


IBM Systems Group

## Options for interoperability between CICS and your network



VSE/ESA

IBM @server zSeries

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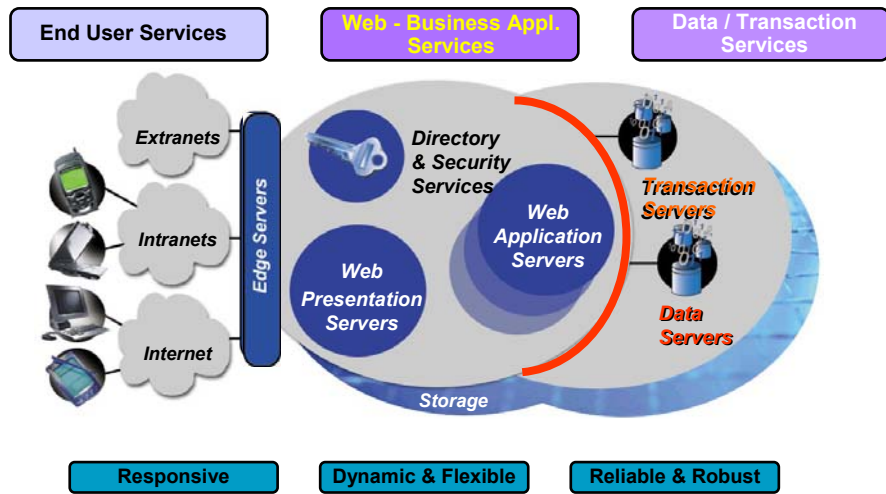
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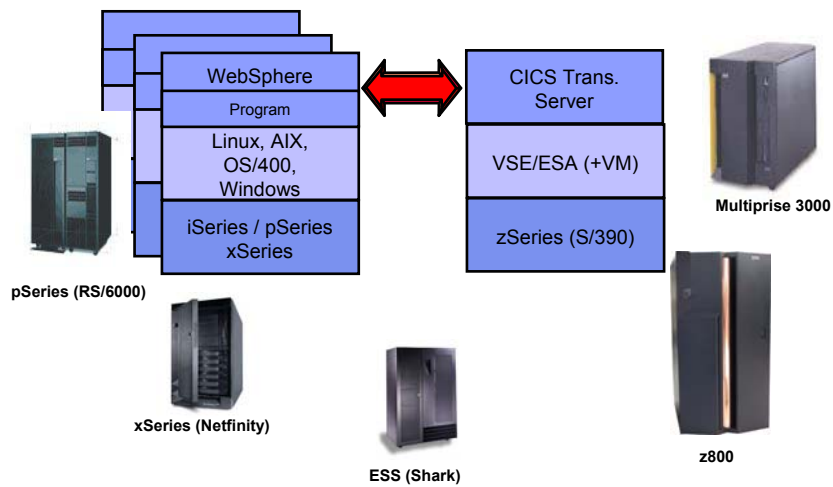
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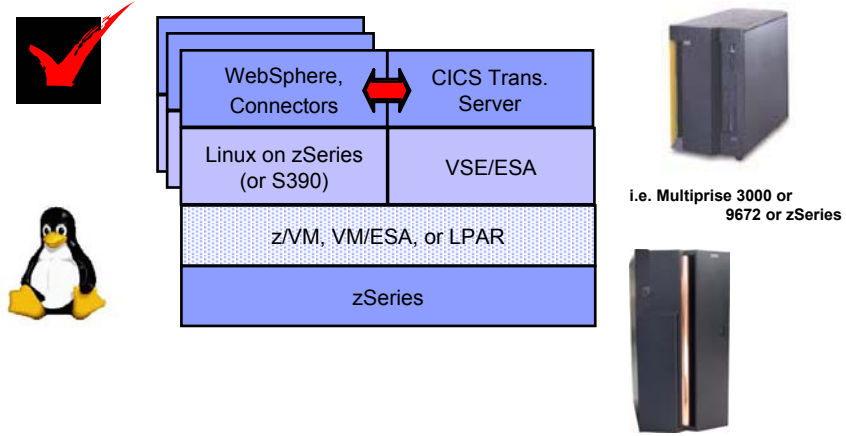
# Infrastructure



