

Domino/WebSphere Integration



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Three vectors of integration



- **Market Integration**
 - *Collaborative Commerce*
- **Framework Integration**
 - *The IBM WebSphere e-business Platform*
- **Technical Integration**
 - *The Collaborative Commerce Toolkit*



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Market Integration:
*The Platform for
Collaborative Commerce*

Why People Are Important to e-Commerce

The lost opportunities...

"Several studies have indicated that between 33 and 66 percent of customers bail out of transactions before they are completed."

New York Times, June 2000

"10 percent of abandoned shopping carts are salvageable if better customer services was provided. This ... adds about \$1.6 billion to the e-commerce market ... by offering assistance to potential buyers."

Giga, April 2000

Apply to B2B...

"68% of eMarketplace sites have drawn more than 100 active buyers, but only 36% of eMarketplaces are closing more than 100 sales per month. "

Forrester, April 2000

Why People Are Important to e-Commerce

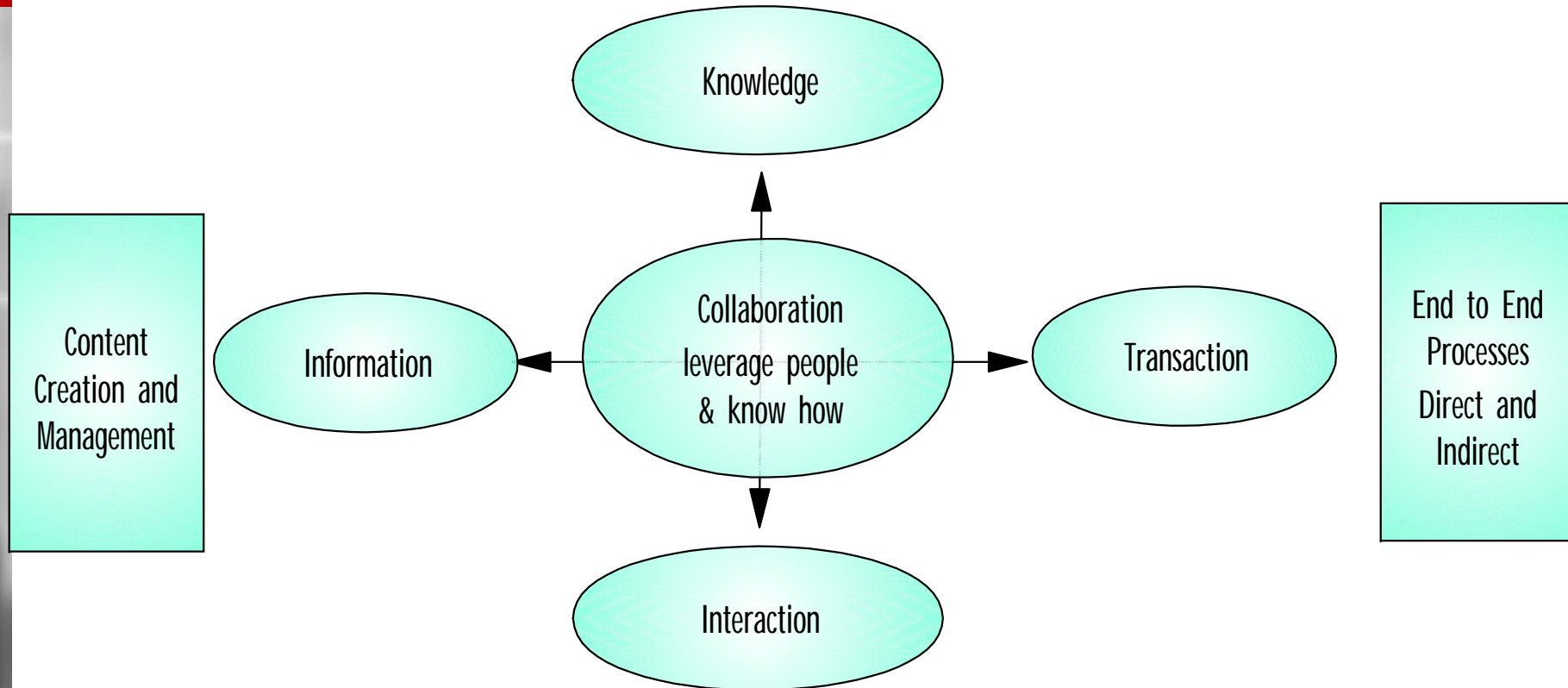
Trust and Relationship are key to driving revenue

