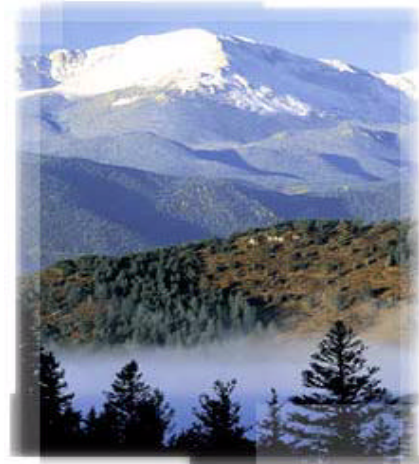




WAVV 2000

Colorado Springs, Co - October 6-10
**Fictitious Foods e-business Case
Study Implementation**



G. M. (Jerry) Johnston
Senior Advisor
IBM Böblingen Laboratory
p798000@us.ibm.com

Topics Covered

- **Introduction to Fictitious Foods**
- **e-business implementation**
 - Consumer Marketing
 - Account Self-Service
 - Outsource Call Center
 - Integration with Suppliers
 - New Interface for existing VSE applications
 - Consumer Marketing (Mobile Access)
- **Implementation Alternatives**
- **Summary and Outlook**
- **More Information**

IBM  business servers. Technology. Innovation. Magic.

© Copyright IBM Corporation 2000

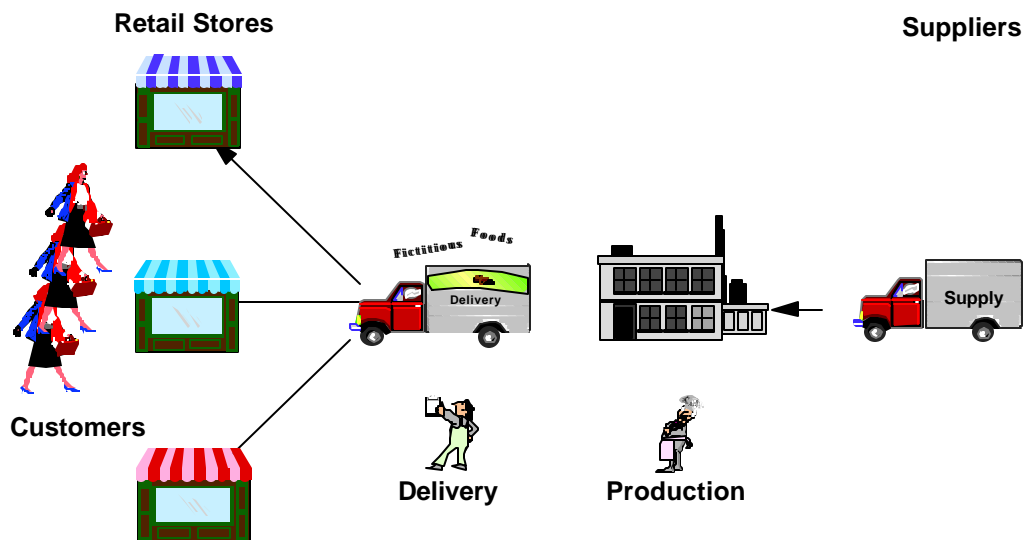
Project Documented in this Redbook

- Number: SG24-5662
- Title: **e-business Solutions for VSE/ESA**
- Host: VSE/ESA V2.3
- Intermediate Web Server: Windows NT



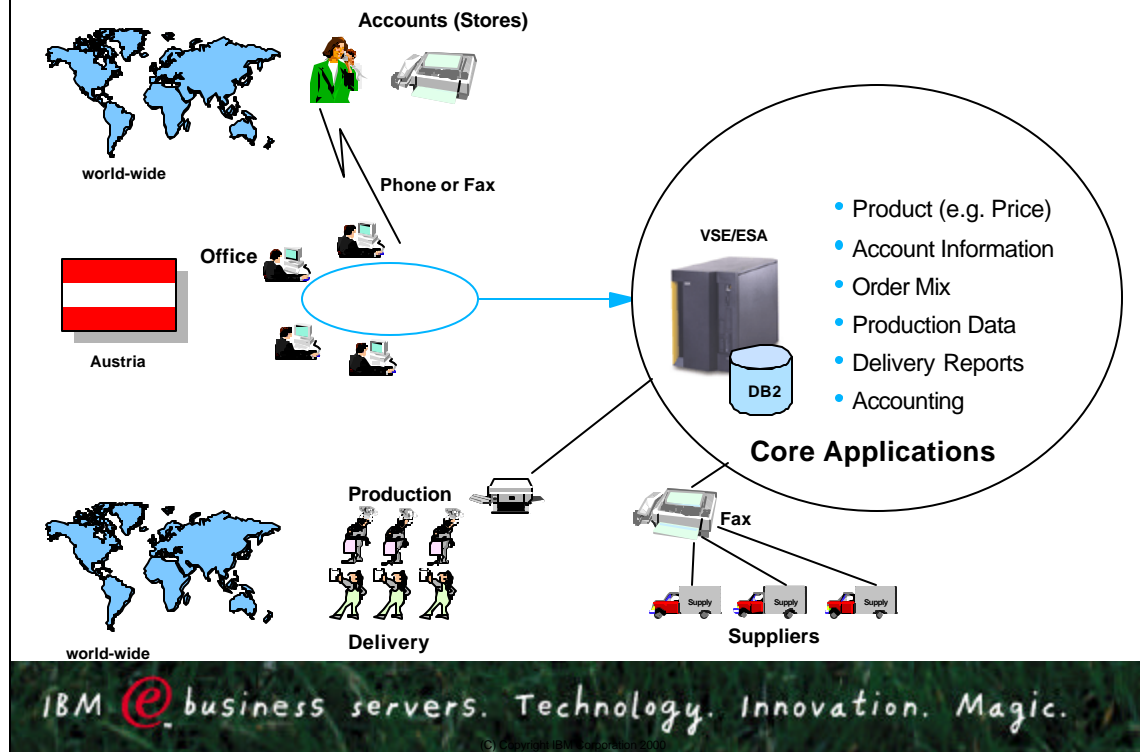
IBM @_business servers. Technology. Innovation. Magic.

Introduction to Fictitious Foods

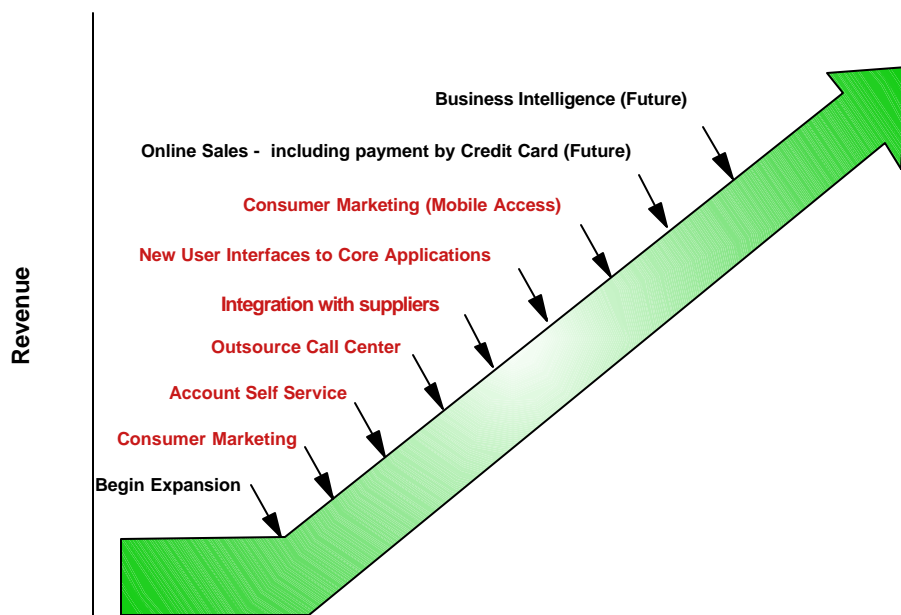


IBM @_business servers. Technology. Innovation. Magic.

