



z/VSE solutions using DB2 and SOA

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z/VSE Solution Architect

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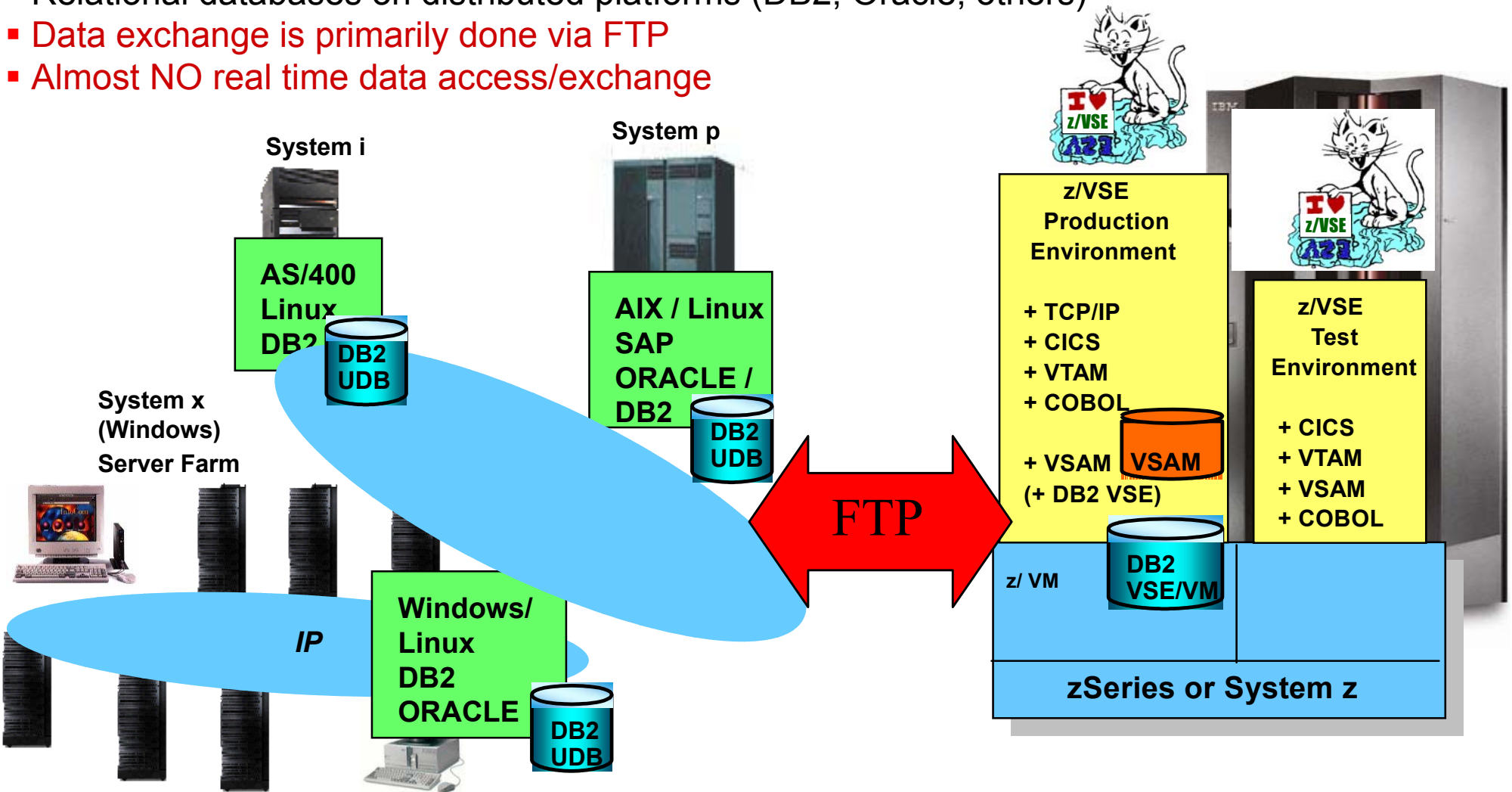
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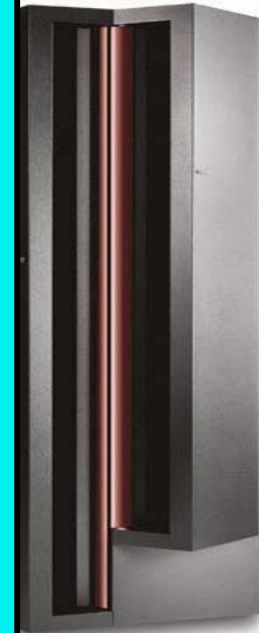
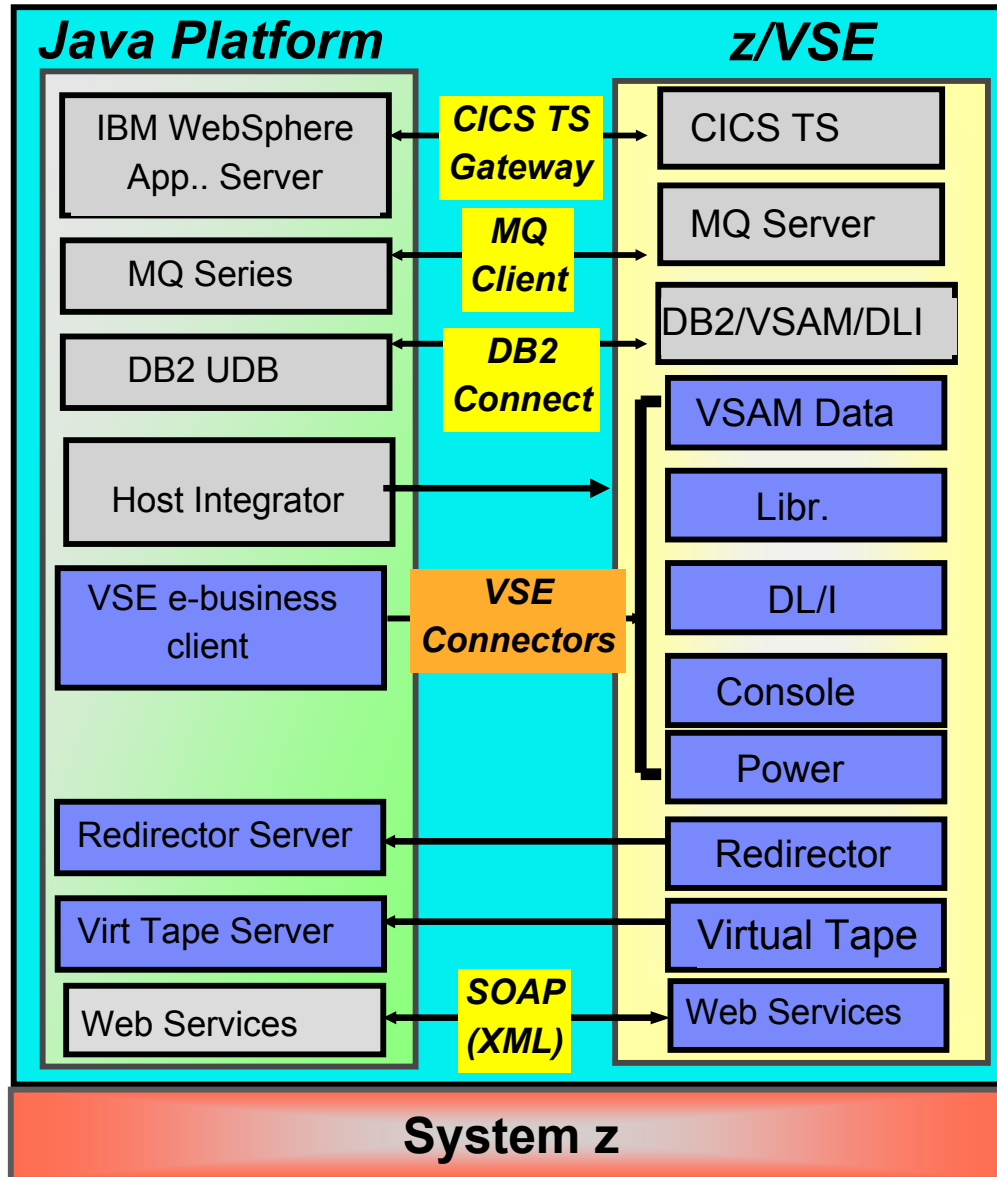
A typical VSE environment today