Forrester projects that online business trade will hit \$2.7 trillion by 2004 with 53% of trade transacted through eMarketplace

However, 72% (of companies surveyed) are currently too apprehensive to buy more than indirect materials through them. In the automotive industry, for instance, two-thirds of material purchases are highly engineered customized direct materials that OEMs only buy from suppliers they know and trust.

**Forrester, eMarketplaces Need
Coordination Services, 3/2000**

Collaborative Commerce





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Collaborative Commerce

Bringing People Together

Information and
Knowledge

- ▶ Awareness of People on the Network
- ▶ Real Time Conversation Between People
- ▶ Virtual Workspaces to Solve Problems Together
- ▶ Structured Workflow to Route Information to Experts
- ▶ eLearning to Enable the Value Chain

Community

Business
Center

Business
Transactions

Collaborative Commerce Product Portfolio

Information and
Knowledge

Lotus

Domino Workflow

Lotus

.domino
Application Server

Lotus

LearningSpace

Lotus

QuickPlace

Lotus

Domino.Doc

Business Center

Community

Lotus **Sametime**[™]

WebSphere

Business Transactions

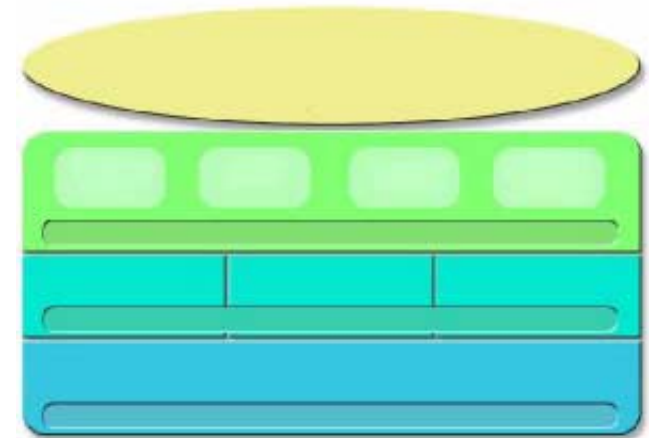
Electrolux Supply Chain Integration

- World's largest supplier of home and outdoor appliances, building everything from weed eaters to washing machines
- Needed to build a supply-chain management solution to cut costs and improve efficiency by connecting a variety of disparate systems and streamlining operations between thousands of global partners
- Combined WebSphere/Domino solution allows suppliers and carriers to collaborate, share massive amounts of data, and conduct secure transactions via the Web
- Enables Electrolux to "deliver on time, in less time."





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Framework Integration:
*The IBM WebSphere
e-business Platform*



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Custom Applications
Partners, ISVs, Customers

e-commerce Collaborative Commerce Enhanced Host/Web XML Marketplace
APPLICATION ACCELERATORS

Development Presentation Deployment
FOUNDATION EXTENSIONS

Web Application Serving and Integration
FOUNDATION

- Differentiate your e-business to win in your marketplace
- Grow your e-business to capitalize on market opportunities
- Transform your business into an e-business



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Custom Applications
Partners, ISVs, Customers

