



IBM SOA Summit



* Informations valorisées et SOA,
le couple gagnant.



IBM SOA*
Summit



TA92 SOA: Une architecture jusqu'au poste de travail

Vincent Perrin
EMEA Lotus Technical Sales





At the quest of a new Rich Client Platform ?
Extend the SOA beyond the Data Center

Lotus Expeditor

Architecture

Samples

... a service?

A **repeatable business task** – e.g.,
check customer credit;
open new account

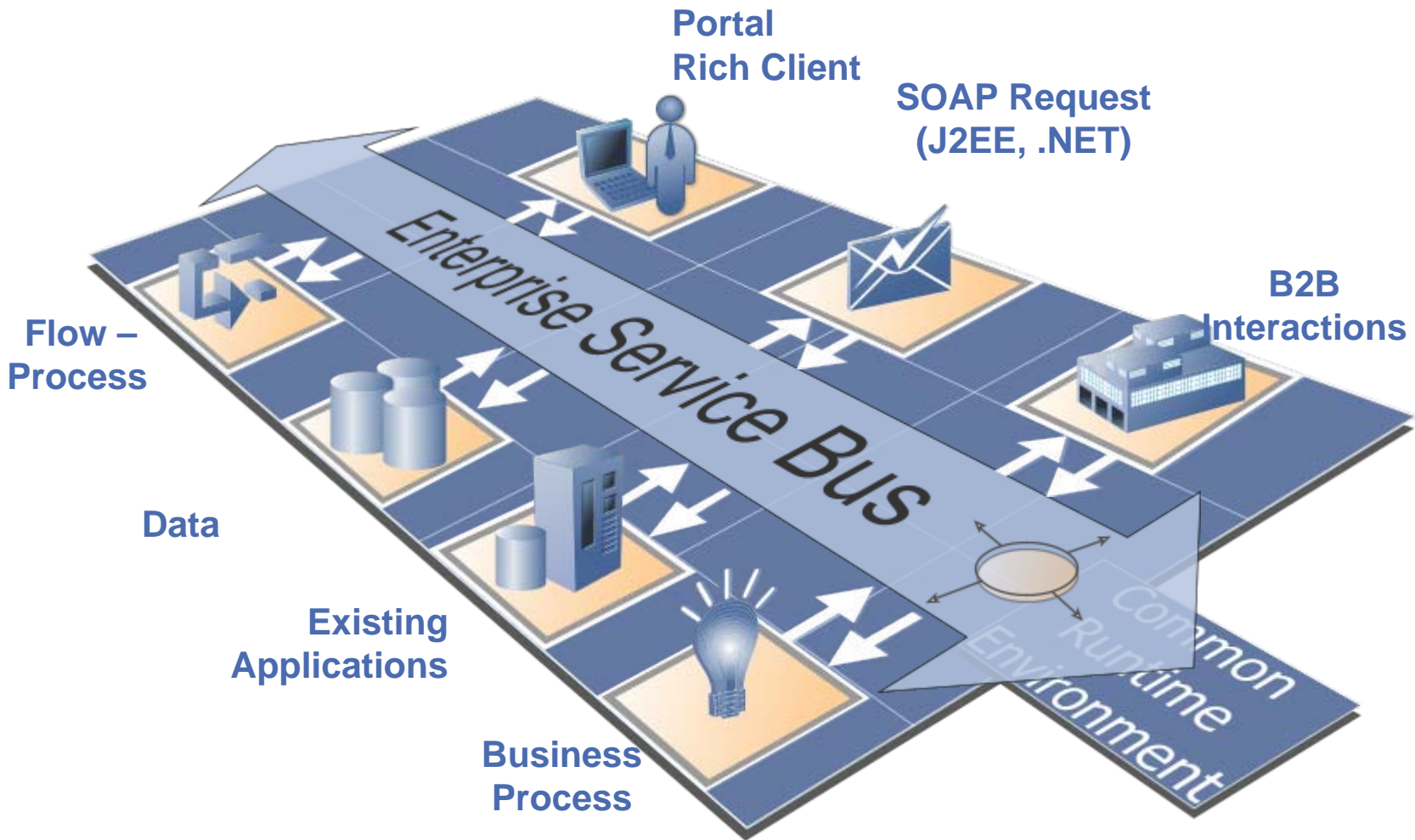


... service oriented architecture (SOA)?