- Various different servers (System z, System p, System i, System x, and others)
- VSAM data on VSE (some DB2 environments, some other databases)
- Relational databases on distributed platforms (DB2, Oracle, others)
- **Data exchange is primarily done via FTP**
- **Almost NO real time data access/exchange**



Interoperability with z/VSE

- Modern applications with Linux for System z
- Most modern technologies interact with VSE services
- Modernization using real time access to data



Agenda: Integrate and simplify

- Leverage VSE data
 - ❖ integrate them with DB2 UDB

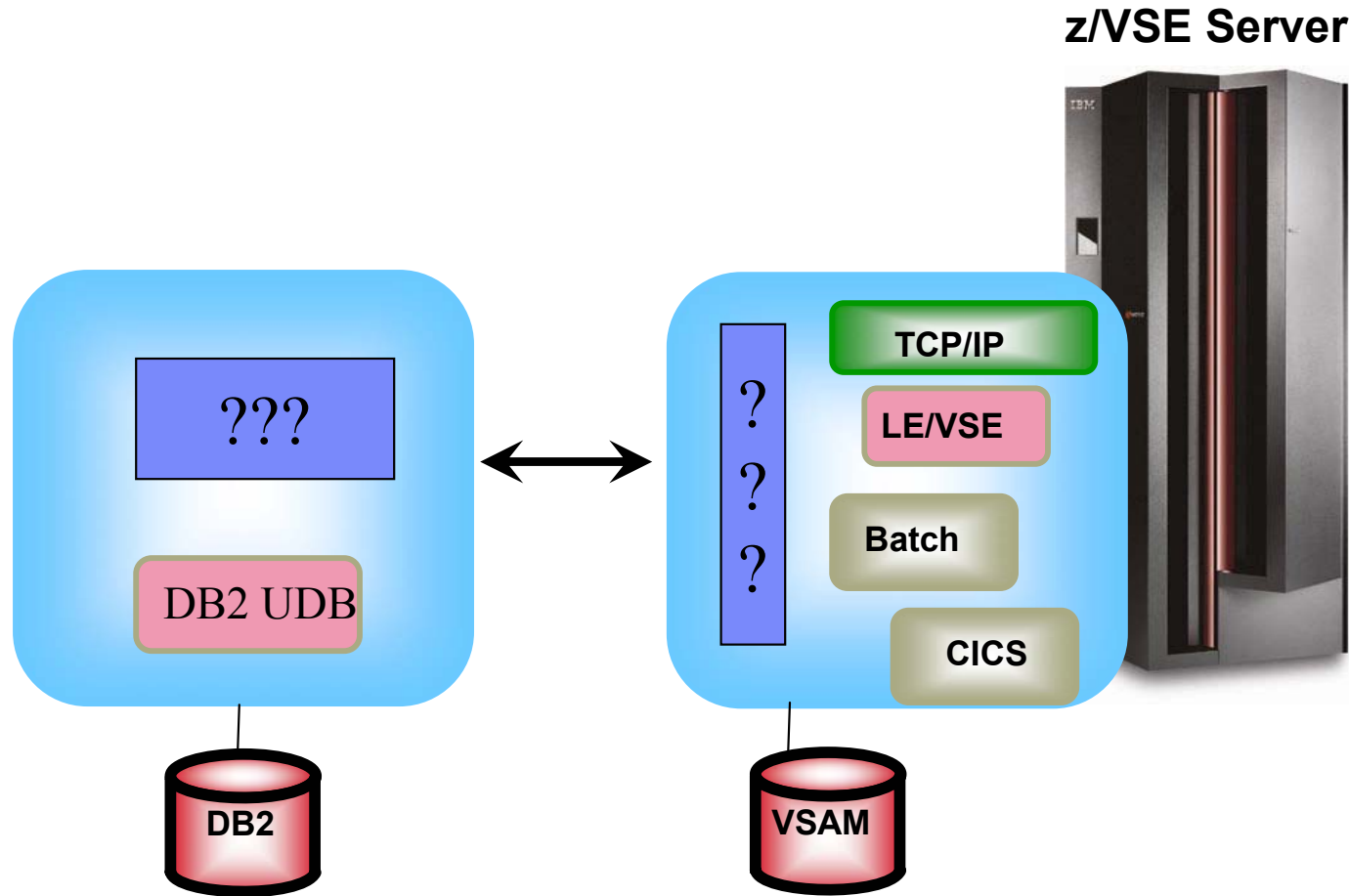
- Leverage VSE applications
 - ❖ with Service Oriented Architecture (SOA)

Agenda: Integrate and simplify

- Leverage VSE data
 - ❖ integrate them with DB2 UDB
 - ❖ replace FTP of VSAM data