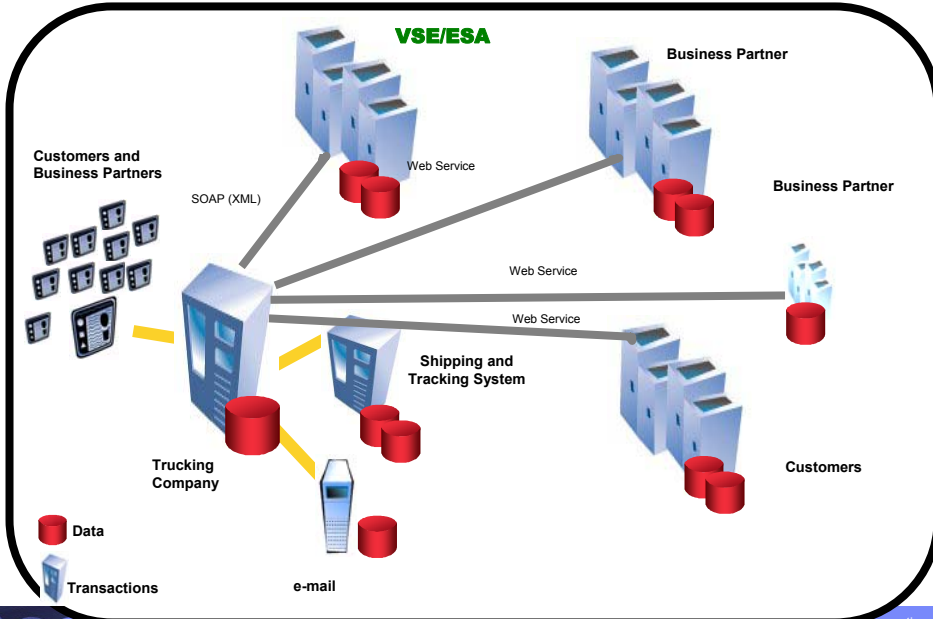
## VSE/ESA Flexibility – in a heterogeneous environment

