



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

Kevin Flanigan, Developer, IBM, kf@us.ibm.com



TAKE BACK CONTROL

Agenda

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



Agenda

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

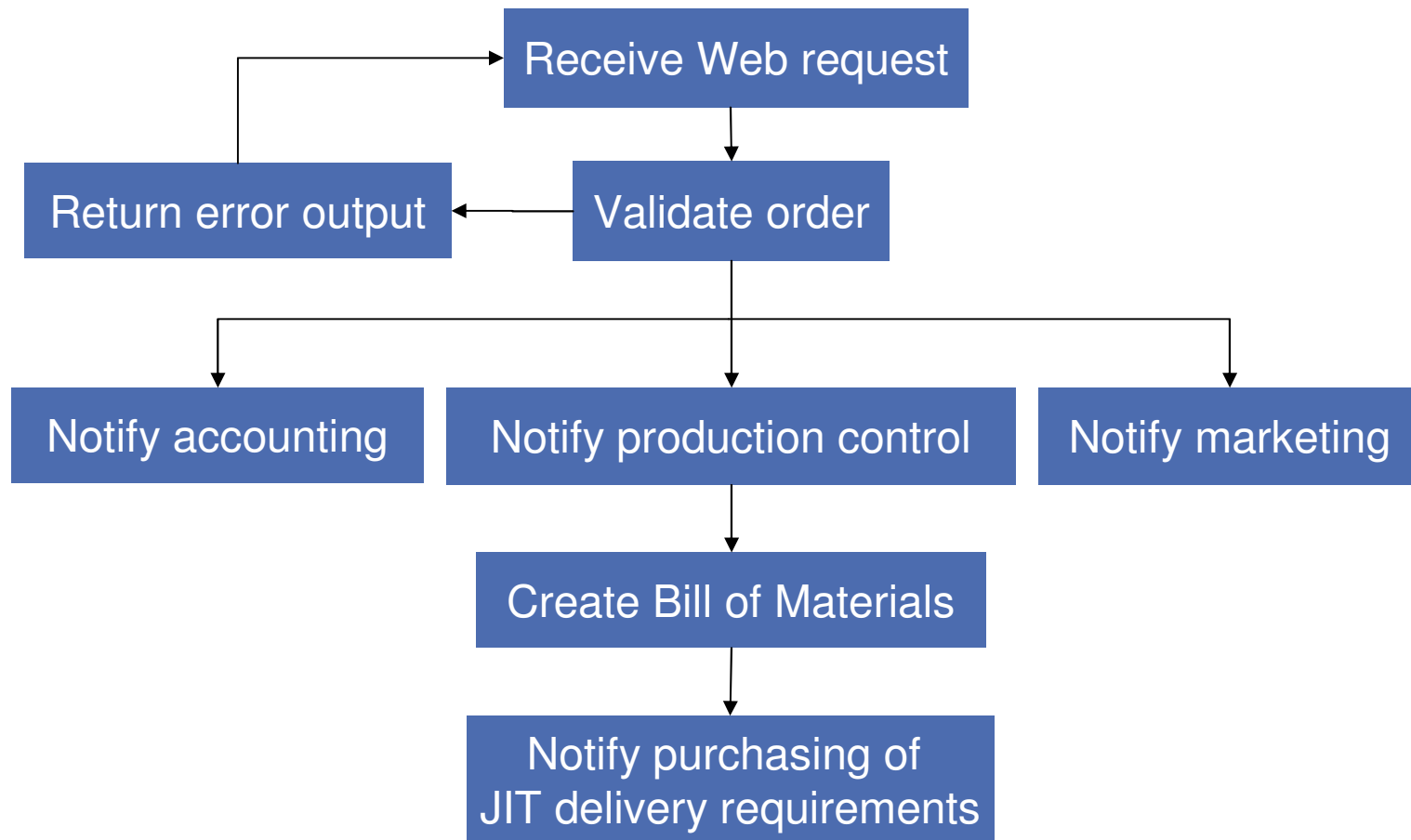