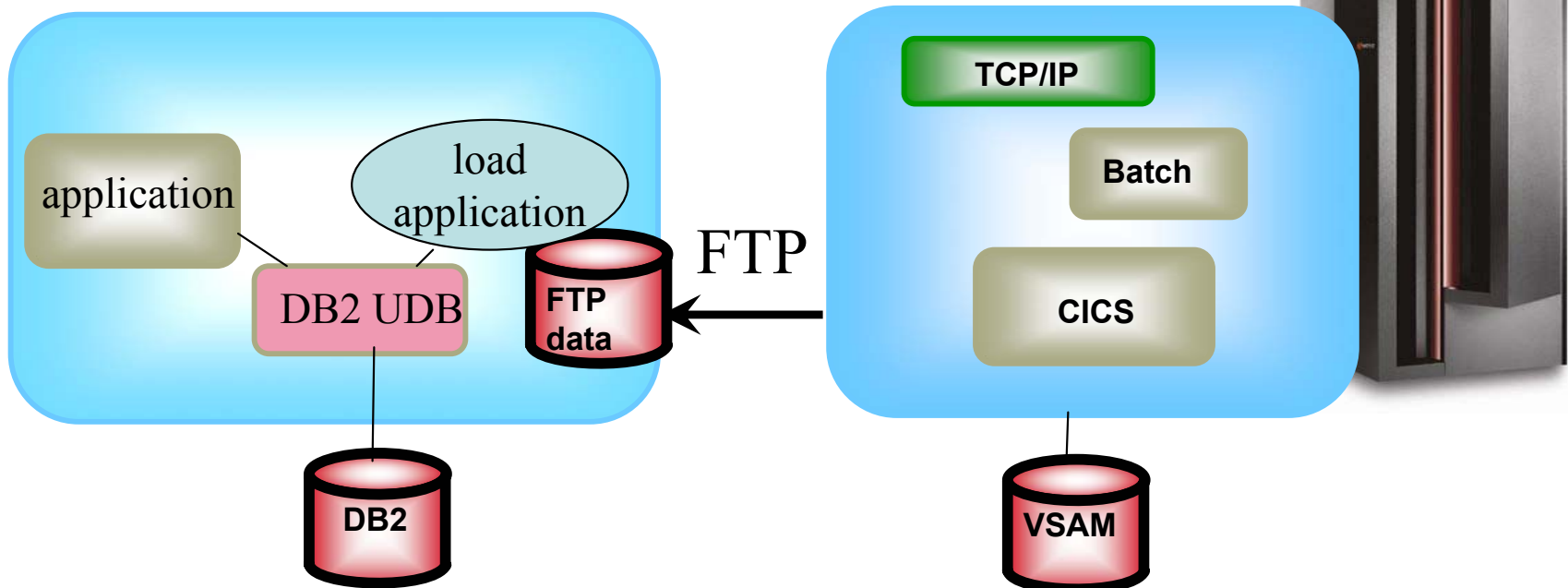
- Leverage VSE applications
 - ❖ with Service Oriented Architecture (SOA)

VSE applications and DB2 UDB on Linux on zSeries



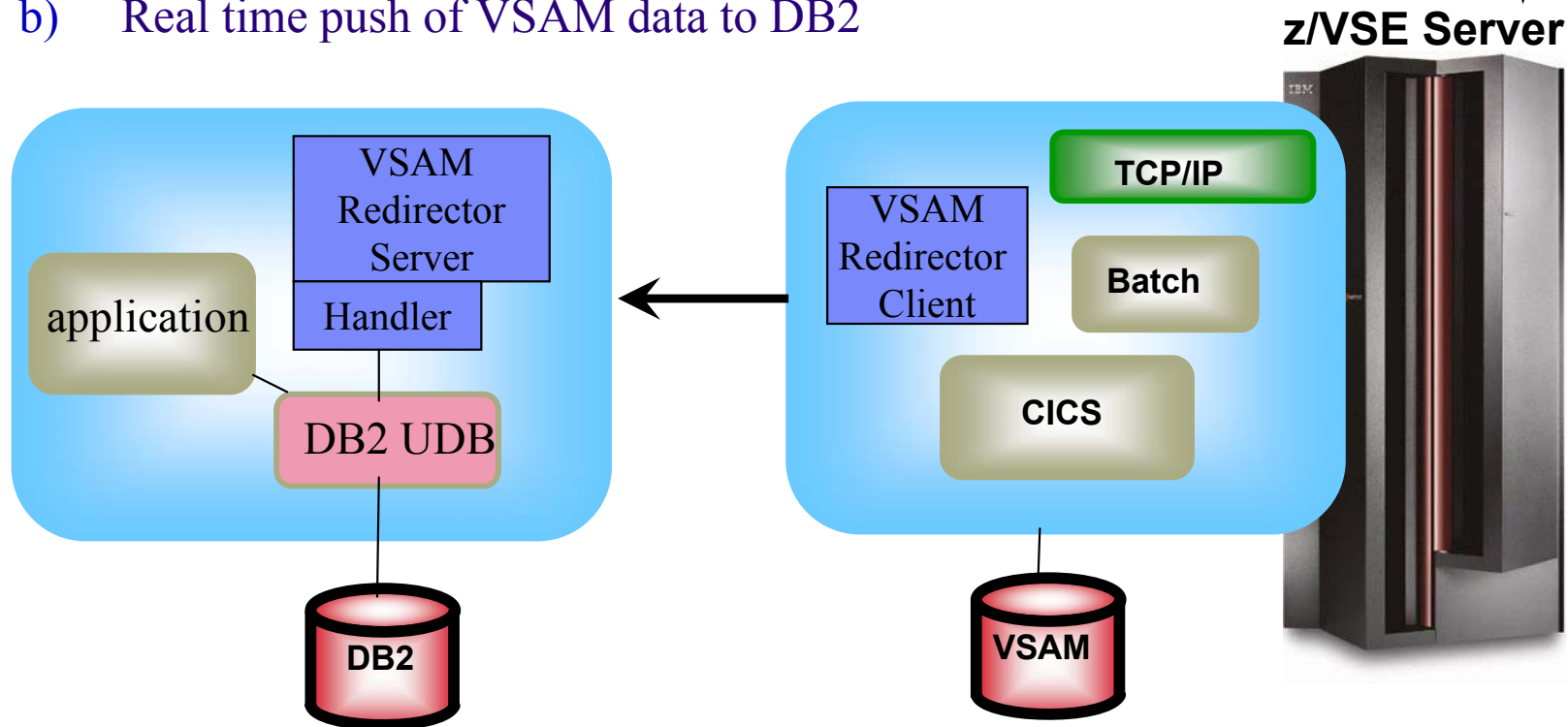
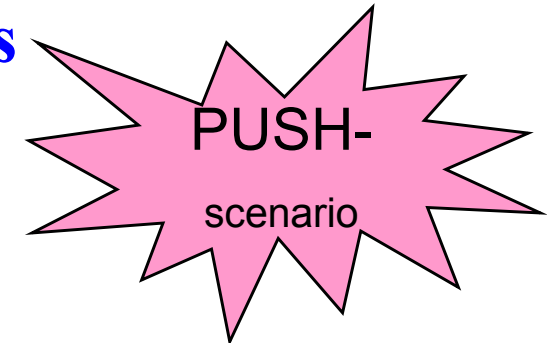
VSE/VSAM applications and data transfer today