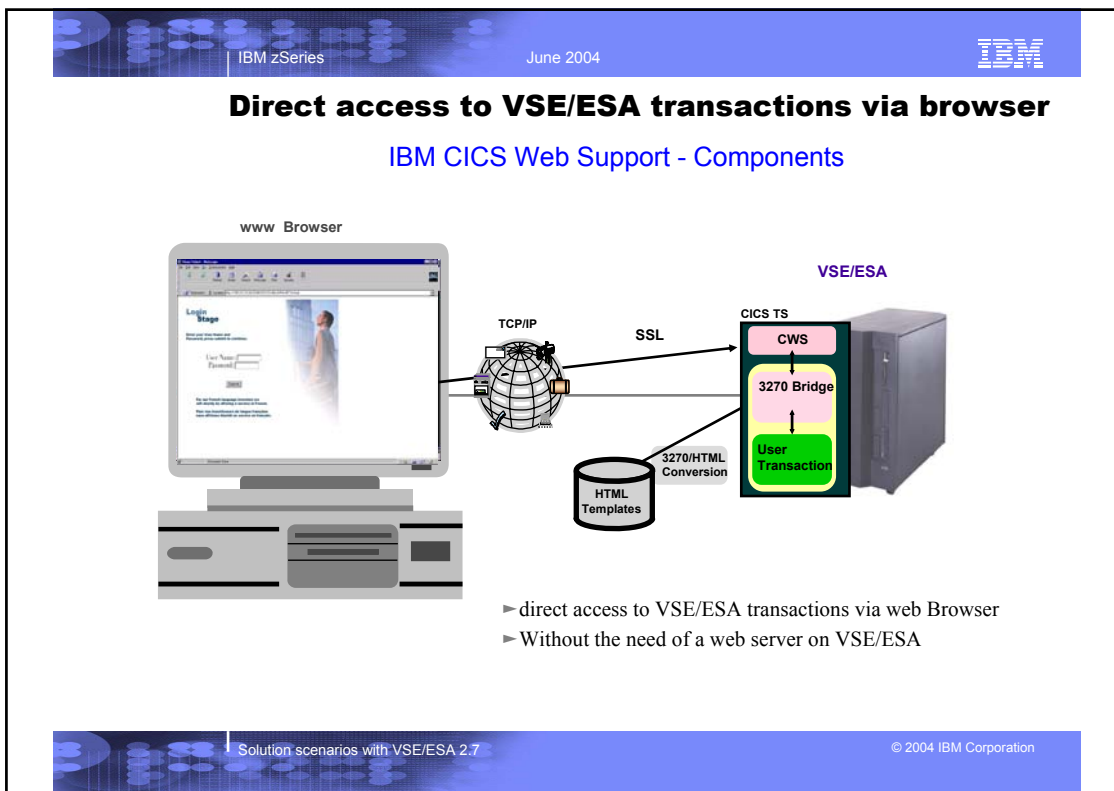
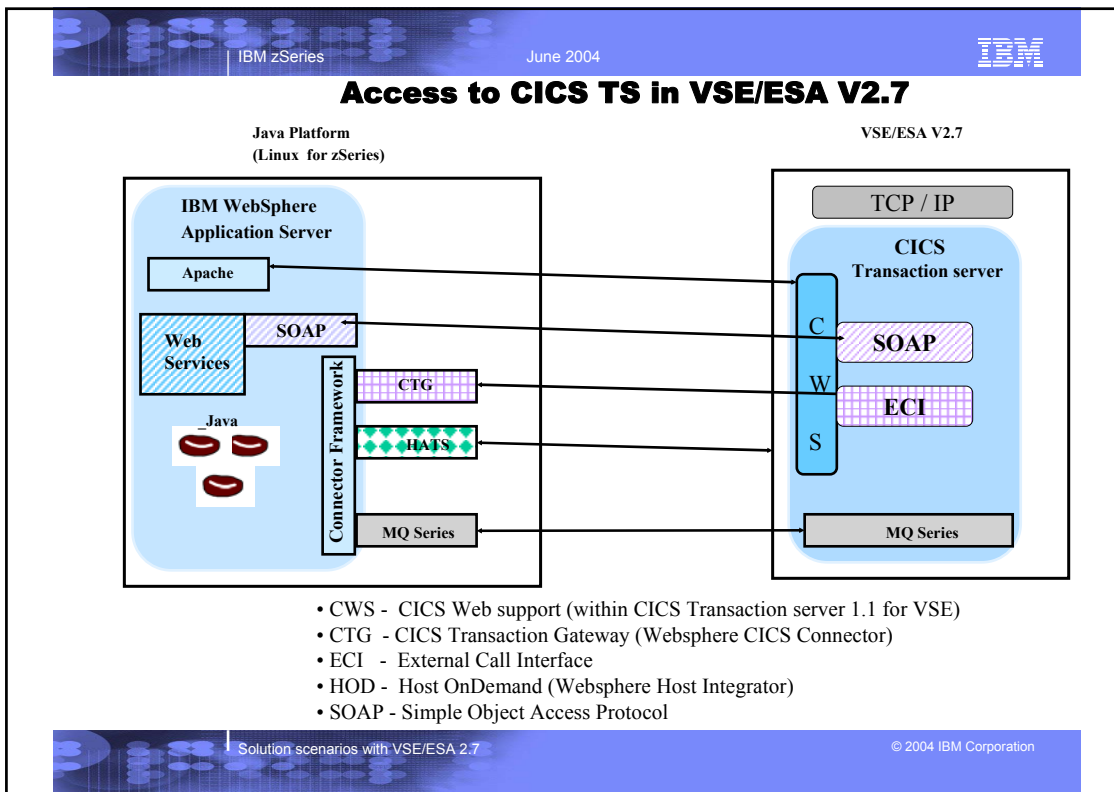