Cathy's challenge

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

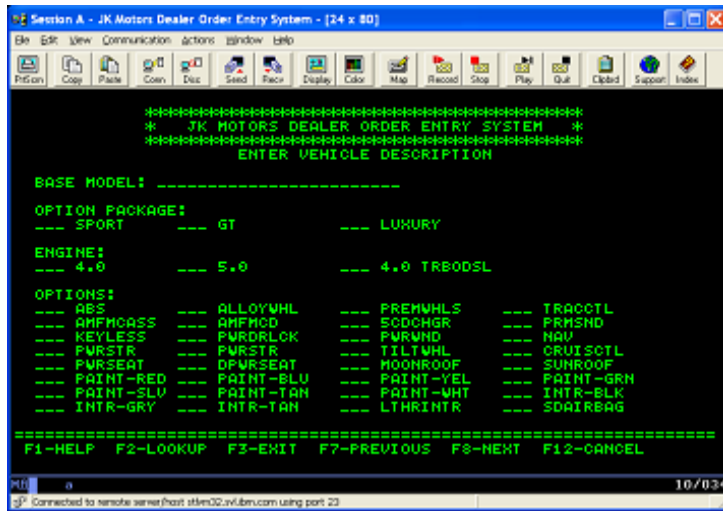


JK Motors Web ordering process

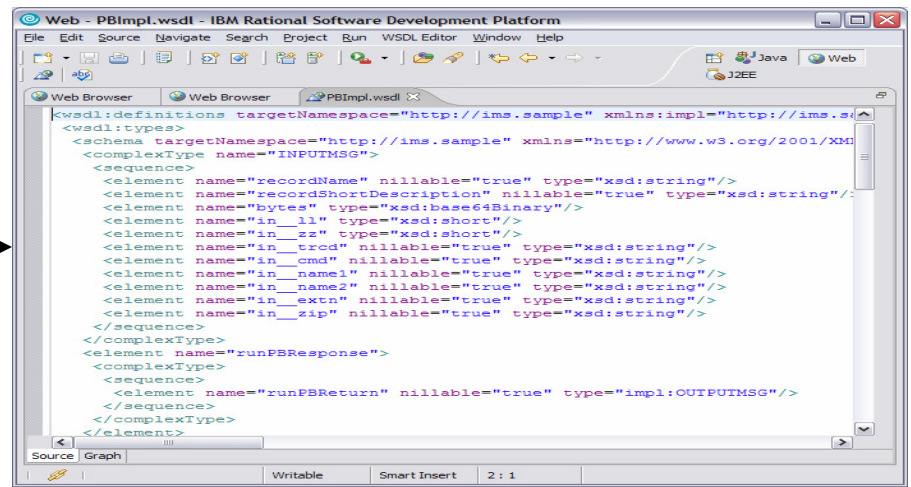
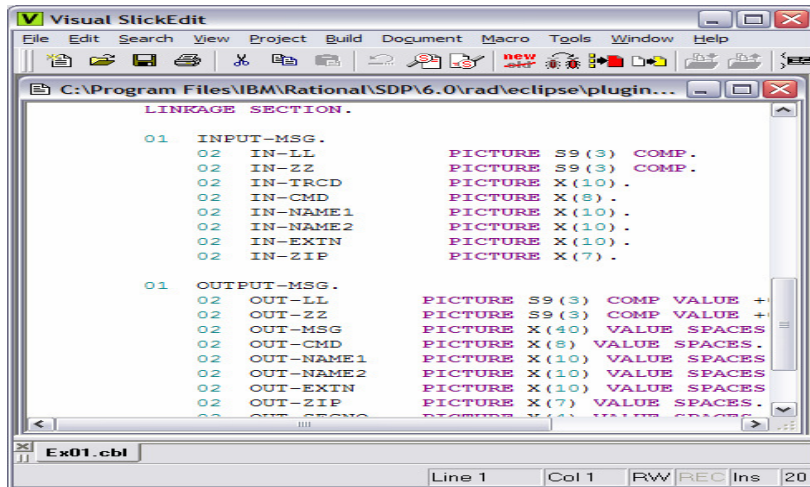


Front End

'Green screen'



'Browser view'