- (1) disadvantages of FTP
 - a) NO real-time access/synchronization
 - b) data immediate out of sync, till next FTP
 - c) always the whole file is transferred
 - d) intermediate step – database loader needed
 - e) FTP is a stateless protocol – no guaranteed delivery
 - f) increased network traffic



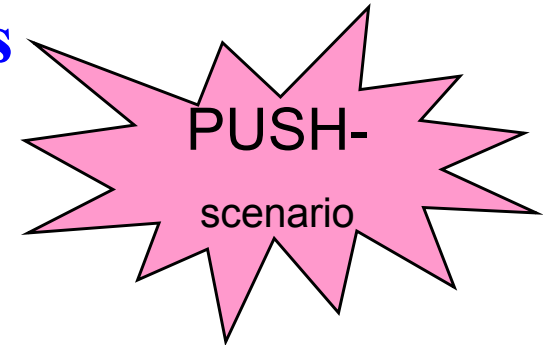
VSE/VSAM applications (without any change), access remote relational databases

- (1) Real time access VSAM to DB2
- synchronization (two phase commit of VSAM and DB2)
 - Real time push of VSAM data to DB2

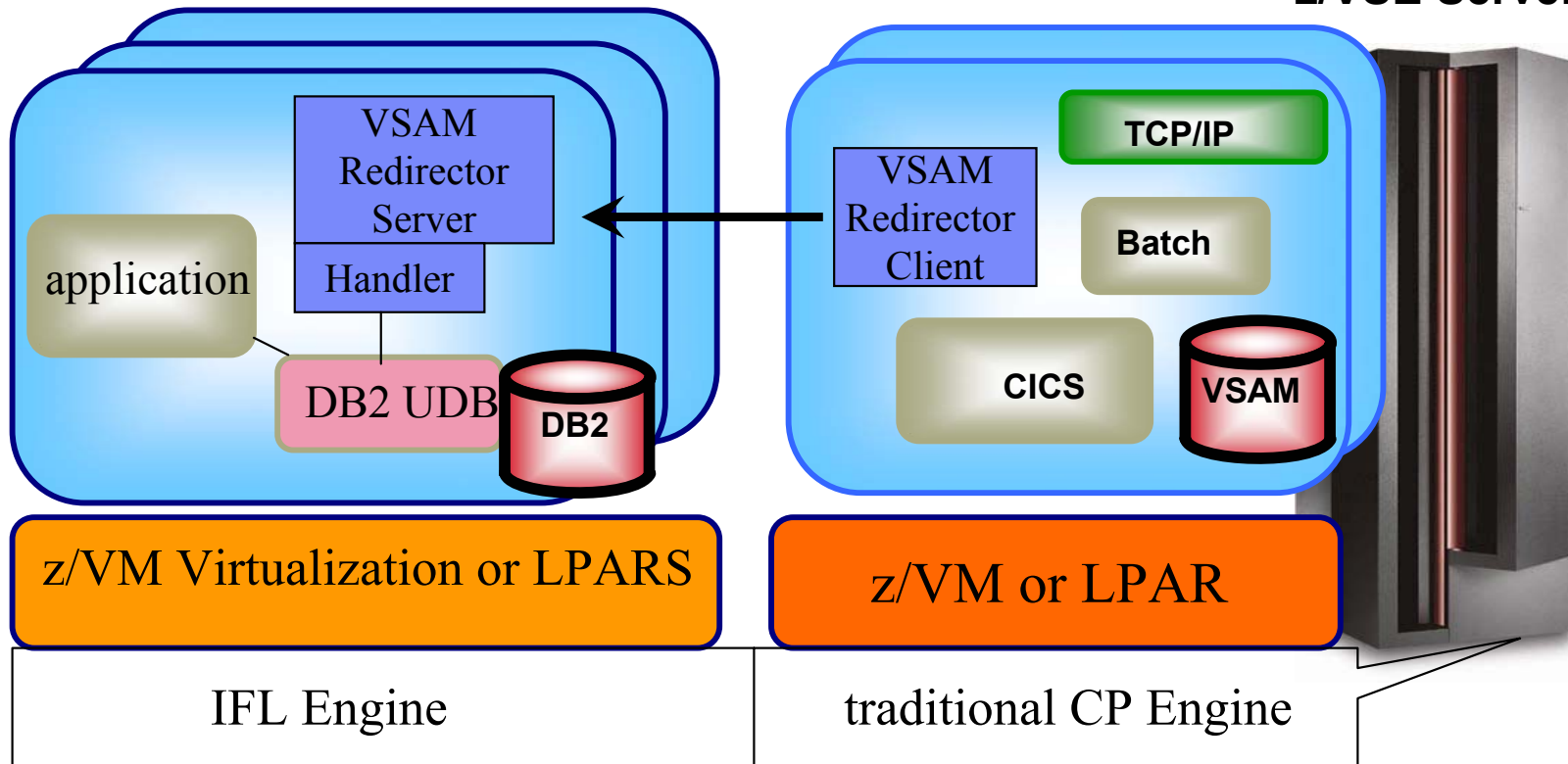


VSE/VSAM applications (without any change), access remote relational databases

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z/VSE Server



Agenda: Integrate and simplify

- Leverage VSE data
 - ❖ integrate them with DB2 UDB

- Leverage VSE applications
 - ❖ with Service Oriented Architecture (SOA)
 - ❖ what is SOA
 - ❖ enable CICS applications for SOA
 - ❖ Values of SOA

What is Service Oriented Architecture (SOA) ?

SOA is a new IT Architectural Concept

- to eliminate technological constraints (i.e. operating system and data organization)
- "loosely coupled" application components called **services**:
 - self-contained with well-defined interfaces
 - not tied to a particular platform, database, or infrastructure
 - accessible over the network --> **web services**
- Services enable the combination of themselves:
 - to **extend existing** business logic
 - to **create new** applications.