# Linux for zSeries 3-tier logical / 2-tier physical



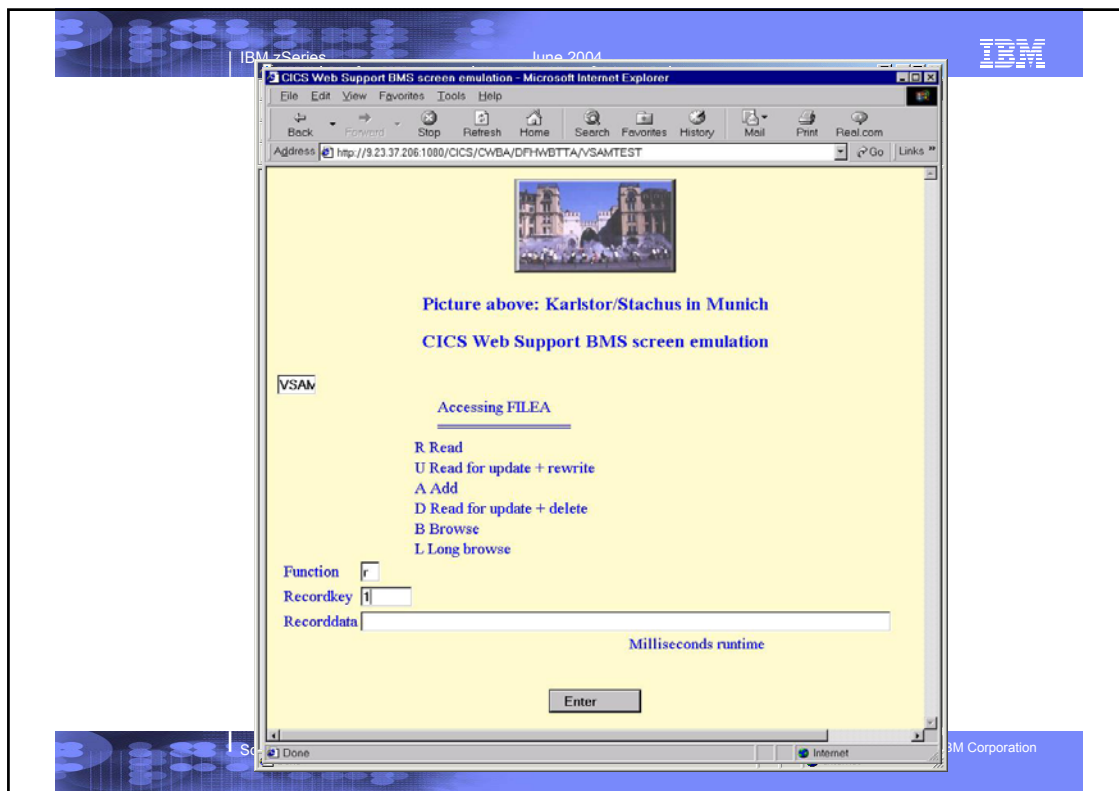
# Service Oriented Architecture – Web Services





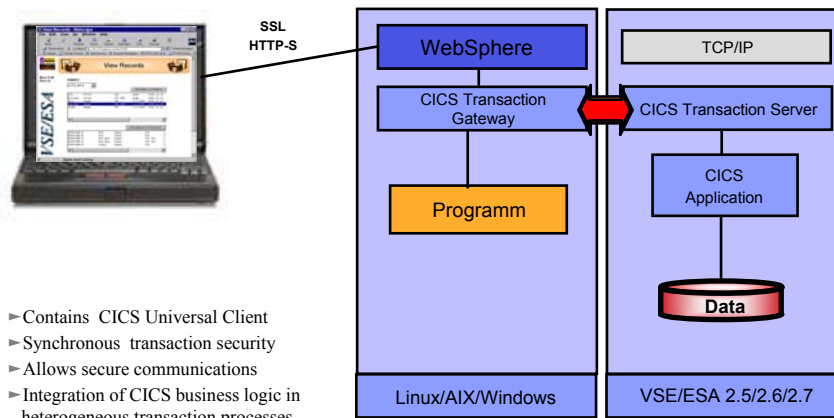
## IBM CICS Web Support

- functional characteristics
  - ▶ direct access to VSE CICS transactions via a simple web browser
  - ▶ transaction security for the called transaction
  - ▶ secured connections (SSL) with VSE/ESA 2.6
- requirements
  - ▶ VSE/ESA 2.5 and higher



## Integration of VSE/ESA transaction processes

### CICS Transaction Gateway - Implementation

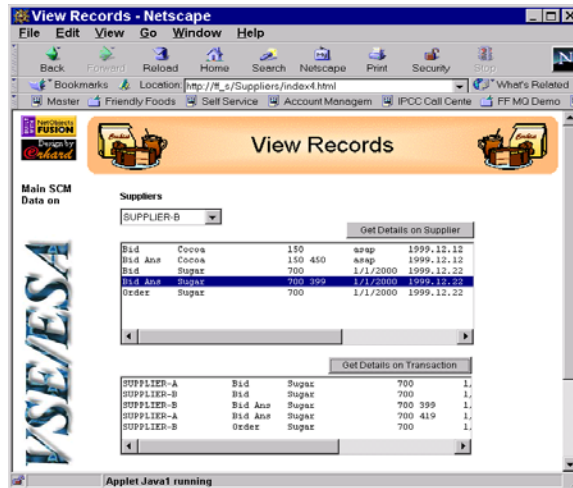


- ▶ Contains CICS Universal Client
  - ▶ Synchronous transaction security
  - ▶ Allows secure communications
  - ▶ Integration of CICS business logic in heterogeneous transaction processes
- ▶ Java skill required

