc/soapoverview.html
  - IMS SOAP Gateway FAQs:
    - <a href="http://www.ibm.com/support/docview.wss?rs=81&uid=swg27011333&loc=en">http://www.ibm.com/support/docview.wss?rs=81&uid=swg27011333&loc=en</a>
      \_US&cs=utf-8&lang=en
  - IMS SOAP Gateway web page:
    - http://www-306.ibm.com/software/data/ims/soap/

















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# What are your requirements?

Please e-mail this and any additional feedback to: himakar@us.ibm.com

- Are you planning to use IMS SOAP Gateway for your SOA implementation?
  - If so, on which platform(s)?
- In addition to the COBOL and PL/1 to XML data transformation, would you need
  - MFS. other?
- What are your security and transaction requirements?
  - WS-Security?
  - Two-Phase Commit?
  - WS-Transaction?
- **Survey Question**: Please check all that apply.
  - What do you intend to use IMS SOAP Gateway with?
    - \_\_ Asynchronous callout
    - \_\_ Synchronous callout
    - Non-conversational transactions
    - Conversational transactions
    - \_\_ Single-segment messages
    - \_\_ Multi-segment messages
    - Commit Mode: \_\_1 or \_\_0, with Sync Level: \_\_ NONE or \_\_ CONFIRM
    - MFS transactions
    - Any other?, please specify:

















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