Agenda

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

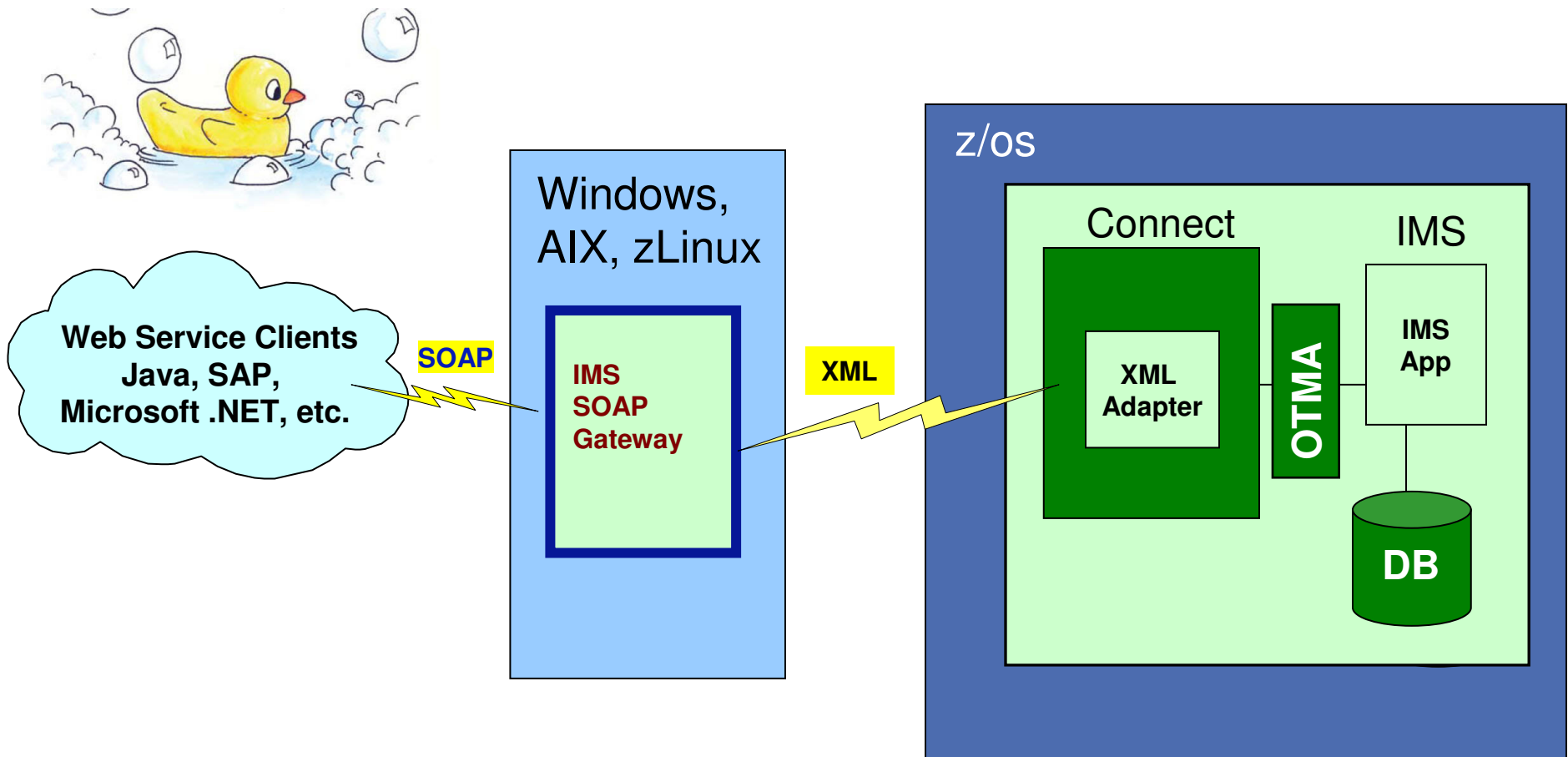


IMS SOAP Gateway Overview