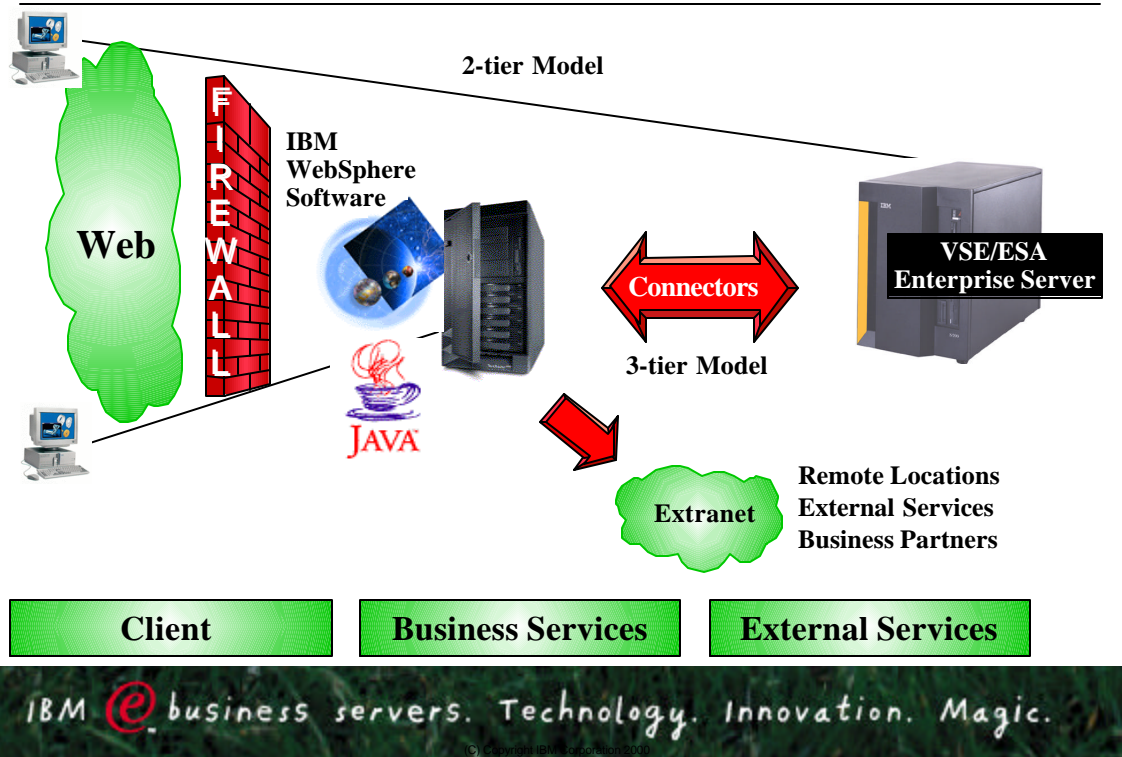
Fictitious Foods ... Before e-business Rollout



Fictitious Foods (e-) business plan



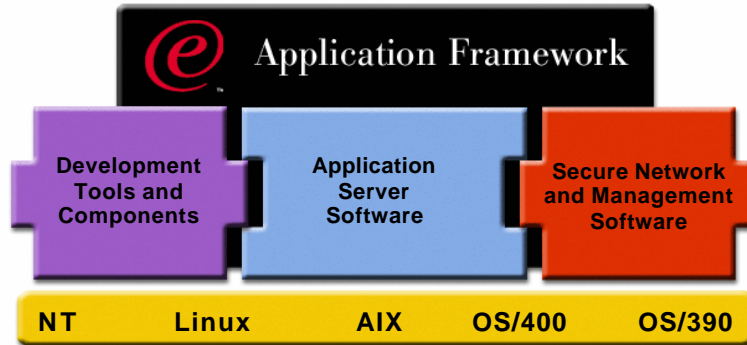
Implementation Alternatives



Technical Objectives

- Implement latest Internet technologies and standards
 - ie. Java (Java Beans, applets, servlets, etc.)
- Protect existing investment in VSE assets
- Position Fictitious Foods to adopt future technologies
- Portability
- Productive/Timely Implementation using modern AD tools

IBM Application Framework for e-business

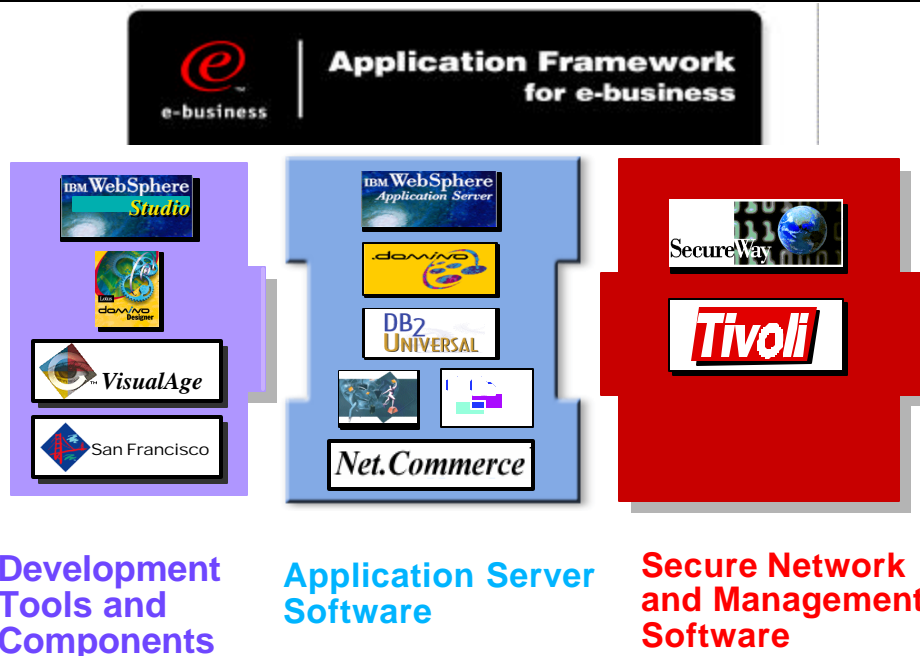


A framework for world-class e-business applications:

- Simplifies AD through the use of Java
- Supported by IBM products
- Leverage existing applications
- Flexibility of multi-platform standards (Java, Internet, OMG)

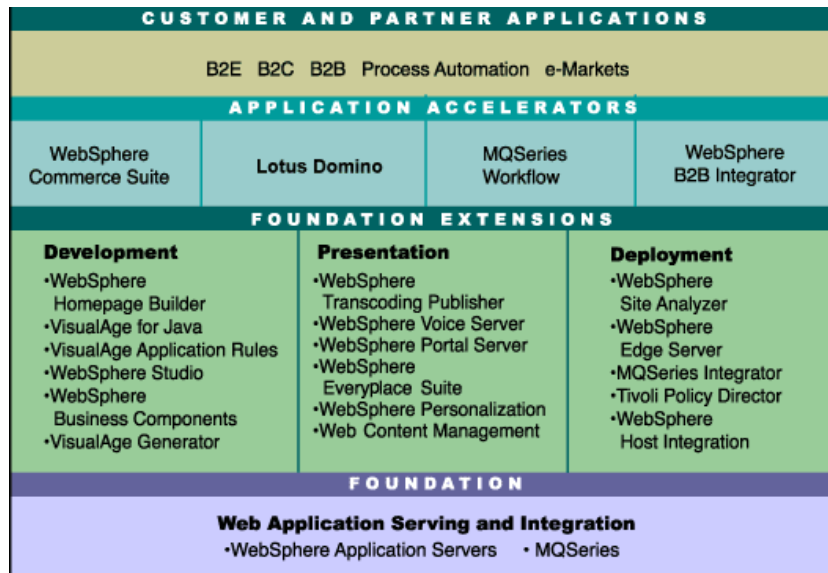
IBM @_business servers. Technology. Innovation. Magic.