An IT **architectural style** that supports
integrating your
business as linked
services

"SOA impacts every aspect of IT and business."

Gartner



“Through 2007, an enterprise portal will be the first major application of SOA concepts for more than 50 percent of enterprises (0.6 probability).”

Analytical source: Gene Phifer, Gartner Research;
Publication Date: 12 October 2005/ID Number: G00132930 Gartner
10/12/05



Customer Reasons for shift to Rich Clients

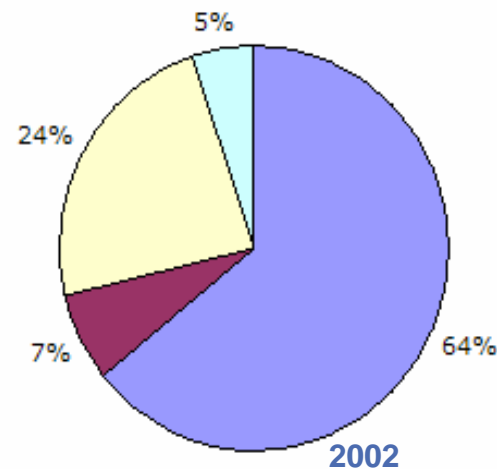
- Better (faster and consistent) response time on the Web based UI
- "Richer" UI than available in a Browser
- Ability to integrate existing "Client based" applications into their web applications
- Local business process execution (enabling mobility if needed)

Gartner

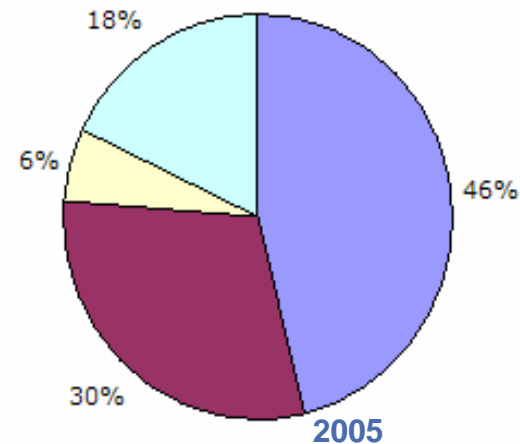
"...Growing trend back from browser-based thin clients to something in the middle – richer, smart clients..."

GIGA

48% of future enterprise desktops deployed will be rich clients...



■ DHTML
■ 2nd Generation Desktop Rich Client
■ 1st generation client/server
■ Browser Rich Client



Source: Giga: Return to the Rich Clients

“Good things” we learned from the past

- **Insulation from the native Operating System**
 - The **browser** is a device which allows a web page to be displayed (and executed...) independently from the underlying Operating System
 - The browser provides an **execution shell**

- **Role-based interaction**
 - Most browser-based applications deliver content based on the user profile
 - A “**portal**” is very good in Identification, Authorization and Authentication

- **Role-based aggregation**
 - Most modern browser interface provide content coming from aggregating different sources
 - A “**portal**” is very good in Aggregating information

- **Zero Management**
 - The last version of an application is always delivered...
 - ... the **browser** “cache” plays a nice role

- **Zero-footprint**
 - The browser **itself** is not “zero footprint”...
 - ... but the browser-applications are !



- **Establish a “Client-side Container” that**
 - ✓ Insulates from the Operating System
 - ✓ Provides added-value services
 - ✓ Defines a framework onto which to provide applications
 - ✓ Rich desktop user experience and platform independence

- **High-performance extensible platform**
 - ✓ Client-side processing and caching
 - ✓ More responsive user experience
 - ✓ Lower server loads
 - ✓ Local data access
 - ✓ Intermittently-connected mode

- **Provide 360° aggregation and integration**
 - Both with the server
 - ... but also with local, native-client applications
 - ... and with the “Internet” world !