## CICS Transaction Gateway

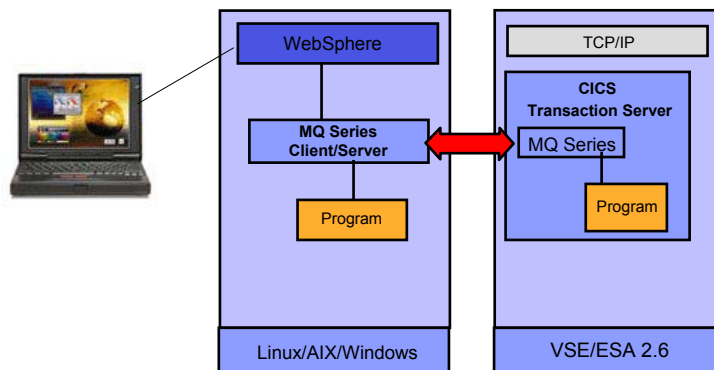
- functional characteristics
  - ▶ access to VSE transactions from a remote platform (program communication)
  - ▶ transaction security for the called transaction therefore, good integration in e-business Processes and WebSphere Application Server.
  - ▶ secured connections (SSL) to CICS Transaction Gateway
- software requirements
  - ▶ VSE/ESA and the Product: CICS Transaction Gateway (CTG)
    - ▶ for External CICS Interface (ECI) with TCP/IP, VSE/ESA 2.6 and later is required with CICS Transaction Gateway Version 4 or newer

## Consolidation of VSE/ESA transaction processes



## Asynchronous work with CICS transactions

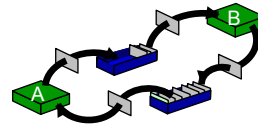
### MQ Series - Implementation



- ▶ asynchronous data exchange using message queuing
- ▶ guaranteed and 'only once' delivery
- ▶ integration into Web Application servers (WebSphere)

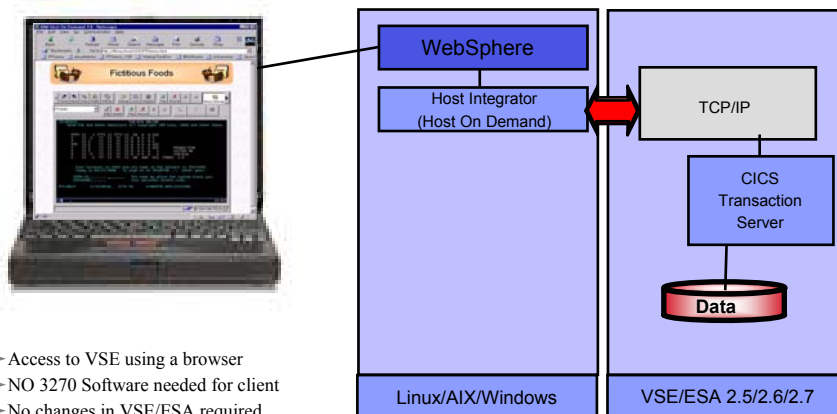
## MQ Series - asynchronous transactions

- functional characteristics
  - ▶ guaranteed, secured asynchronous data access for remote systems
  - ▶ same API for all supported MQ Series platforms
  - ▶ transaction security, therefore appropriate for e-business processes
  - ▶ integration with WebSphere Application Server
  - ▶ works well for Business-to-Business (B2B) environments
  
- software requirements
  - ▶ For VSE/ESA :
    - ▶ VSE/ESA 2.6/2.7
    - ▶ MQ Series Server
    - ▶ Program that interfaces with MQ Series server on VSE/ESA
  
  - ▶ On the remote system:
    - ▶ MQ Series Client / Server
    - ▶ Program that interface with MQ Series