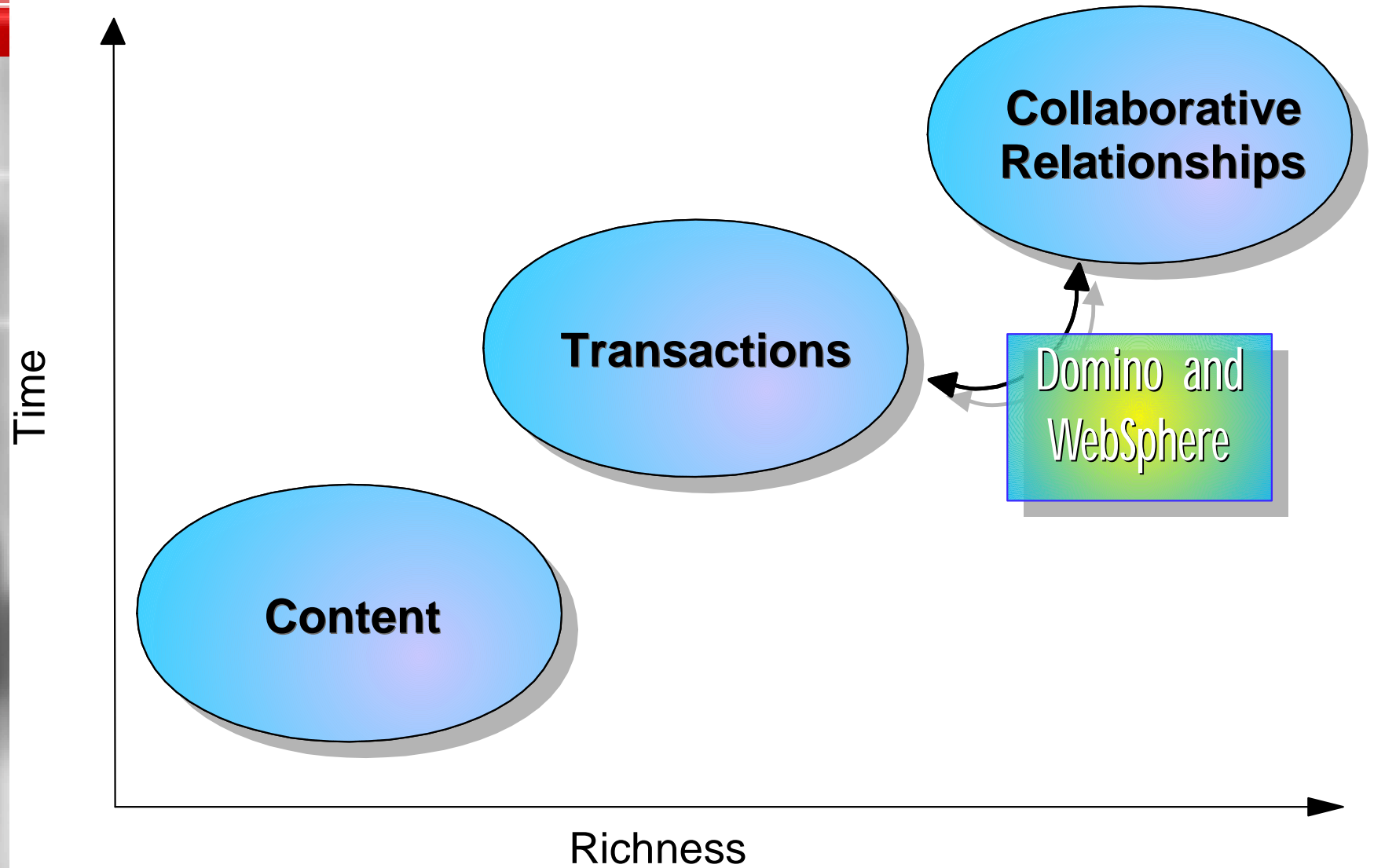
WebSphere Commerce Suite	Lotus Domino	MQ Series Workflow	WebSphere B2B Integrator
APPLICATION ACCELERATORS			