- 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



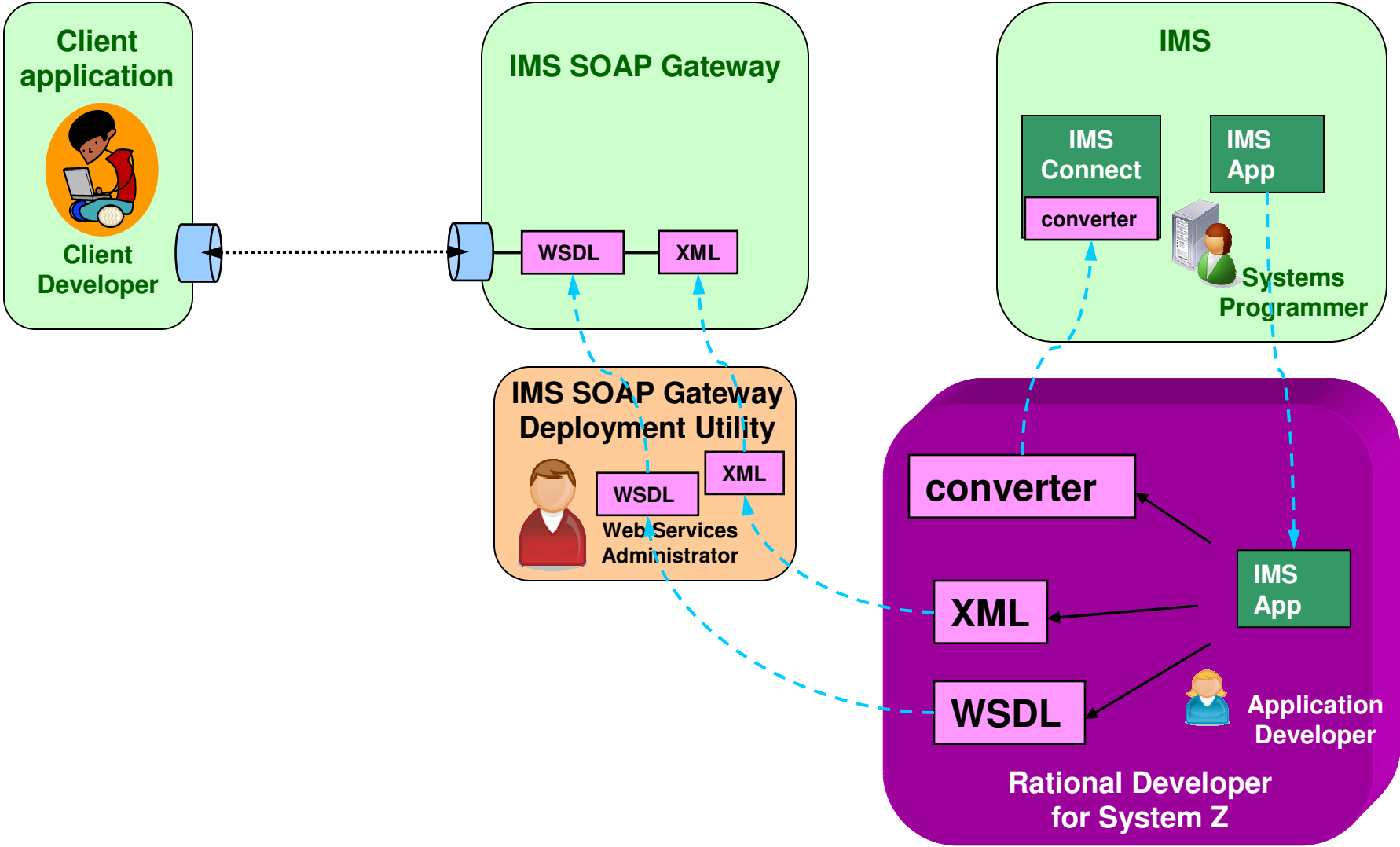
SOAP up! A clean way to get to IMS