IBM Application Framework for e-business



IBM @_business servers. Technology. Innovation. Magic.

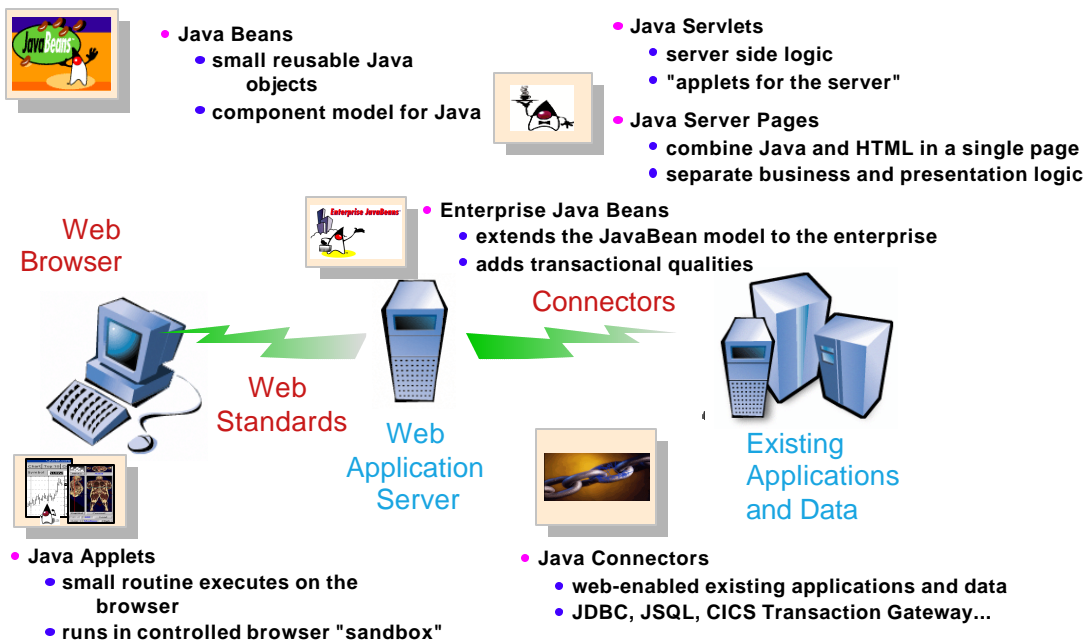
IBM Application Framework for e-business



IBM @business servers. Technology. Innovation. Magic.

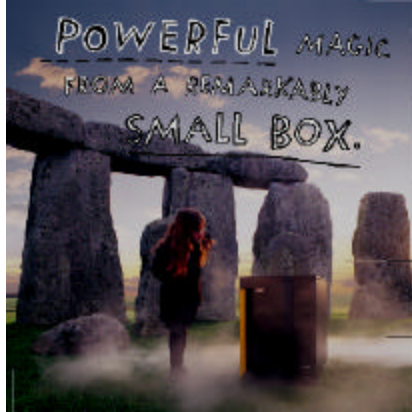
© Copyright IBM Corporation 2002

Application Programming Model



IBM @business servers. Technology. Innovation. Magic.

© Copyright IBM Corporation 2002



Implementation at Fictitious Foods

IBM @business servers. Technology. Innovation. Magic.

TCP/IP - the e-business Highway

'Protocol Stack' and Basic Drivers

Program Interfaces

- X/Open compliant C Interface integrated in the Language Environment
- Language Translator (S/390 Assembler, COBOL, PL/I and C)
- Assembler Macro Interface
- BSD Socket Interface

Network Connectivity

- Integrated Communications Adapter (ICA) of ES/9000 9221 processors for Ethernet, Token-Ring
- IBM 3172 Interconnect Controller for Ethernet, Token-Ring and FDDI
- S/390 Open Systems Adapter 2 (OSA-2) for Ethernet, Fast Ethernet, Token-Ring, FDDI and ATM (LAN Emulation mode only)
- CLAW Connection to RS/6000
- Channel to Channel Adapters (includes virtual CTCA provided by the VM/ESA operating system).
- IBM 2216 Nways Multiaccess Connector

Environments

- VSE/ESA V2.3/ 2.4/2.5



IBM @business servers. Technology. Innovation. Magic.

TCP/IP Standard Applications



Application Pak = Previous Chart Plus

File Transfer

- FTP Client and Server offers access to
 - VSAM ESDS and KSDS datasets
 - Sequential Data sets
 - VSE/POWER spool files
 - VSE library and sublibrary files
 - ICCF Libraries (read only)

Terminal Emulation


- Telnet Client and Server
 - Full Screen 3270
 - Access to other Telnet servers via CICS

Web Server

- Store HTML documents on VSE
- Store JAVA and other objects on VSE
- Common Gateway Interface (CGI)
- Server Side Includes (SSI)

Remote

- Line Printer Daemon (LPD Server)
- Line Printer Requester (LPR Client)
- Line Printer Queue (LPQ)



IBM @ business servers. Technology. Innovation. Magic.

© Copyright IBM Corporation 2000


TCP/IP Optional Components



Network File System


NFS Server

- NFS V2 protocol
- Access to:
 - VSE/VSAM ESDS files
 - VSE/ESA Library files
 - VSE/POWER spool files



General Print Server

- Provides 328x printing capability in a TN3270 environment without application change
- Maps VTAM-based printing to LPR/LPD-based network printers
- Allows GPS daemons appear to VSE/ESA as locally-attached VTAM printer



IBM @ business servers. Technology. Innovation. Magic.

© Copyright IBM Corporation 2000

TCP/IP Exploitation



- **PNET over TCP/IP**
 - announcement letter 200-288
- **MQSeries for VSE/ESA V2.1.1**
 - announcement letter 200-291
- **DB2 Server for VSE and VM V7 - DRDA TCP/IP Support**
 - announcement letter 200-292
- **CICS Web Support / 3270 Bridge**
 - announcement letter 200-293
- **PSF/VSE - Support for TCP/IP attached devices**
 - APAR - DY45247
 - PTF - UD51162
- **VisualAge Generator - transfer generated code to VSE**
 - APAR - PQ26899 & PQ26900
 - PTF - UQ36588

IBM @business servers. Technology. Innovation. Magic.

© Copyright IBM Corporation 2000

Step 1- Consumer Marketing (B2C)