Development	Presentation	Deployment
FOUNDATION EXTENSIONS		

Web Application Serving and Integration
FOUNDATION

- Differentiate your e-business to win in your marketplace
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The Evolution of e-commerce



Domino and WebSphere Product Bundle

The Collaborative Commerce Platform

- **WebSphere Advanced Edition (single CPU version)**
 - Enterprise Java application server
- **WebSphere Studio Professional Edition**
 - Integrated development environment for Web applications
- **Domino Application Server**
 - Collaborative Web application platform
- **Domino Designer**
 - Integrated development environment for collaborative applications
- **Domino Extranet CAL**
 - Unlimited server license for Web access to Domino for non-employees

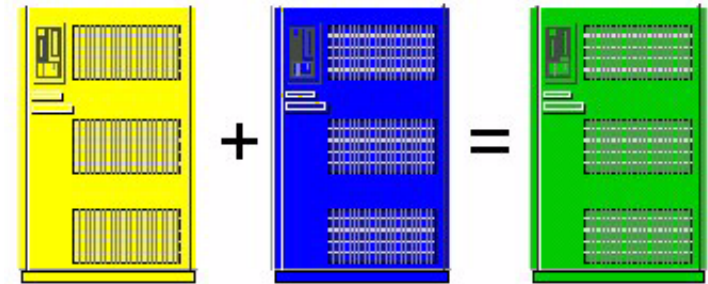
Domino and WebSphere "Getting Started" Services

The Fast Path to Collaborative Commerce

- **Four days of on-site consulting services**
 - Single purchase for fast start on solutions
- **Setup and configuration of WebSphere and Domino on a Microsoft Windows NT server**
 - The tool set for Collaborative Commerce
- **Demonstration of the included application examples**
 - Design and code resource for fast development
- **Skills transfer related to setup and configuration**
 - Knowledge and experience to shorten learning curve