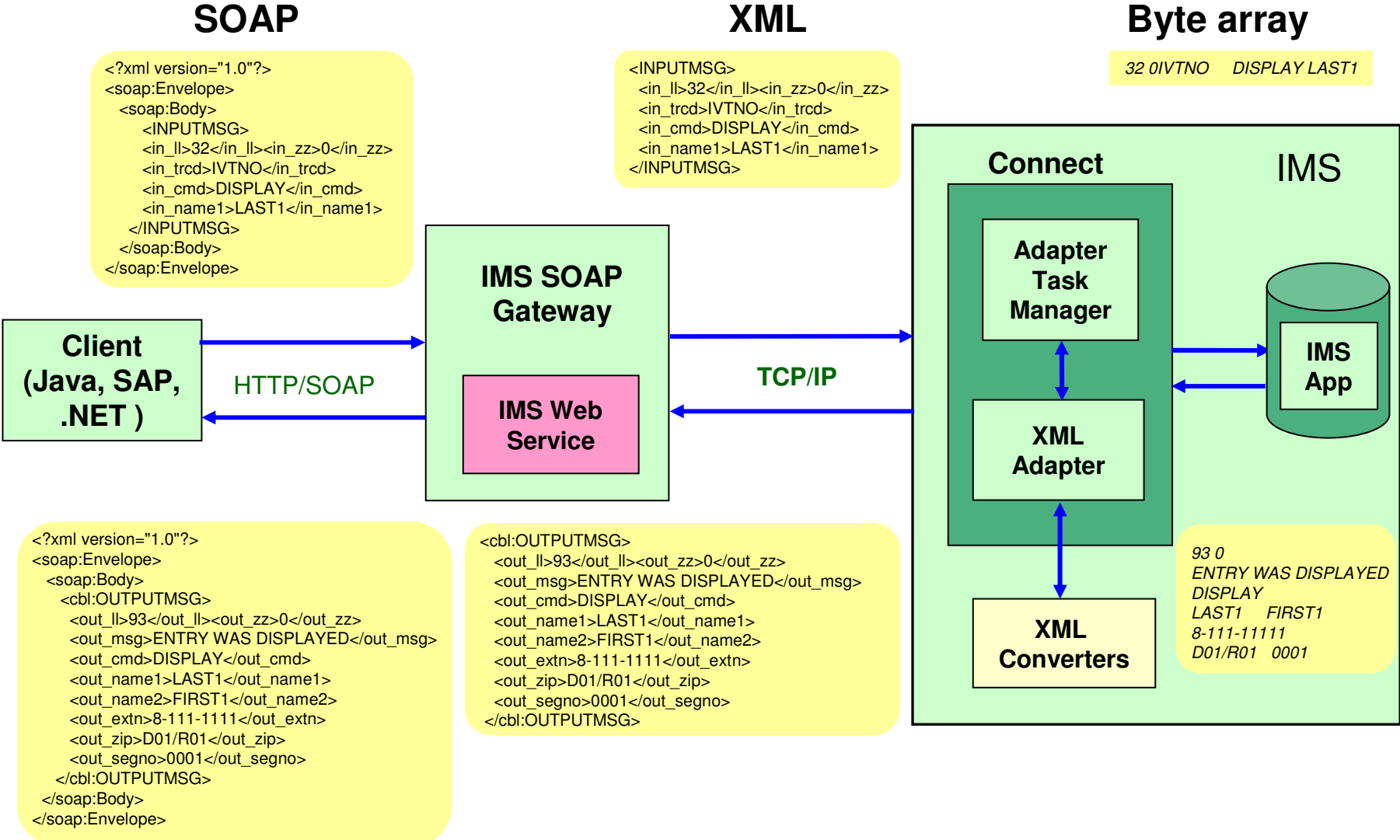
Integrates IMS assets into SOA by providing a standard Web Services interface to your IMS TM applications