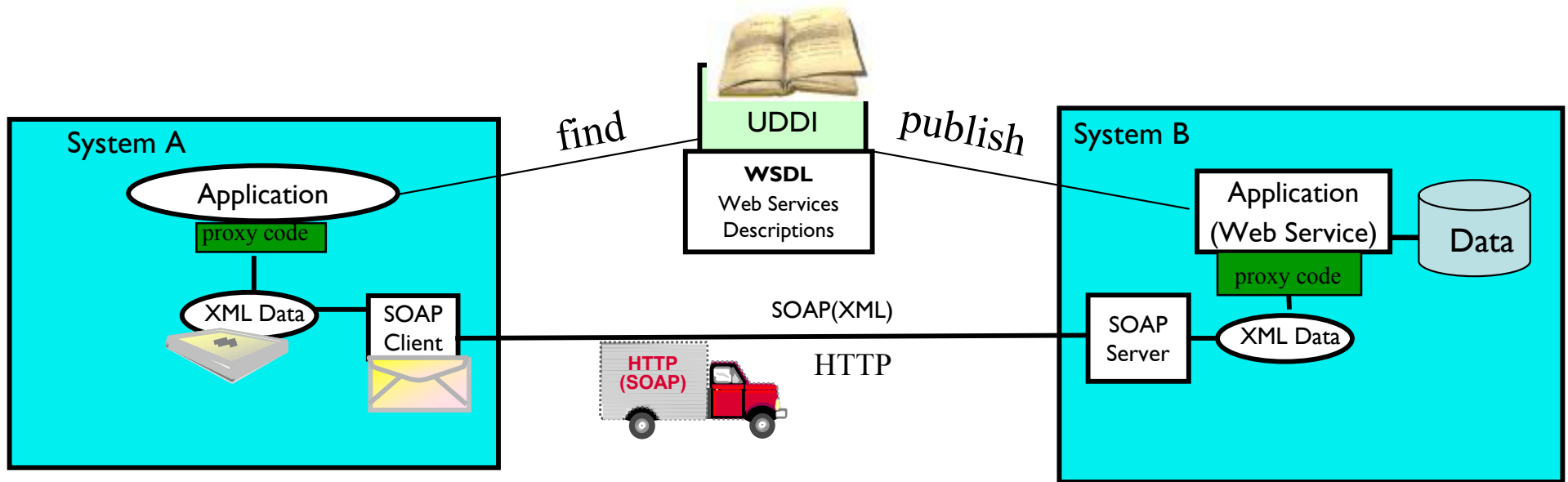
SOA increases your capabilities with:

- **lower costs**
- **higher quality**
- **faster time to market**

It enables your business to adapt to changing conditions and requirements !

Web Services in action

XML Document + SOAP Protocol = Web Services



- XML** -
- SOAP** -
- HTTP** - Carrier
- TCP/IP** - Street
- UDDI** - Yellow pages