- **... But with a “web-like” manageability model**
 - ✓ To avoid the high cost of deployment and management
 - ✓ Central server-based application provisioning and policy



■ **Topology**

- Target device(s) (desktop, mobile device, or both)
- Device capabilities (processor speed, memory, form factor)
- Connectivity (always, intermittent, never or rarely)
- Network capabilities (speed, cost, reliability)

■ **Interaction**

- Web or portlet user interface
- Rich client application (GUI) user interface
- Service-only (i.e. no user interface aka “headless”)

■ **Business logic**

- Online vs. offline operation
- Distribution across tiers
- Reusability across applications (and devices)





- **Persistence**
 - Online vs. offline operation
 - Local data organization and access
 - Local data protection (if any)
 - Synchronization and conflict resolution
 - Amount and frequency of data distribution
 - Configuration

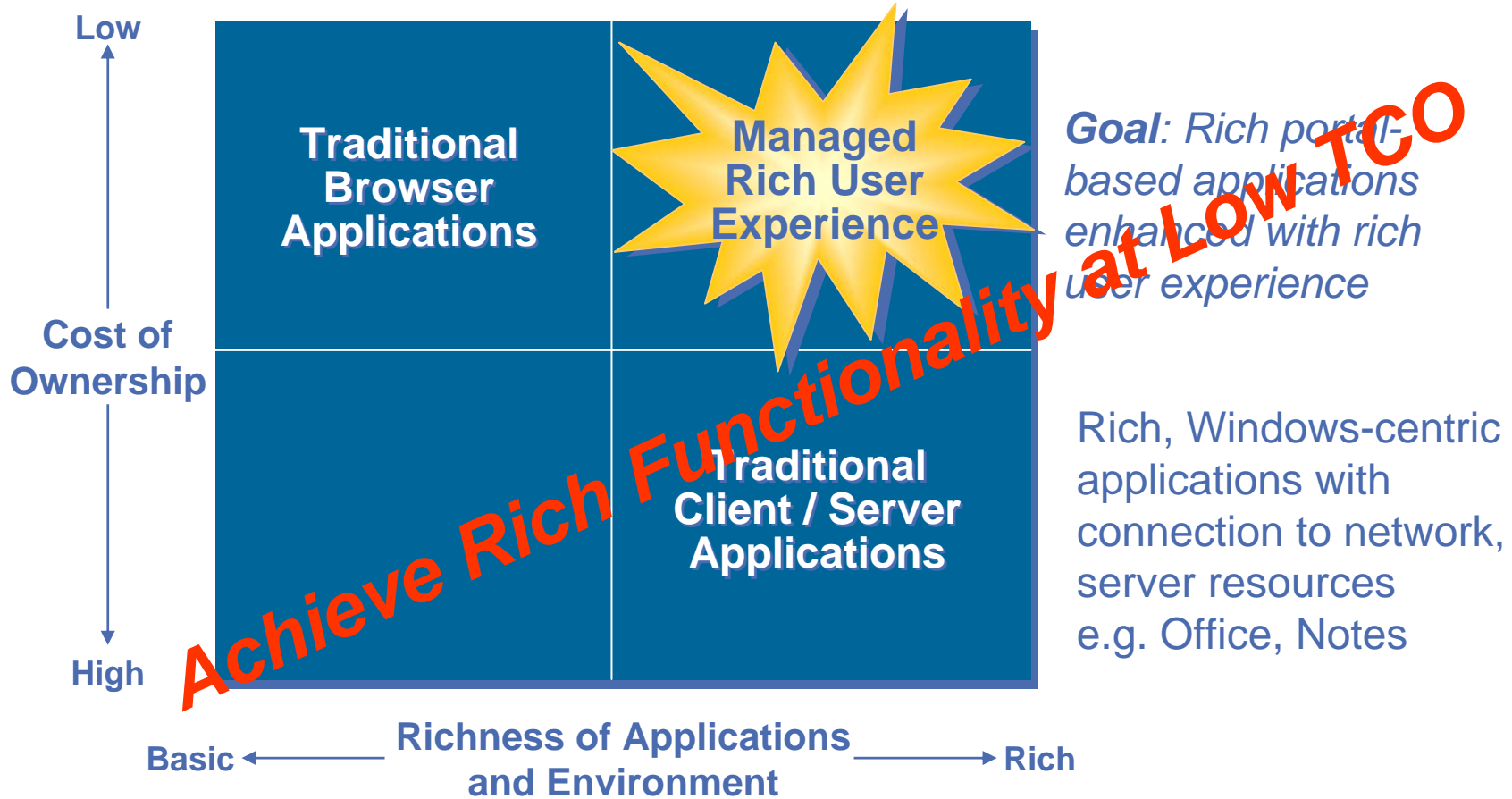
- **Messaging**
 - Online vs. offline operation
 - Security
 - Synchronous vs. asynchronous messaging
 - Transactional, event-driven, web services
 - Configuration

- **Management**
 - Componentization and distribution
 - Data formats

- **Serviceability**



We took the challenge !