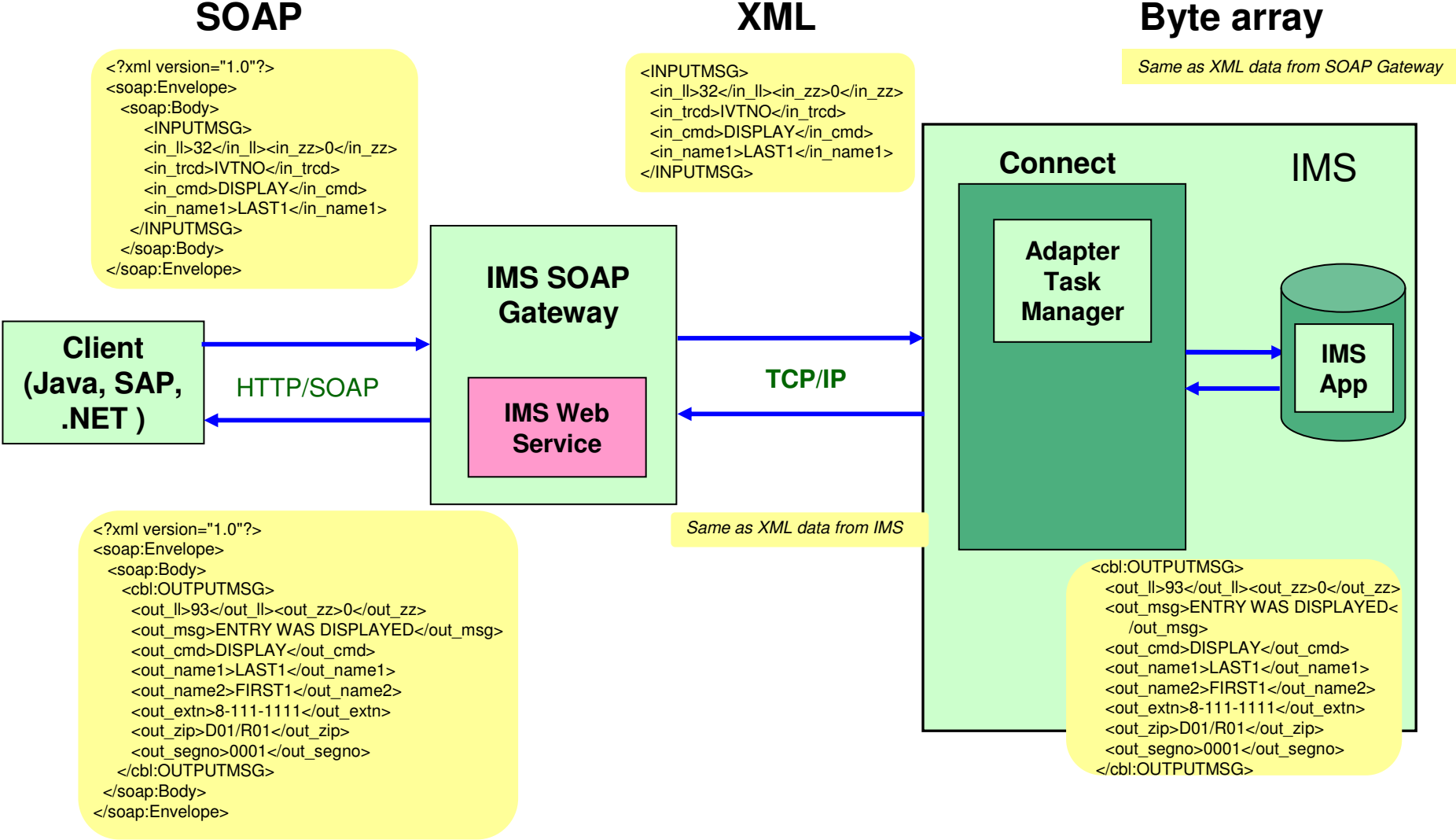
Development and Deployment



Scenario 1 : With XML Adapter



Scenario 2 : Without XML Adapter



Agenda

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



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



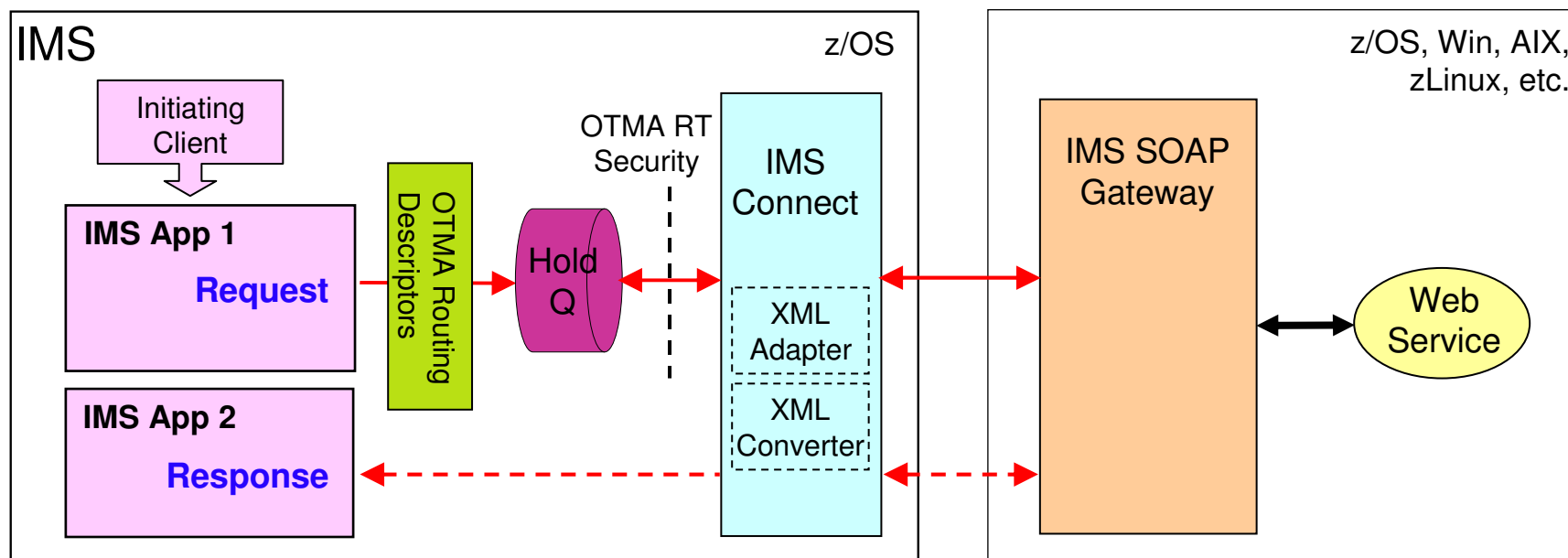
IMS-related Features

- 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



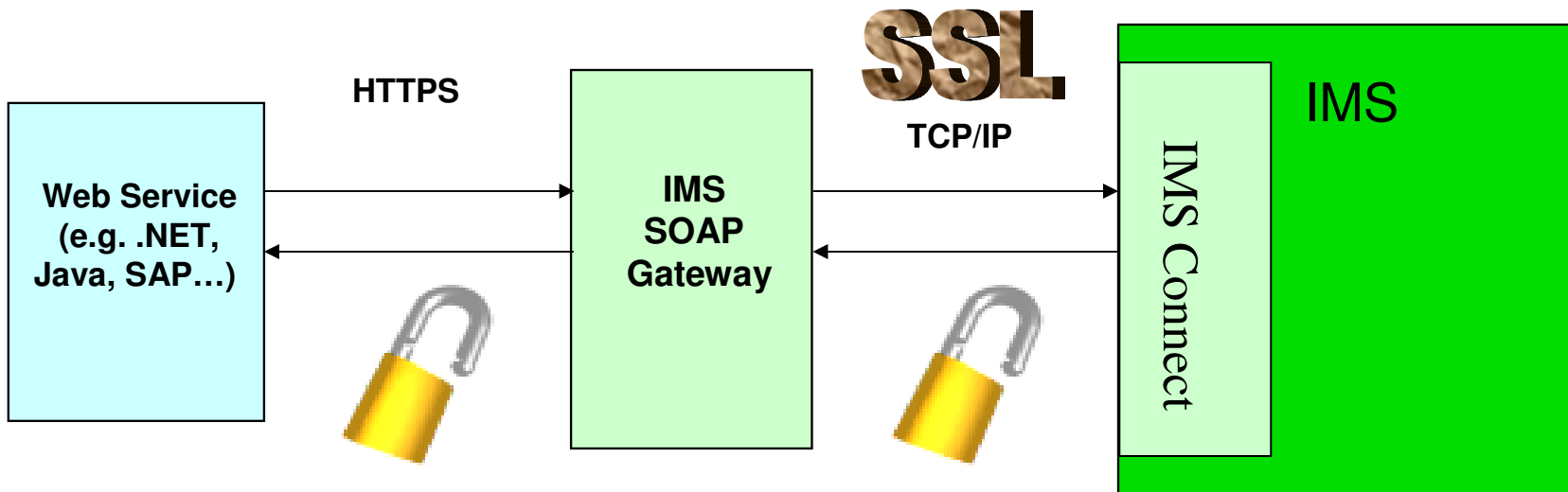
IMS V10 Asynchronous Callout

- 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



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



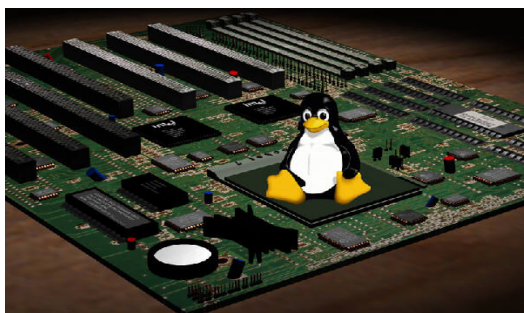
IMS SOAP Gateway V10 platforms



z/OS



Windows – *tested on Win 2000, Win XP*



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



AIX – *tested on AIX V5.3*



Agenda

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



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 License



- Two free licenses for Rational Developer for System z (not entitled to RDz support)
- For use with IMS V10 & IMS SOAP Gateway V10 only