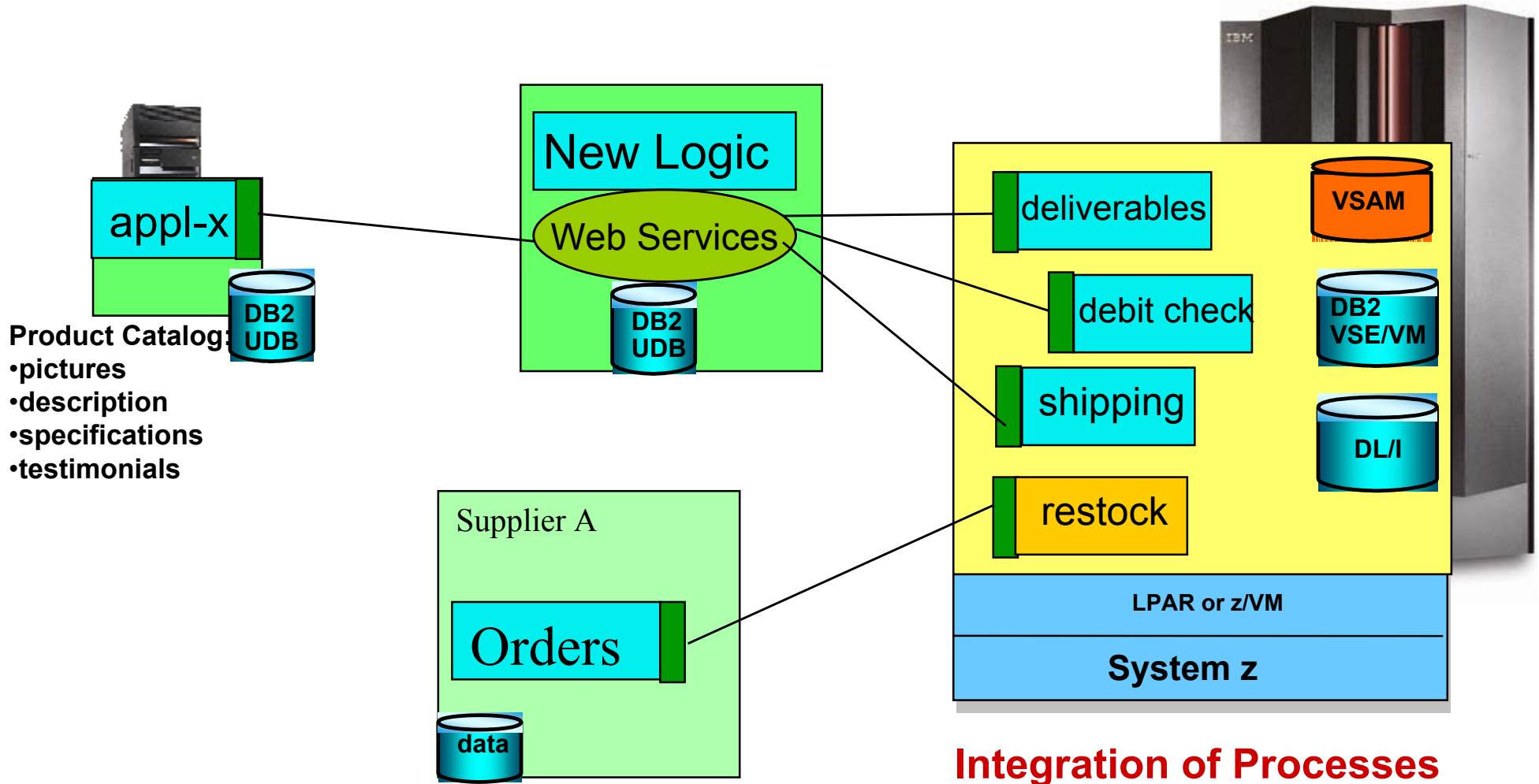
A web service

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

SOA – the way to New applications and processes

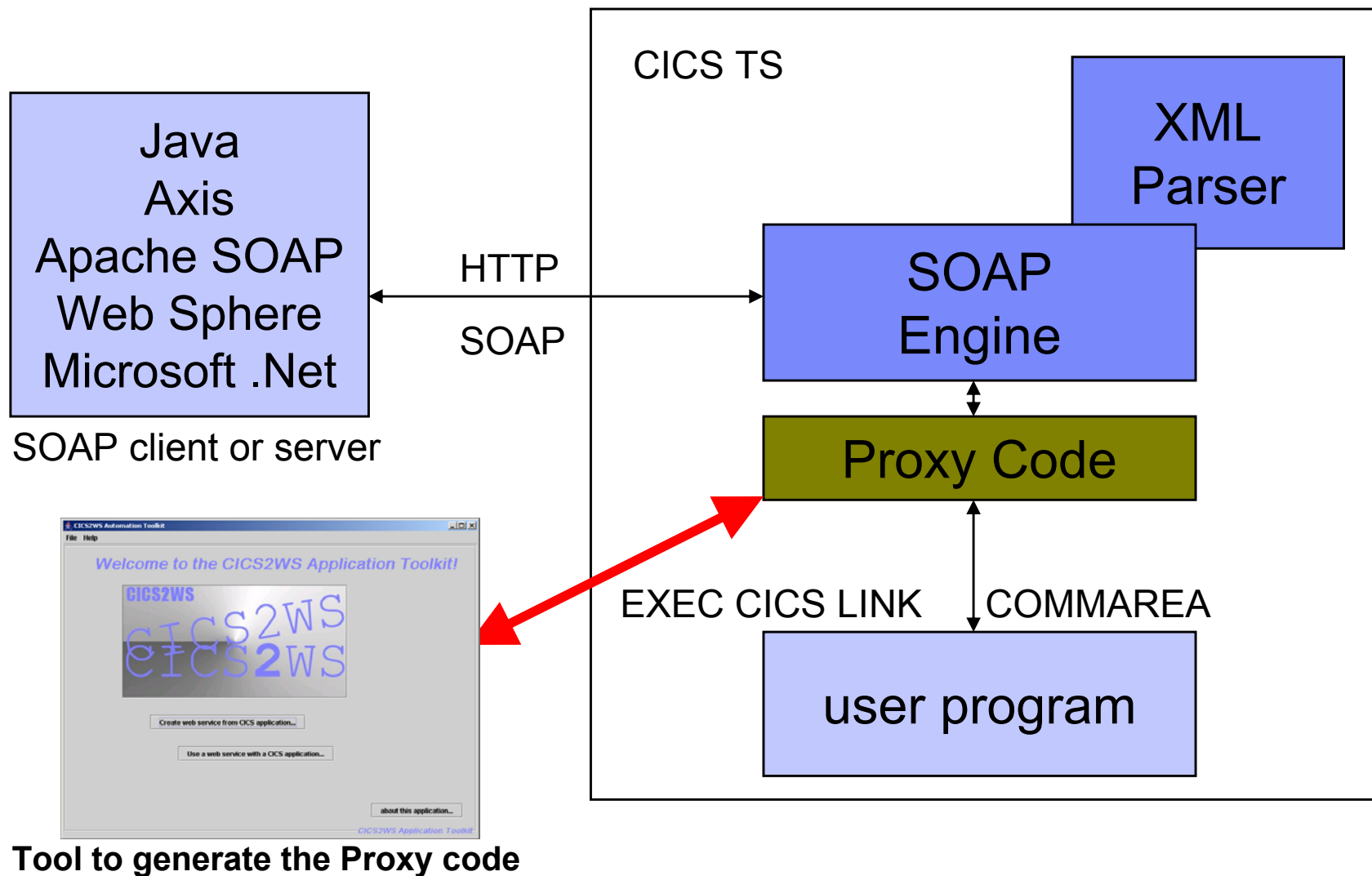
- Applications look the same for all users
- Core applications can be enhanced (independent of their language, COBOL, ASM, PL/I)
- New business logic is built