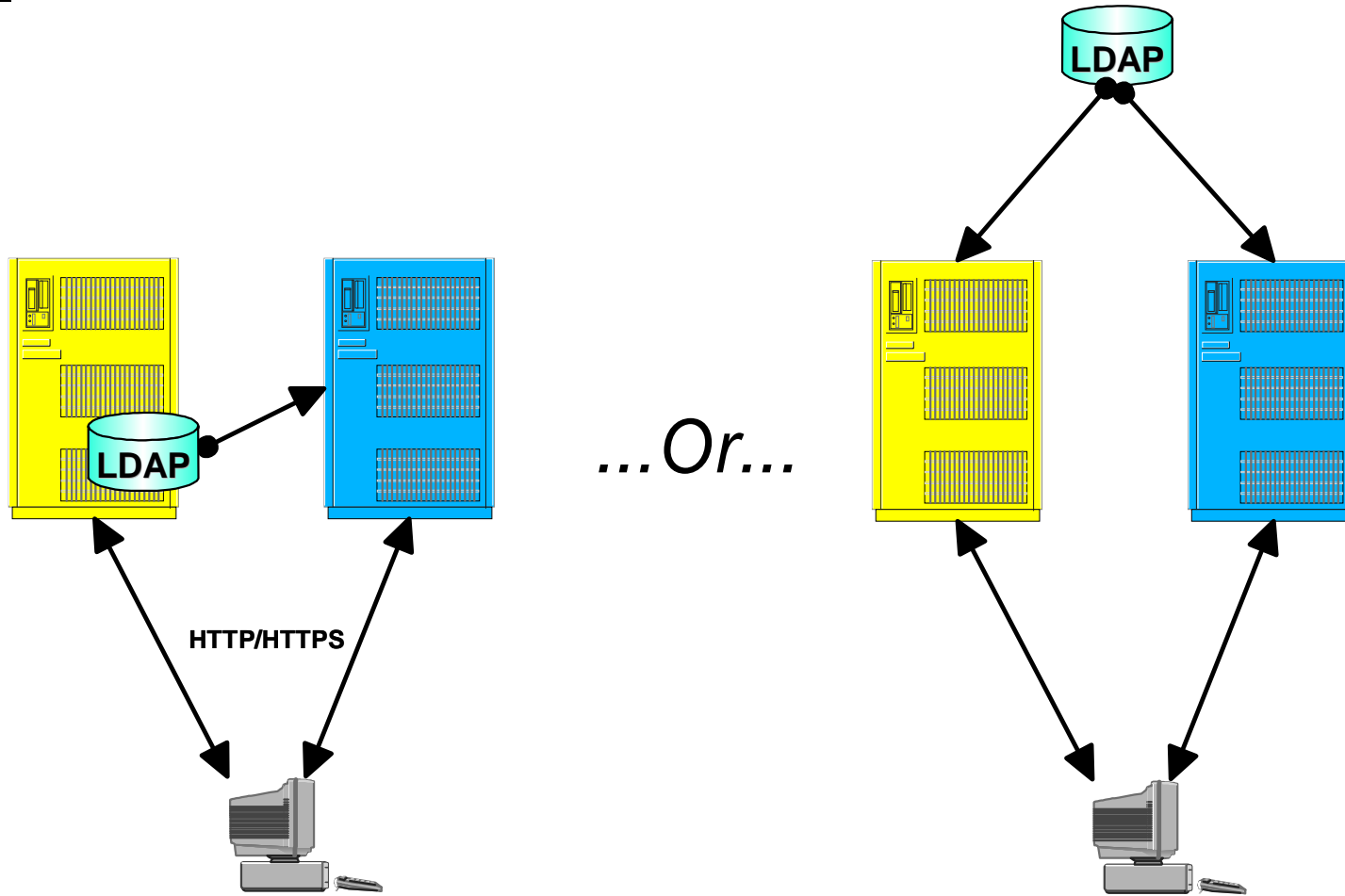


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Technical Integration:
*The Toolkit for
Collaborative Commerce*

LDAP Integration



...Or...

Domino as LDAP

3rd Party LDAP

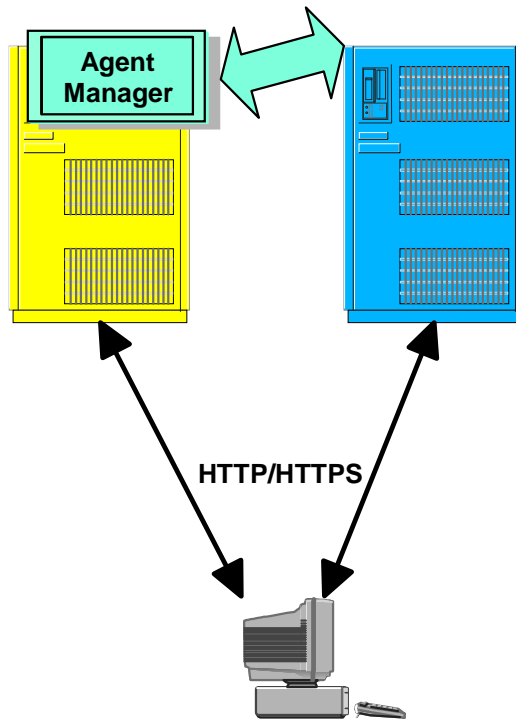
Java Access to Domino User Identity

- Via Local Domino Java classes
 - Server authority
 - `NotesFactory.createSession()`
- Via Local Domino Java or CORBA classes
 - User authority
 - `NotesFactory.createSession(host, username, password)`

New features

- **Common Cookie for Single Sign-On (SSO)**
 - New multi-server option for session authentication
 - New SSO configuration document
 - WebSphere secret key is encrypted with Domino public key
 - Requires WebSphere in secure mode, WebSphere LTPA
 - Domino can provide LDAP repository for user definitions, passwords, certificates
- **New Java API options for authenticated invocation**
 - Shared sessions and calls carry user's authenticated identity
 - Requires SSO setup as above