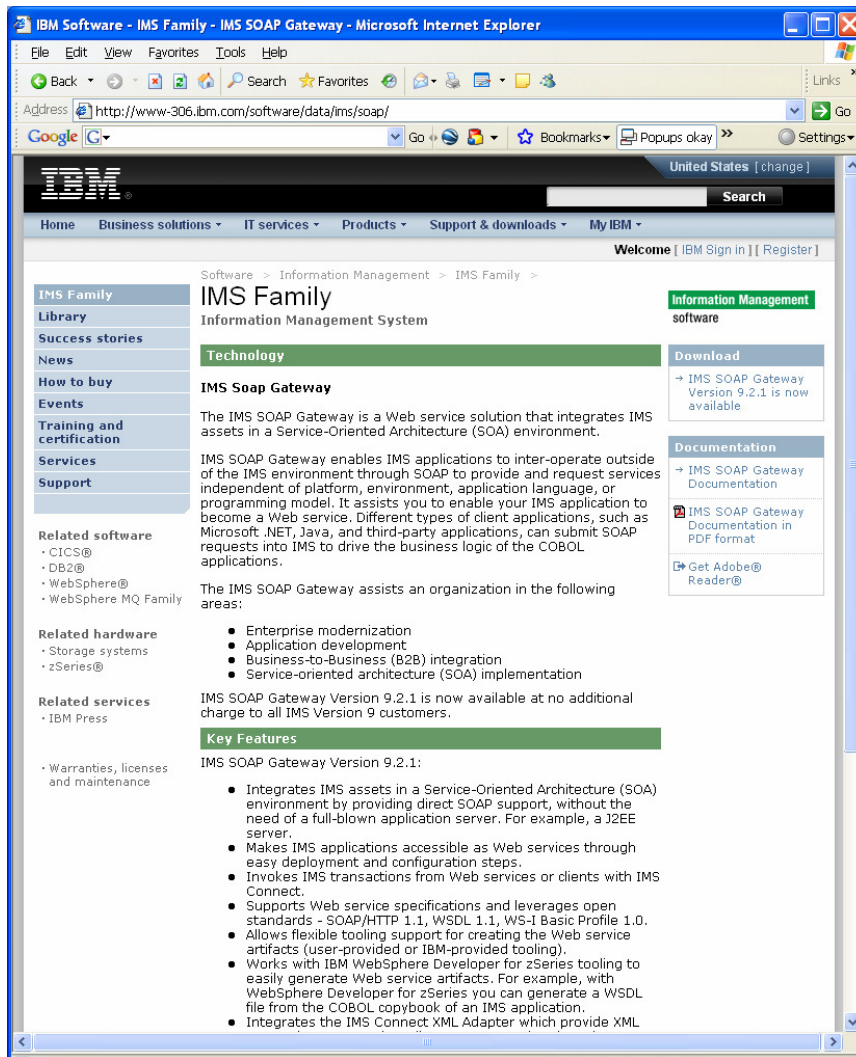


Agenda

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



Where to start



- IMS SOAP Gateway can be downloaded from the IMS web site: <http://www.ibm.com/ims>
 - 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., **imsssoap921.chm** or **imsssoap921.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:
 - http://www.ibm.com/support/docview.wss?rs=81&uid=swg27011333&loc=en_US&cs=utf-8&lang=en
 - IMS SOAP Gateway web page:
 - <http://www-306.ibm.com/software/data/ims/soap/>



Agenda

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



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?
 - Other WS- standards support
- **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: _____



Thank You for Joining Us today!

Go to www.ibm.com/software/systemz to:

- ▶ Replay this teleconference
- ▶ Replay previously broadcast teleconferences
- ▶ Register for upcoming events