Increased success for the Company

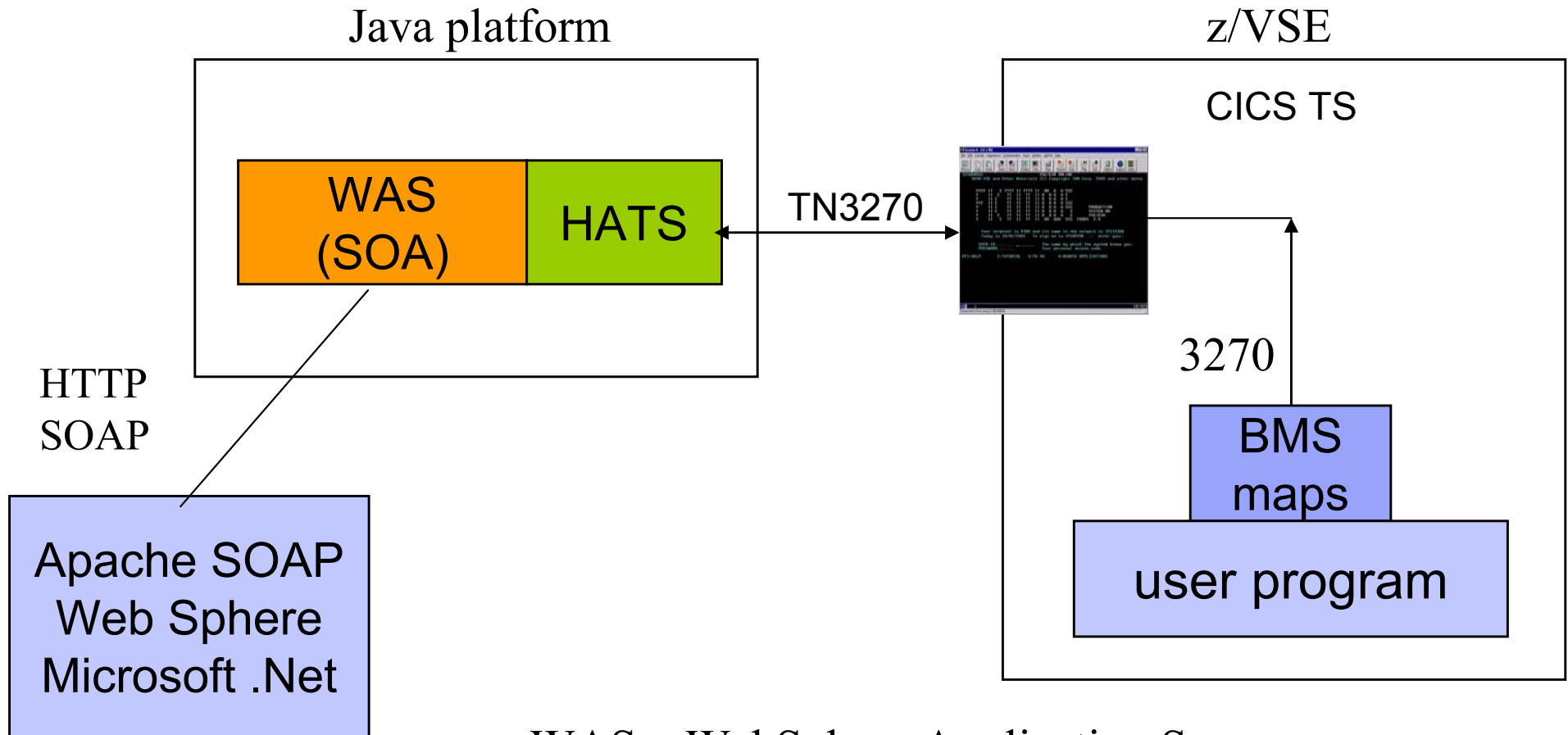


Integration of Processes

Web Services with VSE



Web Services with 3270 applications



WAS – WebSphere Application Server

HATS – Host Access Transformation Server

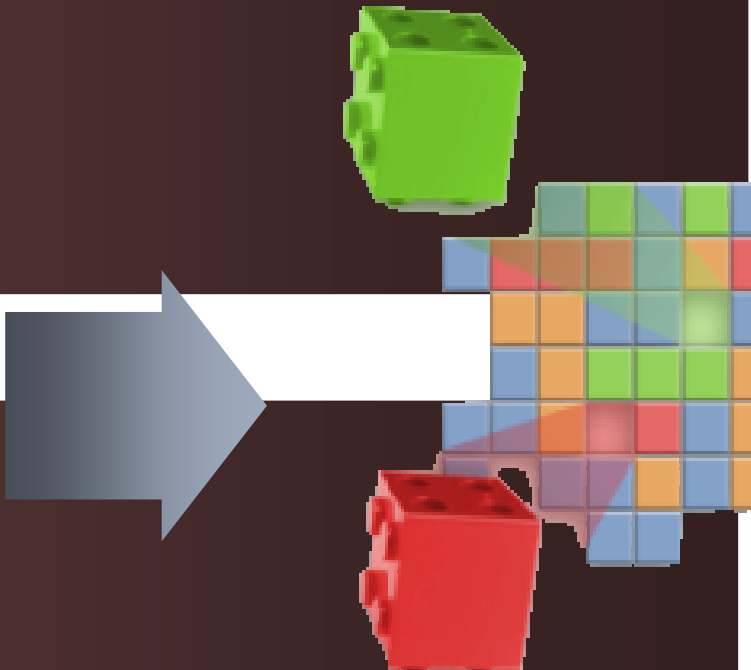
z/VSE - Greater Value through SOA

Value

- VSE looks the same to any other platform
- Any other platform looks the same to VSE
- Flexibility and integration with other platforms
- Expanded access to core applications
- Use of standard Internet protocols

Start with

- What services are needed to run your business?
- Identify high-value existing IT assets
- Service-enable them for reuse
- Fill in gaps by creating new services for today's business needs and future reuse



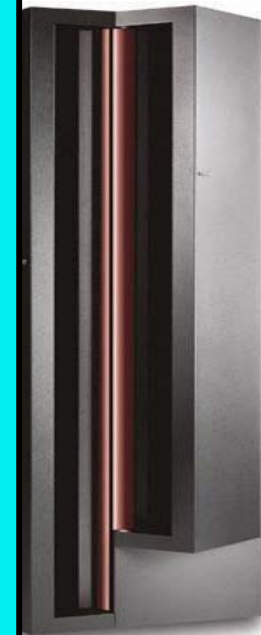
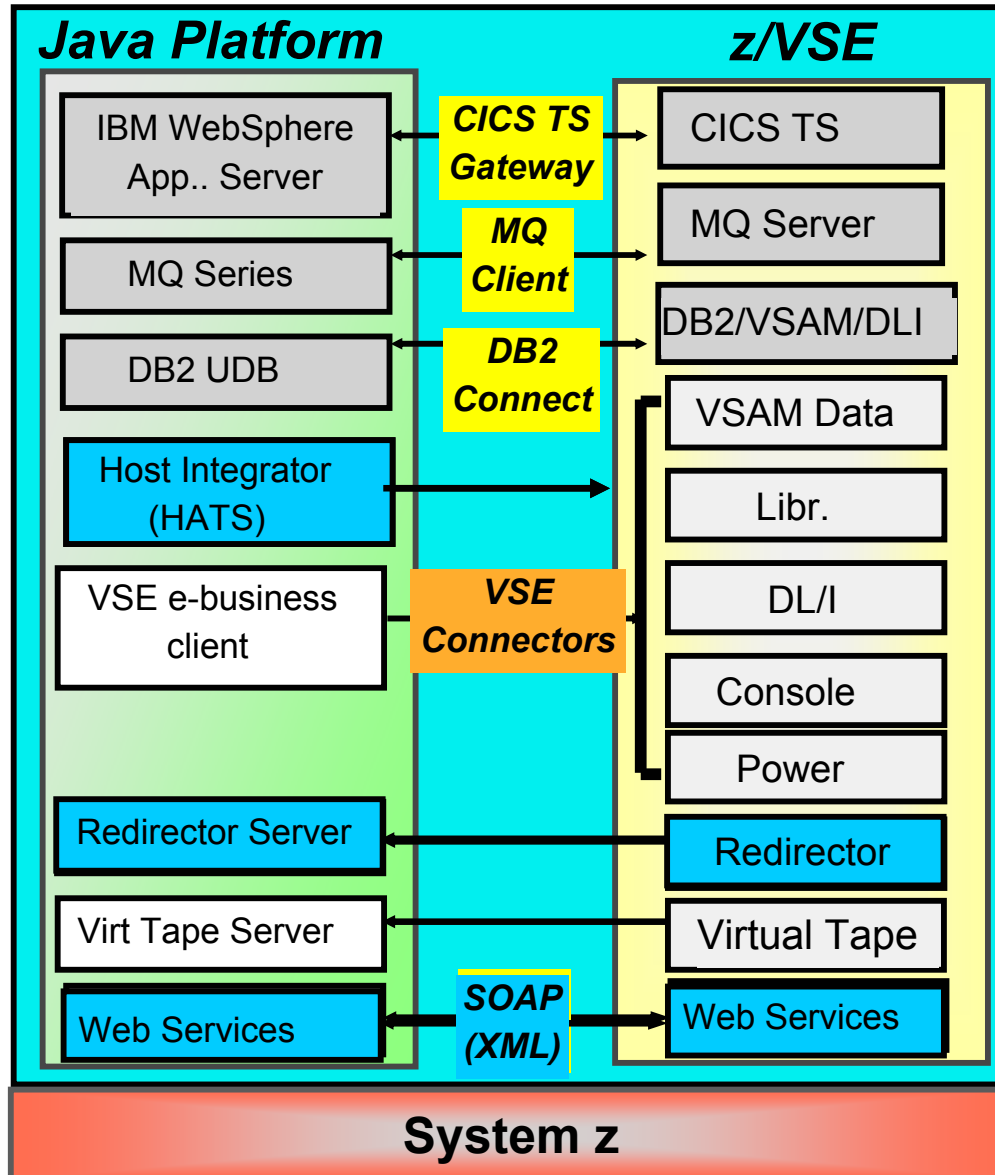
“ With reuse, solving the next business problem can be done more quickly and efficiently.”