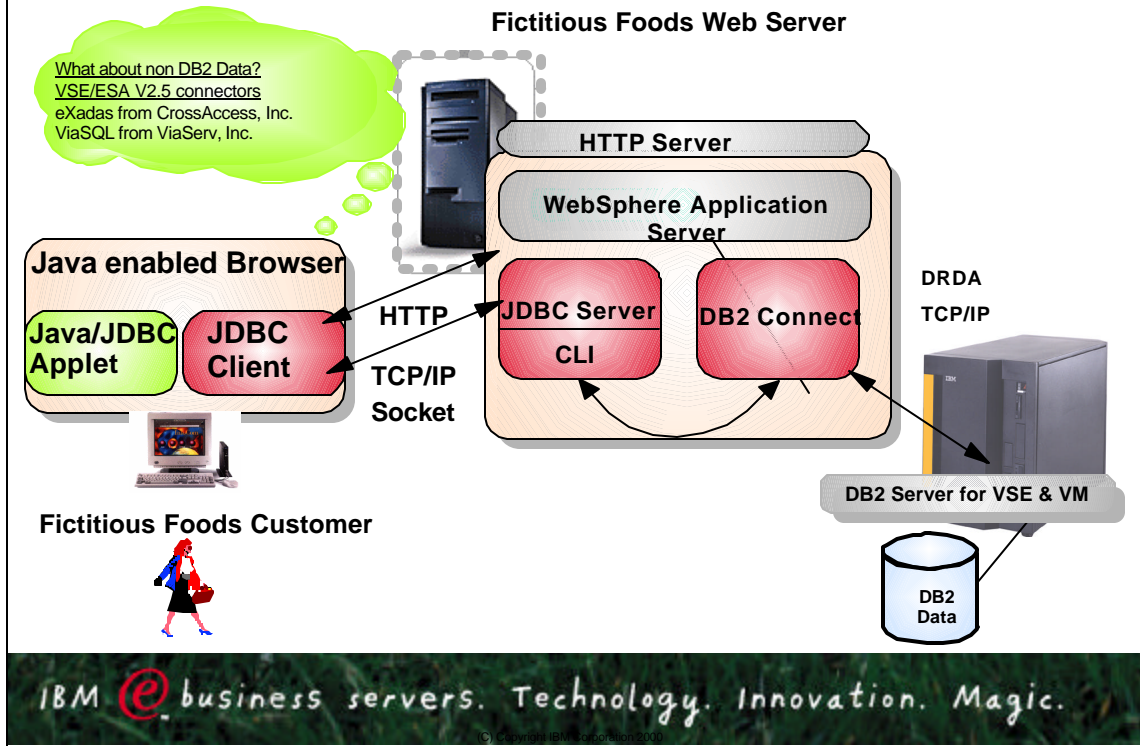


Storename	Localstreet	Locality	Loczip	Loccountry

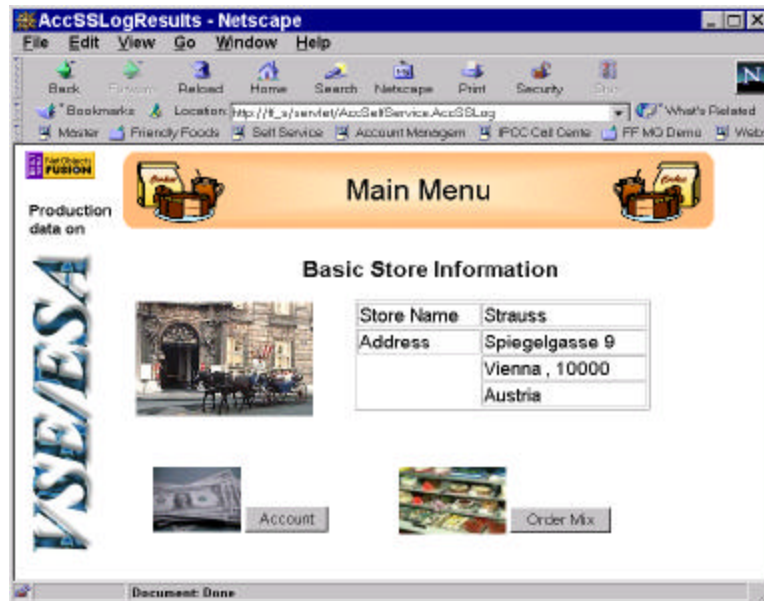
IBM @business servers. Technology. Innovation. Magic.

© Copyright IBM Corporation 2000

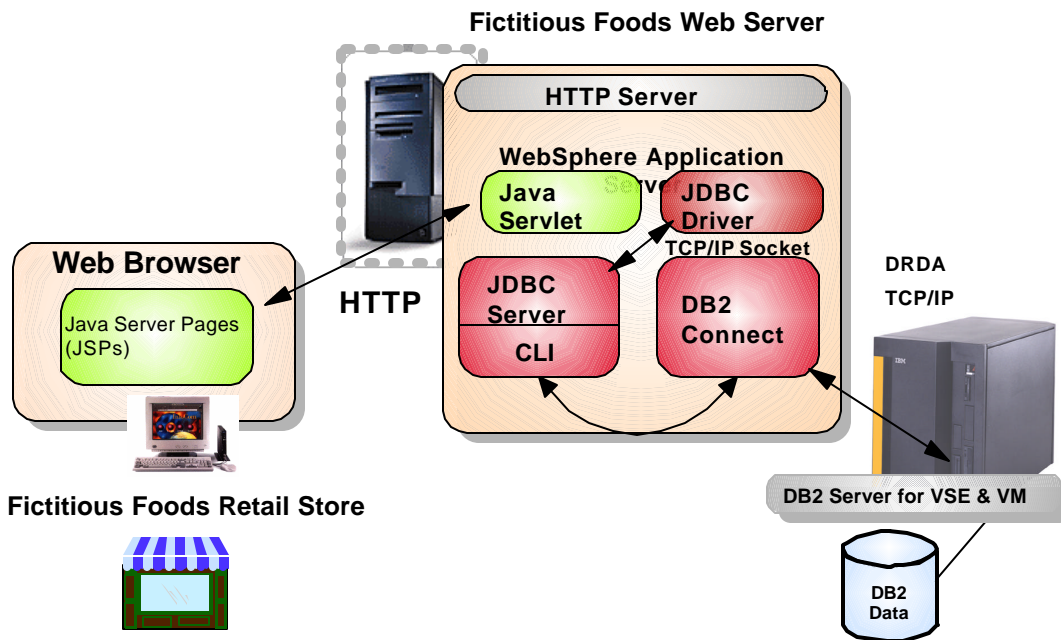
Step 1 - Using Java Applet & DB2 Connect



Step 2 - Account Self Service (Intranet)



Step 2 - Using Java Servlet & DB2 Connect



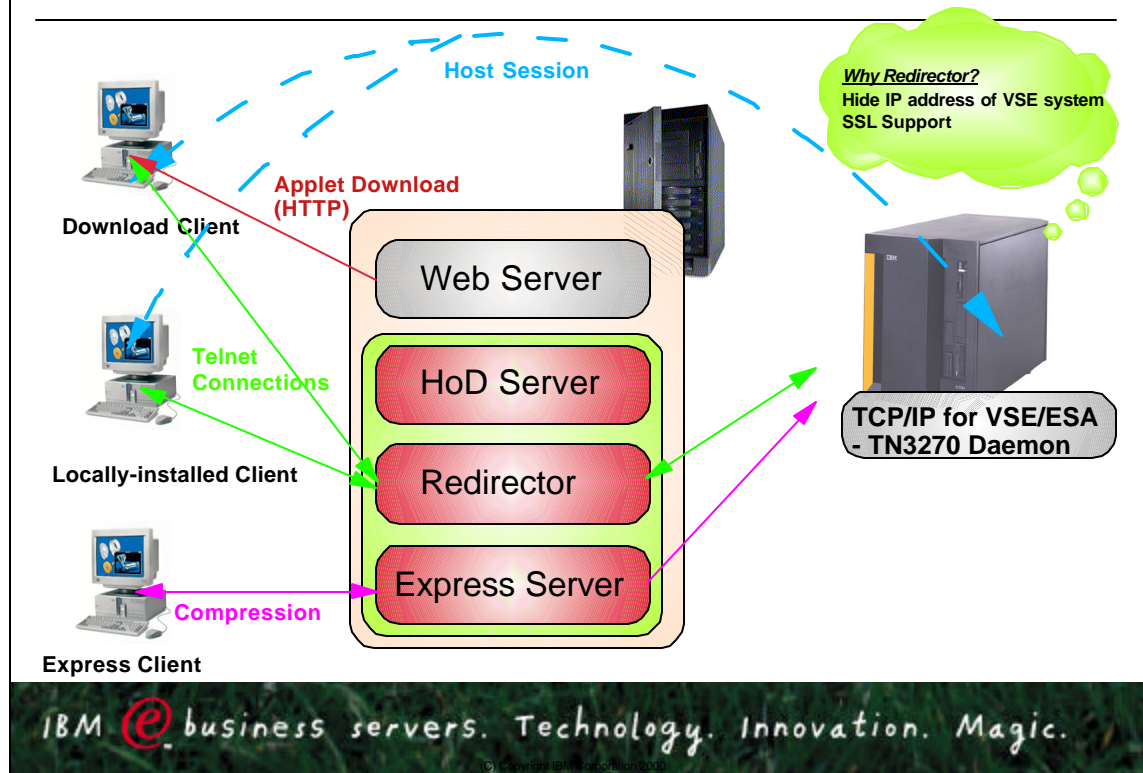
IBM @business servers. Technology. Innovation. Magic.