At the quest of a new Rich Client Platform ?
Extend the SOA beyond the Data Center

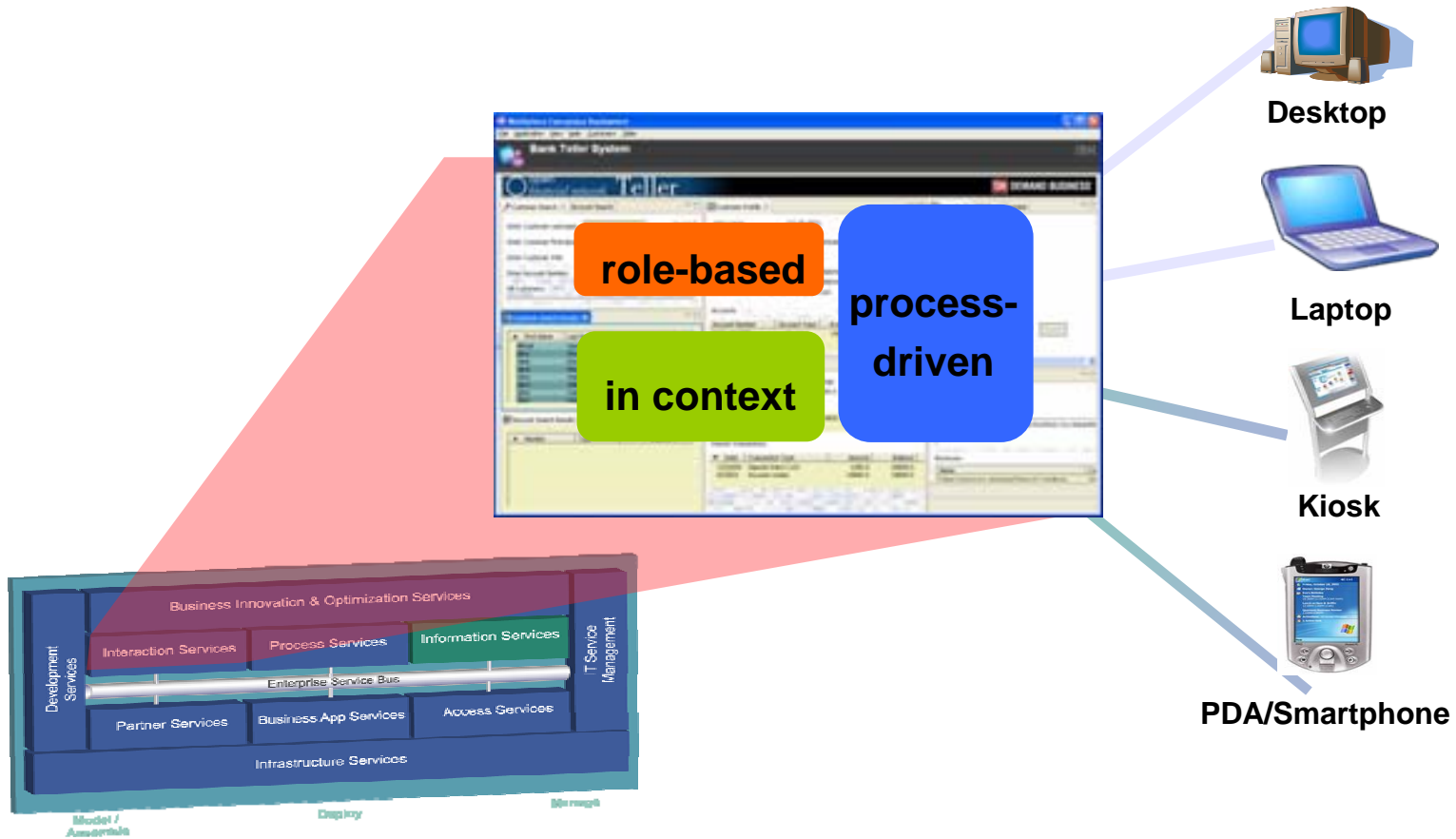


Lotus Expeditor

Architecture

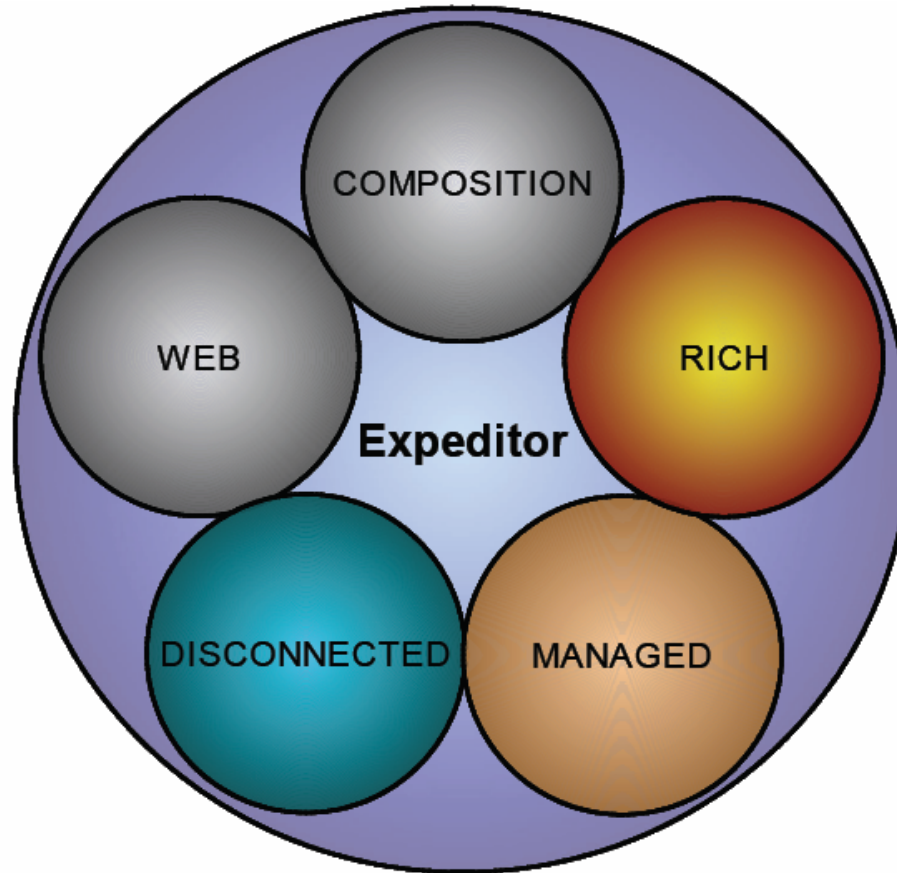
Samples

A Server Managed Client platform that extends SOA apps to desktops, laptops, kiosks and mobile devices



Increases responsiveness and improves end user productivity by accessing composite applications regardless of network connectivity