## General access to VSE/ESA via browser

### Host Access Transformation Server (HATS)



- ▶ Access to VSE using a browser
- ▶ NO 3270 Software needed for client
- ▶ No changes in VSE/ESA required

**NEW!: Available for Linux on zSeries**



## Host Access Transformation Server

- functional characteristics
  - ▶ access to VSE/ESA via browser
  - ▶ the access is similar with a local access via 3270 emulator
  - ▶ can be used in Intranet or Internet and /or
  - ▶ integrated with WebSphere Application Server
  - ▶ support for secured connections (SSL) to the HostOnDemand Server and a redirector to mask the real IP addresses
    - ▶ Host Access Transformation Server – for 3270 screen scraping
    - ▶ Host Publisher - a bean generator to create the Java Beans (Integration Objects), to provide legacy access for new Web applications.
  
- Requirements
  - ▶ WebSphere Host Integration products on middle tier
  - ▶ NO additional software on VSE/ESA required

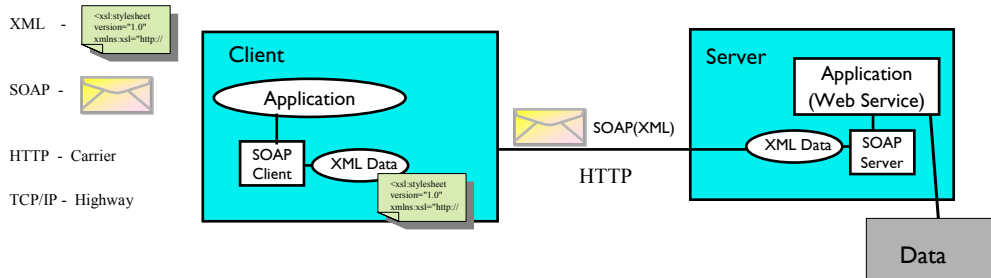
**Benefit: Easily extend existing applications to the web**

## Interaction with VSE/ESA via browser

The screenshot illustrates the interaction between a 3270 terminal and a web browser. The terminal window on the left shows a menu for 'JK Enterprises' with options like 'Webch', 'Colman', 'Control', and 'Base'. The browser window on the right displays the 'JK Enterprises' website, which includes an 'Inventory Table' showing items like 'Baseball glove' (25), 'Catcher's mit' (20), 'Baseball bat' (40), 'Football' (25), 'Baseball' (20), 'Tennis balls - 1 doz' (20), 'Soft balls - 1 doz' (27), and 'Ice Skates' (17). A 'Delivery Schedule' calendar for August 2002 is also visible.

# Web Services

## XML Document + SOAP Protocol = Web Services

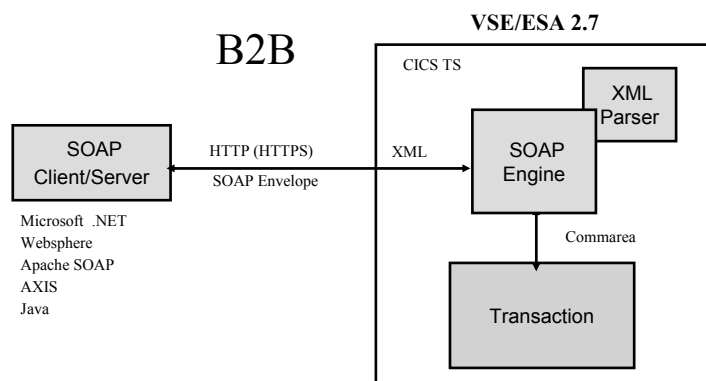


### A web service

- ☞ implements a business, application or system functionality
- ☞ is intended for application communication
- ☞ is useable in internet, intranet, extranet
- ☞ is useable for browser-based solutions up to the B2B integration between companies
- ☞ uses only standard internet technologies