Step 3 - Outsource Call Center

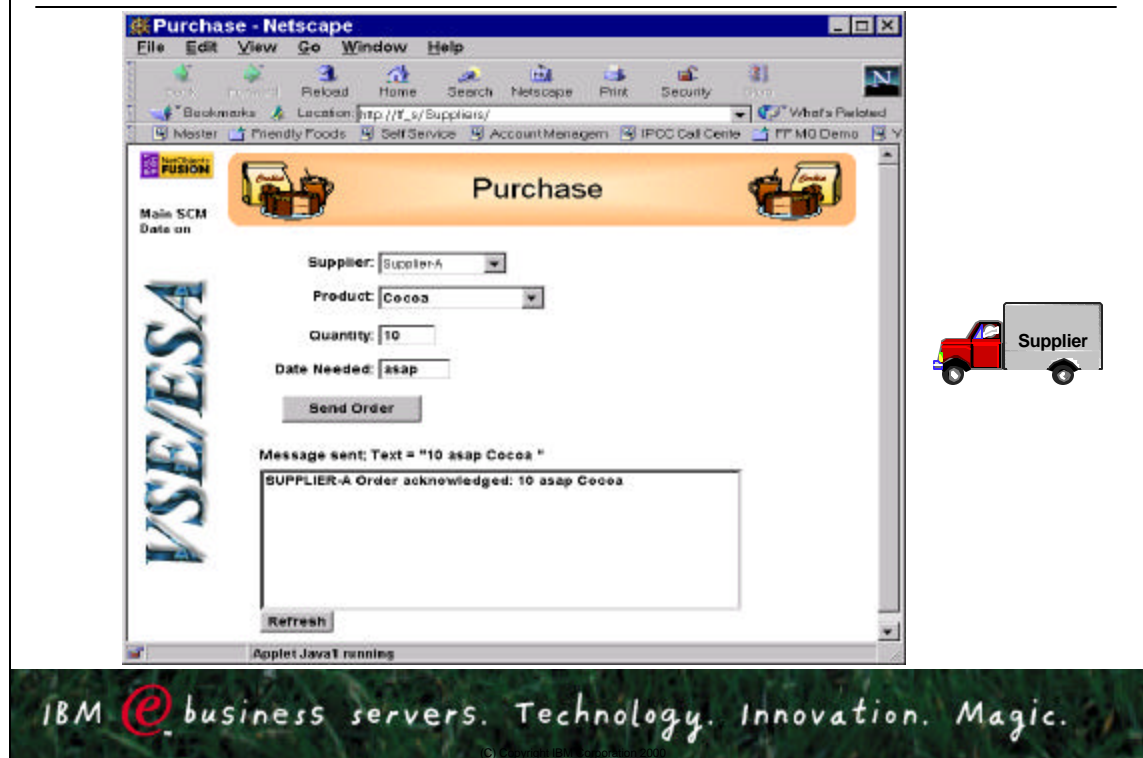


IBM @business servers. Technology. Innovation. Magic.

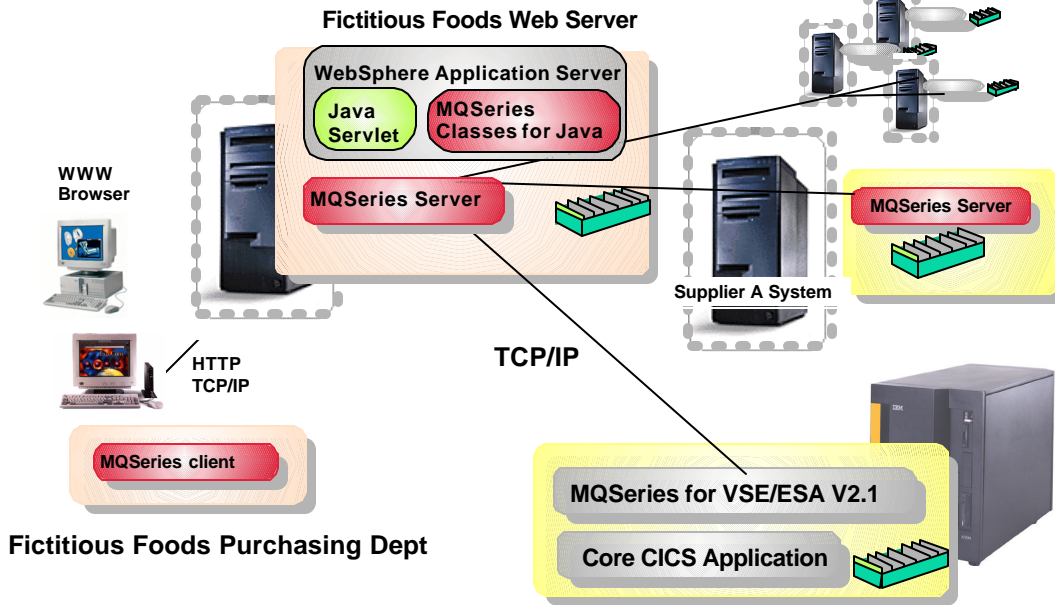
Step 3 - WebSphere Host on-Demand



Step 4 - Integration with Suppliers (B2B)



Step 4 - MQSeries

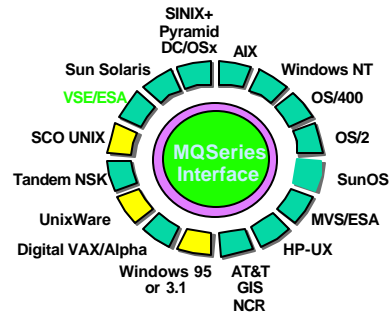


Fictitious Foods Purchasing Dept

IBM @business servers. Technology. Innovation. Magic.

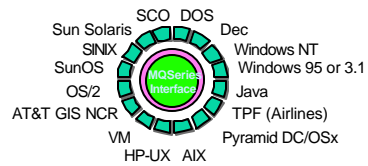
Why MQSeries?