“Extending SOA beyond the data center to People, Places, and Things”



Enables web-based applications to become part of desktop

- **Support all full featured web content**
 - HTML + CSS + DHTML + JavaScript
 - Ajax (JWL, DoJo, Custom, Etc.)

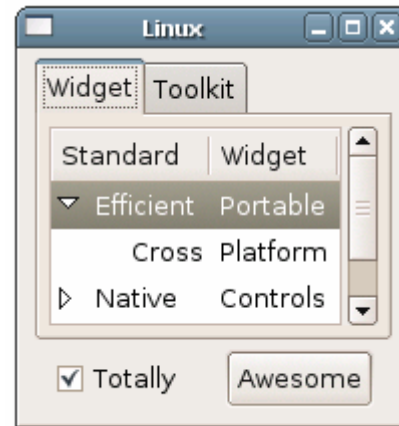
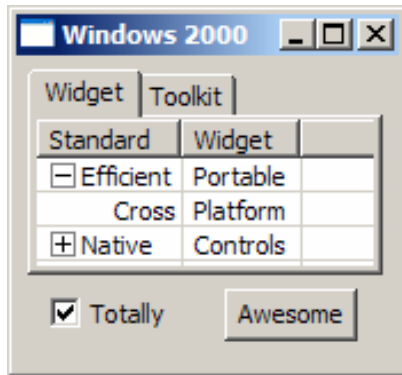
- **Support Extensions**
 - “Common” Browser Plugins (e.g. Flash, PDF, etc.)
 - Applets
 - ActiveX Controls (Win2K, WinXP only)