- Amy Wohl

* Software Productivity Research (SPR)

Interoperability with z/VSE

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- Most modern technologies interact with VSE services
- Modernization using real time access to data



Tools available in the VSE download area

- z/VSE/ESA Home Page – downloads for **FREE**
<http://www.ibm.com/servers/eserver/zseries/zvse/downloads>

- System management:
 - VSE CPU Monitoring tool
 - VSE Installed Software Report tool
 - TCP/IP Configuration
 - IP Trace tool
 - Keyman/VSE (SSL)
 - VSE Health Checker
 - Multi Instant Logic analyzer for VSAM
 - JCalc, JLink, JRun (/LE VSE)

- Connector tools
 - *VSE Connector Client*
 - *VSE Navigator*
 - *VSE Maptool*
 - *VSEPrint*
 - *CICS2WS (SOA, WebServices)*

- *Connector Components*
 - *VSE Connector Client*
 - *VSE Redirector server*
 - *VSE Virtual Tape server*
 - *VSE Script server*



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We're here to help
 Easy ways to get the answers you need.
 E-mail us

Mark your calendar
 WAVV Conference
 May 18-22, 2007
 Green Bay, Wisconsin
 → Register

Announcing
 Data encryption. Protect your critical data. Don't be the next headline.
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IBM System z9™ Business Class
 A mainframe that's powerful enough to run my business and

Announcing z/VSE V4.1
 Built on a heritage of ongoing refinement and innovation that spans four decades

IBM Education Announcement - z/VSE 4.1 Live Virtual Classes

[z/VSE Version 4.1](#) was recently announced on January 9, 2007. Please join us on this series of **three 1-hour technical education sessions** (delivered as Live Virtual Classes) to hear more information about z/VSE 4.1 as well as the exciting new [Midrange Workload Licensing Charges](#) (MWLC) for z/VSE 4.1. We hope you will share information about these sessions with your colleagues.

There is no tuition to participate in these sessions, however you must enroll at least 1 day ahead of the session date to enable your participation. The Live Virtual Classes (LVC) will be delivered using the Interwise tool that employs Voice over IP (VoIP) technology to provide both the audio as well as the visuals for the class to your Windows workstation. Each participant must enroll individually, ie. no sharing of LVC logins is supported. However, several participants may view and listen on one workstation.

📄 [Minimum Workstation Requirements for LVC session](#) (PDF, 9KB)

Each call will start at 8:00 a.m. Pacific US/ 11:00 a.m. Eastern US/ 4:00 p.m. GMT/ 5:00 p.m. CET. The duration for each live virtual class is 1 hour.

z/VSE and MWLC Announcement Overview - February 1 (Thursday): Jerry Johnston, z/VSE Advanced Technical Support, will present a 1-hour overview of the January 9 announcement including z/VSE 4.1 and updates to the z/VSE pricing. Time for Q&A is included to provide further information.

🔗 [Playback of z/VSE and MWLC Announcement Overview class](#)

Related links

- Linux on IBM System z
- z/OS
- z/VM
- IBM Storage
- IBM Printing Systems

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

Documentation

- What is SOA?
 - <http://www.ibm.com/developerworks/webservices/newto/>
 - <http://webservices.xml.com/pub/a/ws/2003/09/30/soa.html>
- Web Services
 - <http://www.ibm.com/servers/eserver/zseries/zvse/documentation/ebusiness.html#soap>
- Web Services in VSE (from Rich Smrcina)
 - <http://www.zjournal.com/index.cfm?section=article&aid=281>
 - <http://www.zjournal.com/index.cfm?section=article&aid=320>
 - Includes COBOL sample code
- *z/VSE e-business Connectors, User's Guide (SC33-8231)*

IBM Education Announcement - z/VSE 4.1 Live Virtual Classes

z/VSE Version 4.1 Virtual Classes after announcement on January 9, 2007

- The Live Virtual Classes (LVC) were delivered using the Interwise tool that employs Voice over IP (VoIP) technology to provide both the audio as well as the visuals for the class to your Windows workstation.
- **Each call is available as replay for a short period of time.**
- **Visit the VSE home page for details (ibm.com/vse)**

1) z/VSE and MWLC Announcement Overview -

February 1 (Thursday)

Content: Overview of the January 9 announcement including z/VSE 4.1 and updates to the z/VSE pricing.

2) Midrange Workload Licensing Charges for z/VSE -

February 22 (Thursday)

Content: Midrange Workload Licensing and associated sub-capacity pricing.

3) z/VSE 4.1 solutions based on SOA and DB2 -

March 15 (Thursday)

Content: How z/VSE can take part in modern solutions based on System Oriented Architecture (SOA), XML data interchange and Web services standards.

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

Additional Information

- z/VSE/ESA Home Page
<http://www.ibm.com/servers/eserver/zseries/zvse/>
- z/VSE solutions
<http://www-1.ibm.com/servers/eserver/zseries/zvse/solutions>
- e-business Connectors User's Guide SC33-6719
<http://www-1.ibm.com/servers/eserver/zseries/zvse/documentation/#conn>



- e-business Solutions for VSE/ESA SG24-5662
- e-business Connectivity for VSE/ESA SG24-5950
- CICS Transaction Server for VSE/ESA
CICS Web Support *SG24-5997-00*
- WebSphere V5 for Linux on zSeries Connectivity Handbook SG24-7042

We appreciate your comments at : zvse@de.ibm.com