Servers



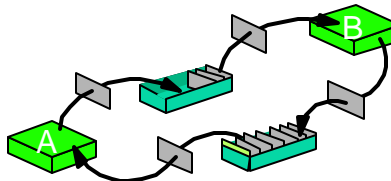
Server with Client support

Clients



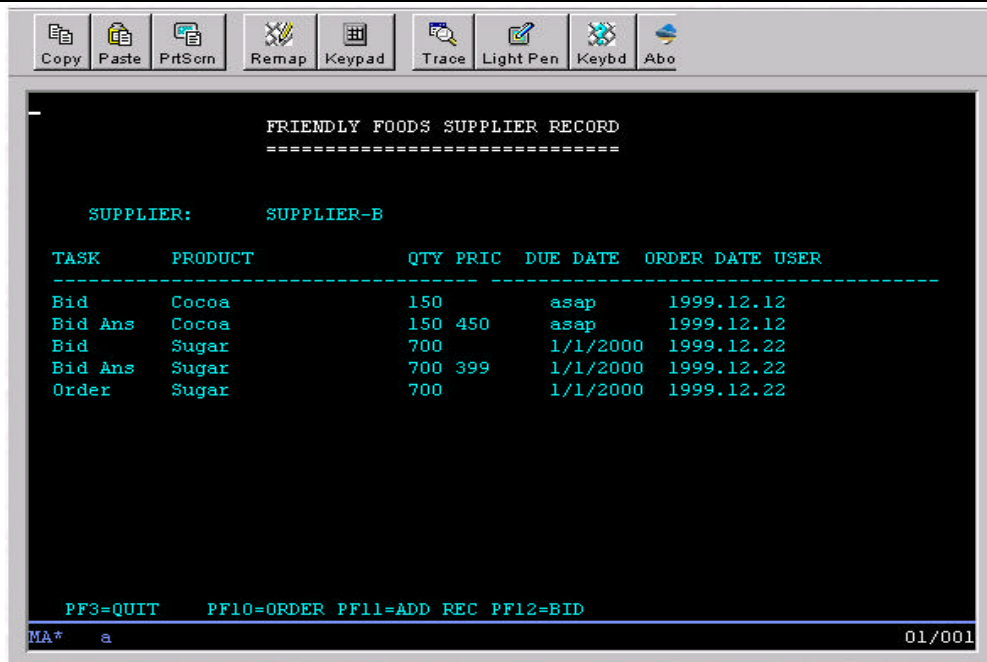
MQI Channel

- Assured Delivery/Integrity
- Fast, continuous delivery
- Choice of Platforms



IBM @business servers. Technology. Innovation. Magic.

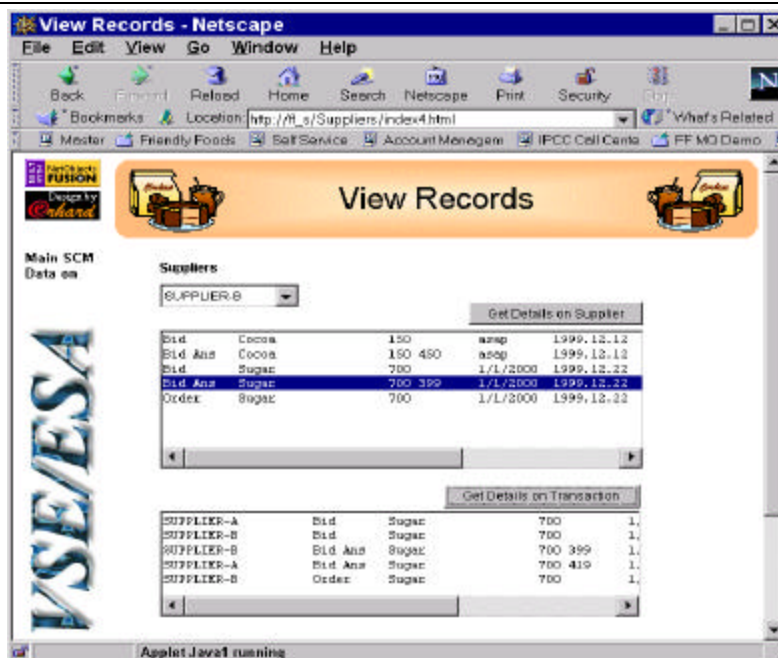
Traditional 3270 Interface to Applications



IBM @business servers. Technology. Innovation. Magic.

© Copyright IBM Corporation 2000

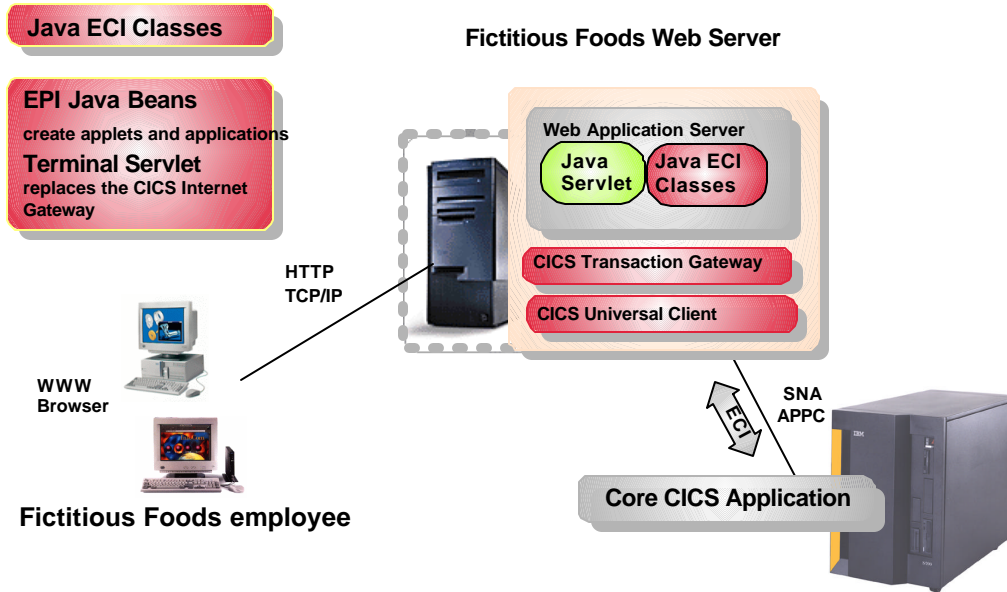
Step 5 - Browser Interface to VSE Appls



IBM @business servers. Technology. Innovation. Magic.

© Copyright IBM Corporation 2000

Step 5 - CICS Transaction Gateway



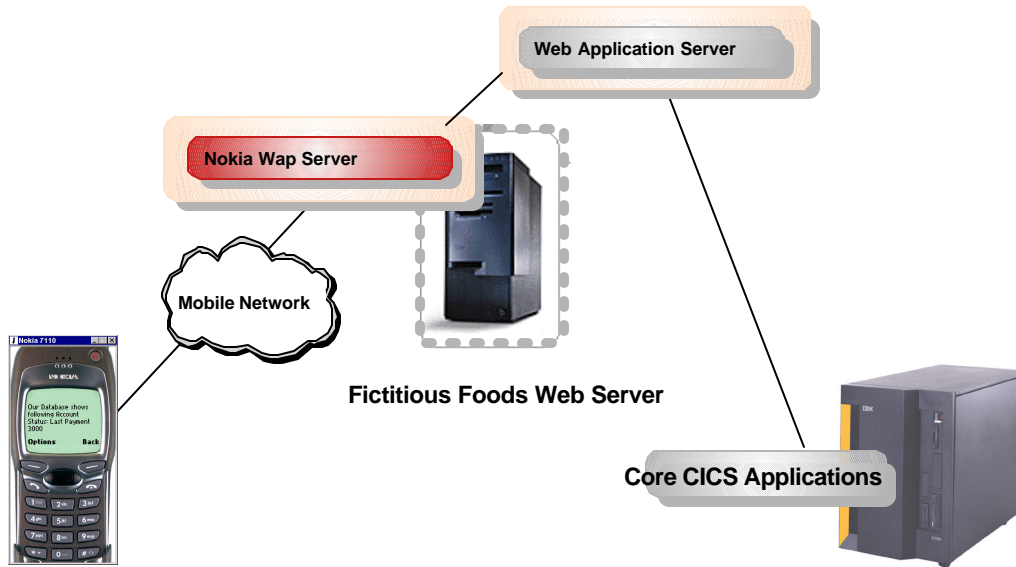
IBM @business servers. Technology. Innovation. Magic.

Step 6 - Mobile Access (Pervasive)



IBM @business servers. Technology. Innovation. Magic.

Step 6 - Wireless Application Protocol



IBM @business servers. Technology. Innovation. Magic.

Summary - Fictitious Foods Implementation



IBM @business servers. Technology. Innovation. Magic.