Java Integration



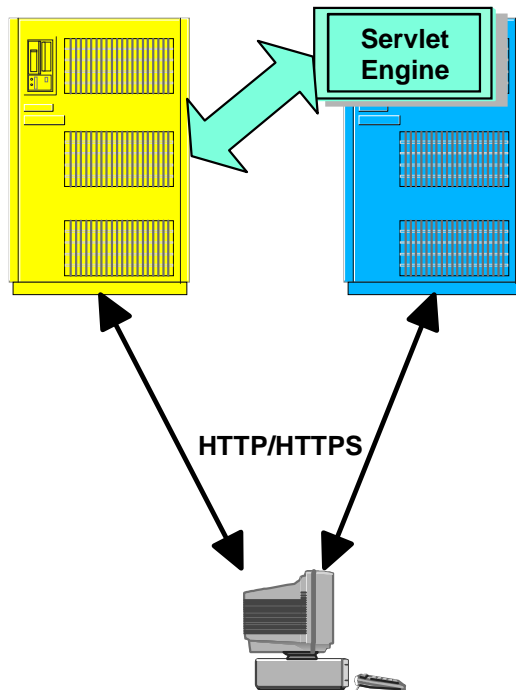
Agents:

- Access to Lotus object model and collaborative services
- Written in LotusScript (BASIC) or Java
- Full access to Domino services
- Loaded in memory each run
- Honors all Domino security including roles

Java Tools:

- Full Java API to object model
- Support for imported or in-place Java code
- View, outline, action, text editor applets
- Java Lotus Connectors
- Java XML Parser
- Java XSL Stylesheet Processor

Servlet Engine Integration



Servlets:

- Standard Server-based Java Program
- Successor to CGI and NSAPI/ISAPI Programs
- Stays resident in memory
- Can load on HTTP startup
- Accesses HTTP parameters, session state and cookies

Java Servlets

Java servlet support:	Domino Servlet Manager
Servlet URL path:	/sv
Class path:	domino/servlets
Servlet file extensions:	esp;jsp;orb
Session state tracking:	Enabled
Idle session time-out:	30 minutes
Maximum active sessions:	1024
Session persistence:	Disabled

Next Features (proposed)

- **JSPs**

- Java Server Pages (JSPs) are a server-side scripting framework for the Web
- Dynamic page generation, separates HTML authoring from coding function

- **JSP Support for LotusScript**

- Phase 1: JSPs hosted in WebSphere have access to LotusScript classes and methods
- Phase 2: Domino supports JSPs in LotusScript

- **LotusScript**

- Becomes pervasive programming model within the WebSphere family of offerings
- Offers a BASIC programming model to complement or substitute for Java
 - Opens WebSphere to LotusScript and Visual BASIC (Windows) developers
- Enterprise Solutions Builder (ESB) technology leveraged to deliver LotusScript with or without Domino

EJB Integration

- **Enterprise Java Beans (EJBs)**

- A competitor to MTS
- A specification for enterprise transactional applications based on java