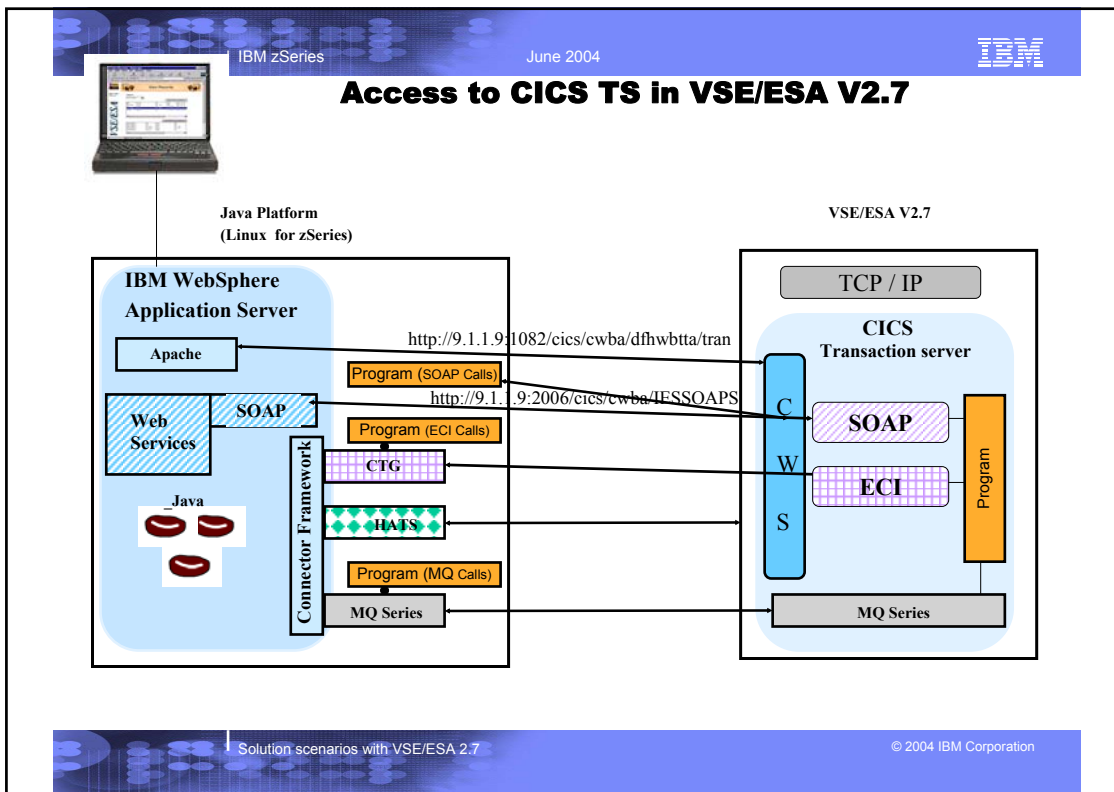
# Web Services with VSE/ESA 2.7

## XML data interchange with CICS transactions



★ VSE/ESA Transactions as Web Service

► **NEW:** Also with VSE/ESA 2.6 + UQ81044



IBM zSeries June 2004

## Solutions on the new z/VSE homepage

The screenshot shows the IBM z/VSE homepage. The main content area features a heading **z/VSE** and a sub-heading **Announcing z/VSE V3.1**. Below this, there is a section titled **Redesigned z/VSE Homepage** with a paragraph of text. A sidebar on the left contains a navigation menu with items like **z/VSE**, **About VSE**, **How to buy**, **News**, **Solutions** (circled in red), **Products & Components**, **Documentation**, **Service & support**, **Downloads**, **Education**, **Partners**, **FAQ**, and **Contact VSE**. The main content area also includes a **Learn more** section with links to **About z/VSE**, **News**, and **History of VSE**. There are also several promotional banners and a **Spotlights** section on the right side of the page.

<http://www.ibm.com/servers/eserver/zseries/zvse/>

Solution scenarios with VSE/ESA 2.7

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## Additional Information

- **z/VSE Home Page**  
<http://www.ibm.com/servers/eserver/zseries/zvse/>



- **Solutions for VSE**  
<http://www.ibm.com/servers/eserver/zseries/zvse/solutions/>



- **e-business Connectivity for VSE/ESA** **SG24-5950**
- **e-business Solutions for VSE/ESA** **SG24-5662**
- **Servlet and JSP Programming** **SG24-5755**
- **Linux Web Hosting with WebSphere, DB2, and Domino** **SG24-6007**
- **NEW: Websphere Handbook (Connectors to z/OS and VSE)** **SG24-7042**

We appreciate your comments at [zvse@de.ibm.com](mailto:zvse@de.ibm.com)