Activities Planned

- Migrate VSE/ESA V2.3 to V2.5
 - mostly done
- Migrate Windows NT server to Linux
 - mostly done
- Migrate Linux server to Linux for S/390

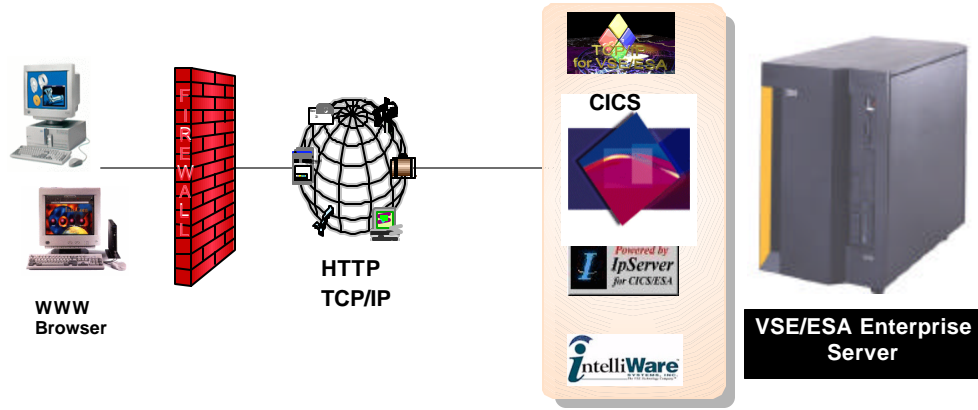
IBM @_business servers. Technology. Innovation. Magic.



2-tier Alternatives

IBM @_business servers. Technology. Innovation. Magic.

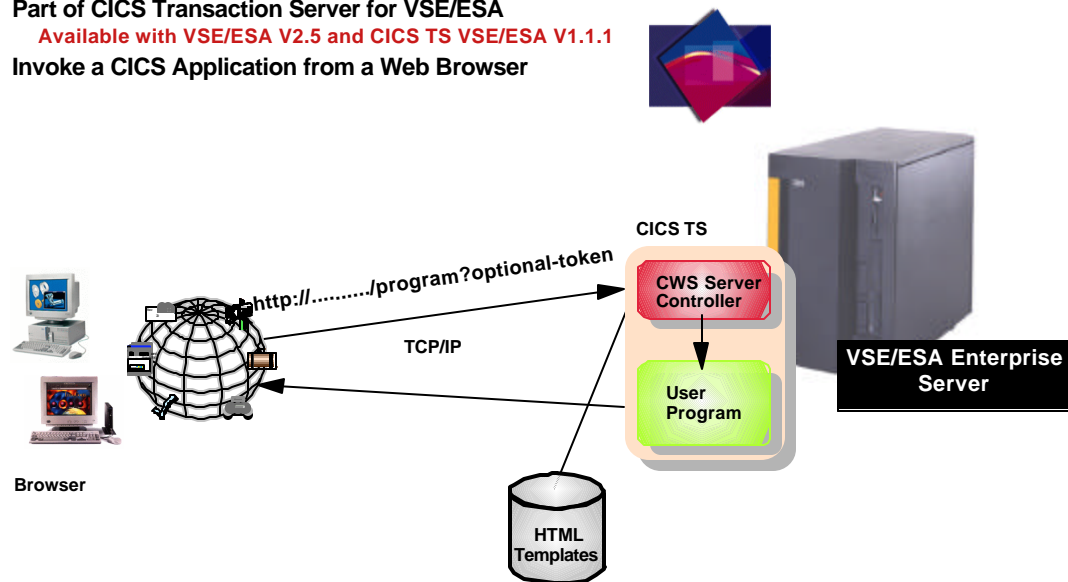
2-tier solutions



IBM @business servers. Technology. Innovation. Magic.

CICS Web Support

Part of CICS Transaction Server for VSE/ESA
Available with VSE/ESA V2.5 and CICS TS VSE/ESA V1.1.1
Invoke a CICS Application from a Web Browser



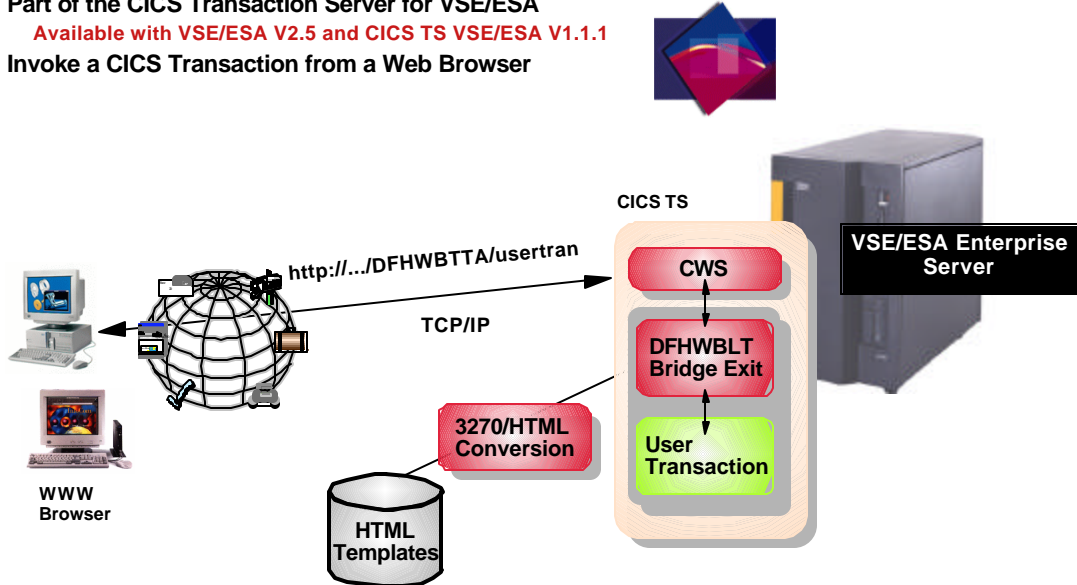
IBM @business servers. Technology. Innovation. Magic.

3270 Bridge

Part of the CICS Transaction Server for VSE/ESA

Available with VSE/ESA V2.5 and CICS TS VSE/ESA V1.1.1

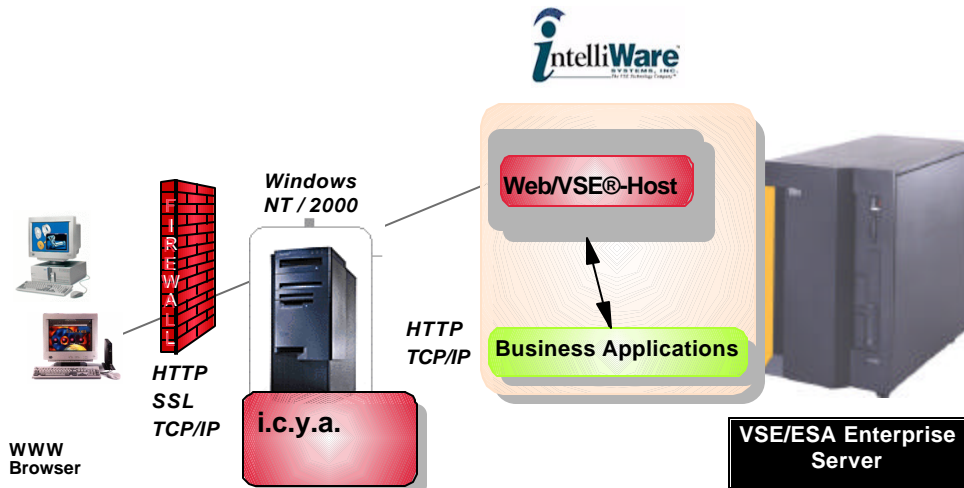
Invoke a CICS Transaction from a Web Browser



Announced to be available together with VSE/ESA V2.5

IBM @business servers. Technology. Innovation. Magic.