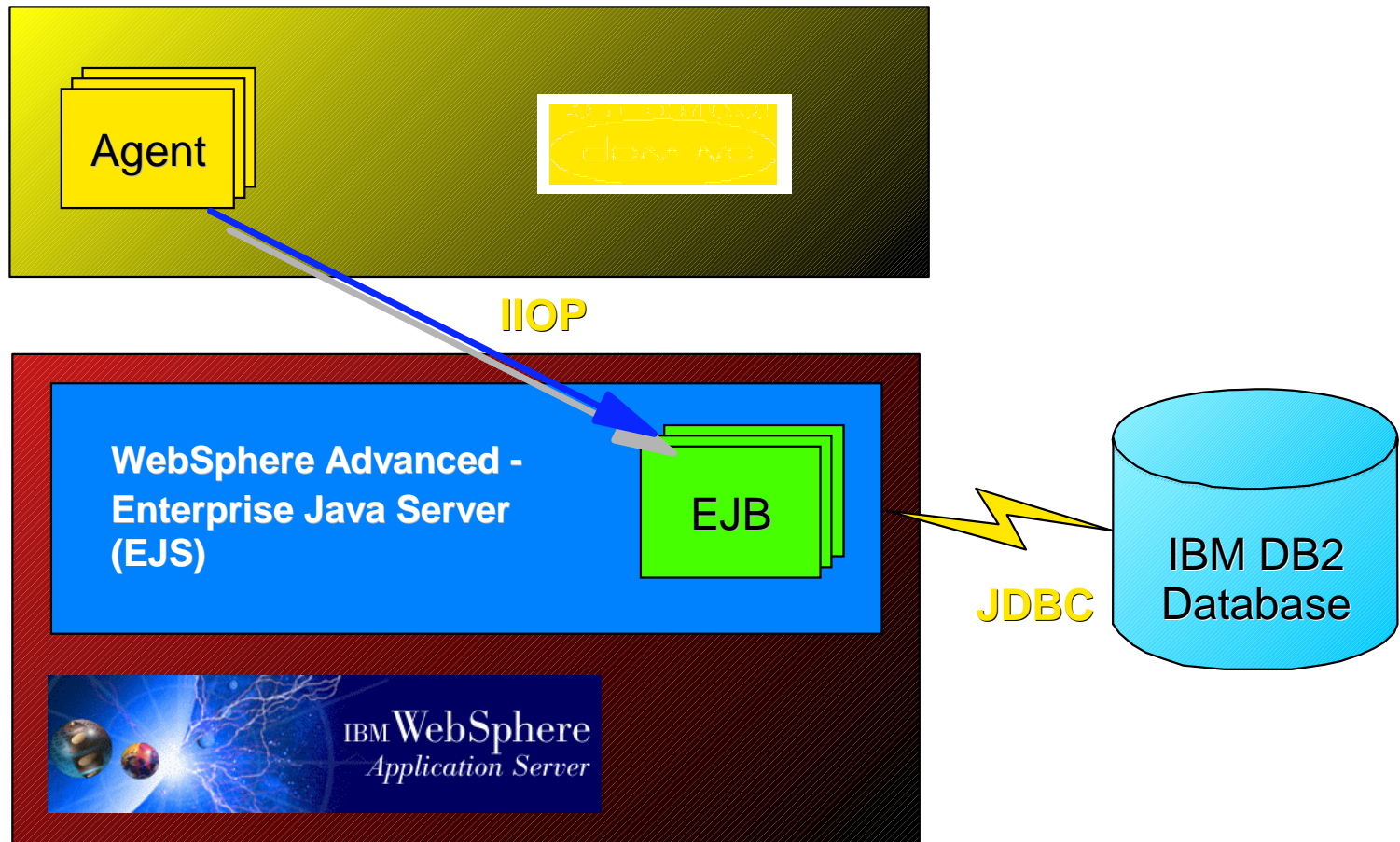
- **Domino calling EJBs**

- Invoke EJB logic from a Domino Java Agent
- Invoke EJB logic indirectly through a servlet or JSP

- **EJBs calling Domino**

- Java Objects (local)
- CORBA Objects (remote)
- JDBC

Accessing WebSphere EJB via Domino Agent



Additional Resources

- **lotus.com/websphere**

- White Paper: Developing Enterprise Applications With Lotus Domino and IBM WebSphere Application Servers
- Redbook: Domino and WebSphere Together
- Domino WebSphere Demo
- Case studies
- News and updates

- **www.ibm.com/redbooks**

- Connecting Domino to Enterprise Using Java
- WebSphere Application Servers: Standard and Advanced Editions

- **www.ibm.com/websphere/developer**

- WebSphere Developer Domain (DD)

- **www.ibm.com/webservers**

- WebSphere Platform for e-business

Thank You!



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