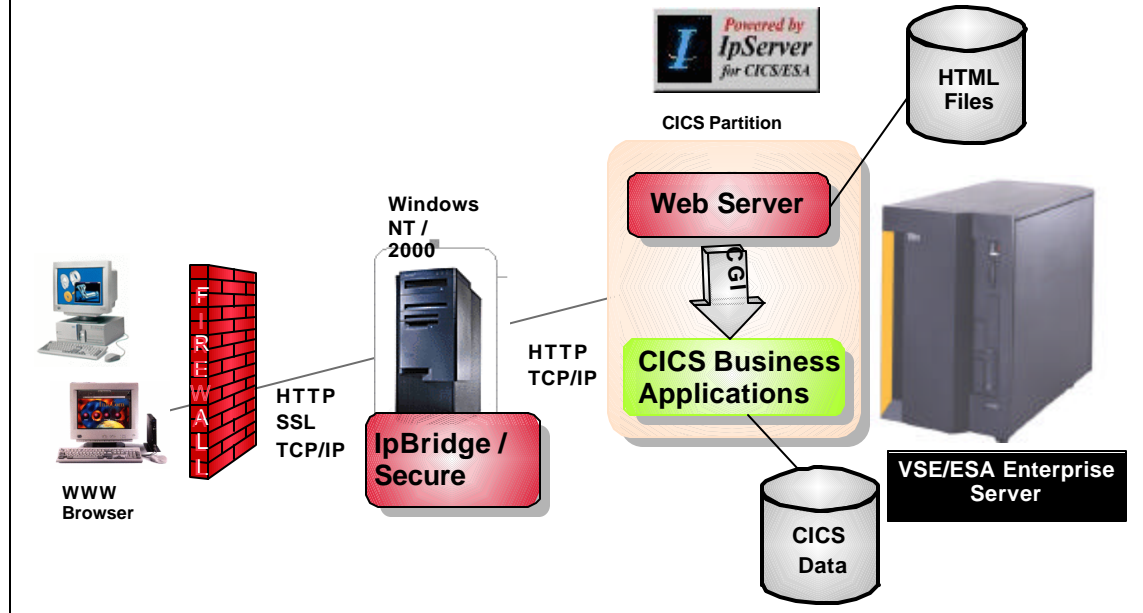
Web/VSE-Host from IntelliWare Systems, Inc.



<http://www.vseesa.com>

IBM @business servers. Technology. Innovation. Magic.

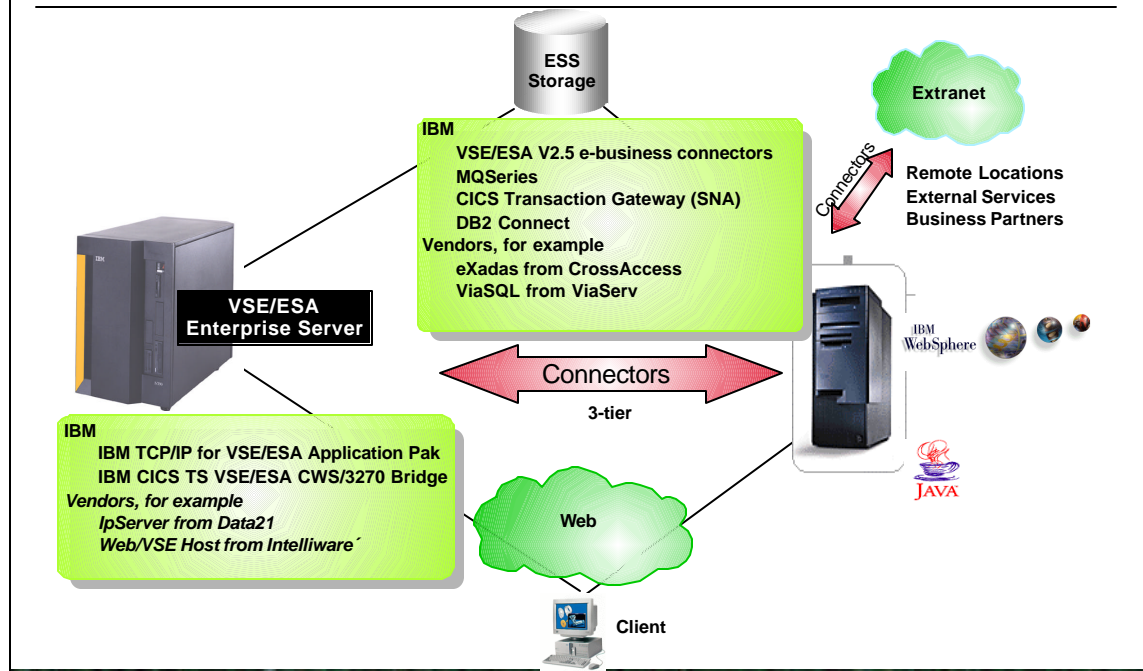
IpServer from Data21, Inc.



<http://www.data21.com>

IBM business servers. Technology. Innovation. Magic.

VSE e-business solutions - Summary



IBM business servers. Technology. Innovation. Magic.



More Information

IBM  business servers. Technology. Innovation. Magic.

More Information on the Web

- **VSE/ESA**
 - <http://www.ibm.com/vse>
- **Application Framework for e-business**
 - <http://www.ibm.com/software/ebusiness/>
- **WebSphere Application Server**
 - <http://www.ibm.com/software/webservers>
- **VisualAge for Java**
 - <http://www.ibm.com/software/ad/vajava/>
- **WebSphere Host on-Demand**
 - <http://www.ibm.com/software/network/hostondemand/>
- **CICS Transaction Gateway**
 - <http://www.ibm.com/software/ts/cics/platforms/internet/>
- **MQSeries Family**
 - <http://www.ibm.com/software/ts/mqseries/>
- **DB2 Family**
 - <http://www.software.ibm.com/data/db2/>

IBM  business servers. Technology. Innovation. Magic.

More information on the Web

- **Cross Access, Inc.**
 - <http://www.crossaccess.com>
- **Data21, Inc.**
 - <http://www.data21.com>
- **Intelliware Systems, Inc.**
 - <http://www.vseesa.com>
- **ViaServ, Inc.**
 - <http://www.viaserv.com>

IBM  business servers. Technology. Innovation. Magic.

© Copyright IBM Corporation 2000

Related Redbooks

- **TCP/IP in General**
 - TCP/IP Tutorial and Technical Overview - GG24-3376
- **TCP/IP for VSE/ESA**
 - The native TCP/IP Solution for VSE - SG24-2041
 - Getting Started with TCP/IP for VSE/ESA - SG24-5626
 - VSE as a Webserver - SG24-2040
- **e-business and VSE/ESA**
 - e-business solutions for VSE/ESA - SG24-5662
- **WebSphere Application Server**
 - Introduction to WebSphere Application Server - SC09-4430
 - Developing an e-business Application for the WebSphere Application Server-SG24-5423
 - WebSphere Application Servers: Standard and Advanced Editions - SG24-5460



IBM  business servers. Technology. Innovation. Magic.

© Copyright IBM Corporation 2000

Related Redbooks



● VisualAge for Java

- VisualAge for Java Enterprise Version 2: Data Access Beans - Servlets - CICS Connector - SG24-5265
- Connecting the Enterprise to the Internet with MQSeries and VisualAge for Java - SG24-2144
- IBM WebSphere and VisualAge for Java Database Integration with DB2, Oracle, and SQL Server - SG24571

● CICS related

- Revealed! Architecting Web Access to CICS - SG24-5466
- External Presentation Interface (EPI): New VSE/ESA Support for CICS - SG24-2038
- Revealed! CICS Transaction Gateway with more CICS Clients unmasked - SG24-5277

● Host on-Demand

- IBM SecureWay Host on-Demand Enterprise Communications in the Era of Network Computing - SG24-2149,

IBM @business servers. Technology. Innovation. Magic.

After 35 Years Providing Cost/Effective Solutions to IBM Customers the World Over, VSE Doesn't Get Older - It Gets Better. Now, following the IBM Application Framework for e-business, *you can be as competitive as you want to be!*



IBM @business servers. Technology. Innovation. Magic.