- **Provide Lockdown Browser**
 - URL management
 - Access Control



Compelling user experience across platforms

- **Enable Platform native look and feel ...**



- **Enable Drag and Drop**
- **Enable Keyboard integration**
- **Enable 2D and Vector Graphics**
- **Enable Hardware Device Integration**
- **Enable protection from OS Level Changes**

Lotus Expeditor: Composition

Seamless Integration of client applications

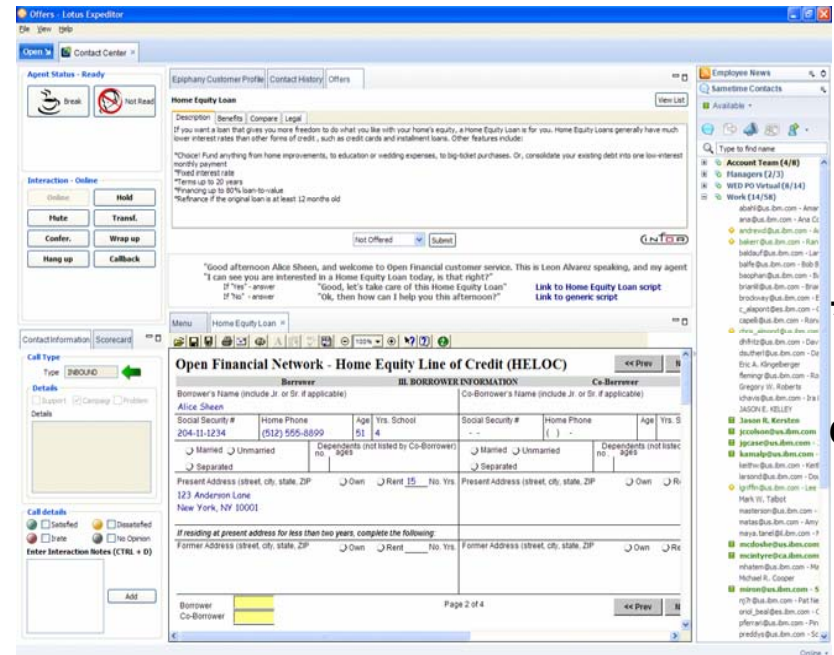
- Enable “Mashups” across pre-existing and new application types

- Swing, AWT, Native, .NET, Web, Portlet, Forms,
- RCP, Flash/FLEX, Text Terminal, Etc.
- Local data integration between apps
- Local event integration between apps
- Create new views on existing apps

- Enable complete Desktop mgmt

- Optimize real estate
- Control overall look and feel
- Custom branding
- Configurable access

Expeditor



Portlets

Sametime

Workplace Forms



- **Enable better responsiveness**
 - Minimal round trip to server(s)
- **Improve end to end scalability**
 - Locally hosted business logic
- **Enable transparent server interaction when server becomes available**
 - Outgoing - Complete transactions when connected
 - Incoming - Refresh/Update local content when connected
- **Enable mobility**
 - “Full” disconnected for long periods of time (i.e.: on an airplane)



Install, configure and maintain both the platform & the applications

- **Enable flexible points of control**

- One time setup; subsequent lockdown desktop
 - Lockdown browser (URL, Access Control, etc.)
 - Lockdown composite applications
- Dynamic, self managed by end user
- Dynamic centrally managed via server
 - Continue to maintain a lockdown user view of the system
- Combinations of end user and central server managed

- **Enable central visibility**

- Applications
- Configurations
- History, Inventory and Status

- **Enable remote access**

- Administrator scheduled jobs on the client



The same value and services as desktop, enabled on mobile devices

The screenshot displays the 'MobileAdjuster' application running on a desktop browser window. The application interface includes a menu with 'Open' and 'MobileAdjuste...' options. The main content area shows 'JK Insurance' claim information and a bar chart of damage types.

Category	Amount	Percentage
Cosmetic	\$900	43%
Structural	\$350	16%
Mechanical	\$850	39%
Other Dmg	\$50	2%

Below the desktop window, a Nokia mobile device is shown displaying the same application interface, demonstrating the application's portability to mobile devices.

Windows Mobile 5, Symbian

At the quest of a new Rich Client Platform ?
Extend the SOA beyond the Data Center

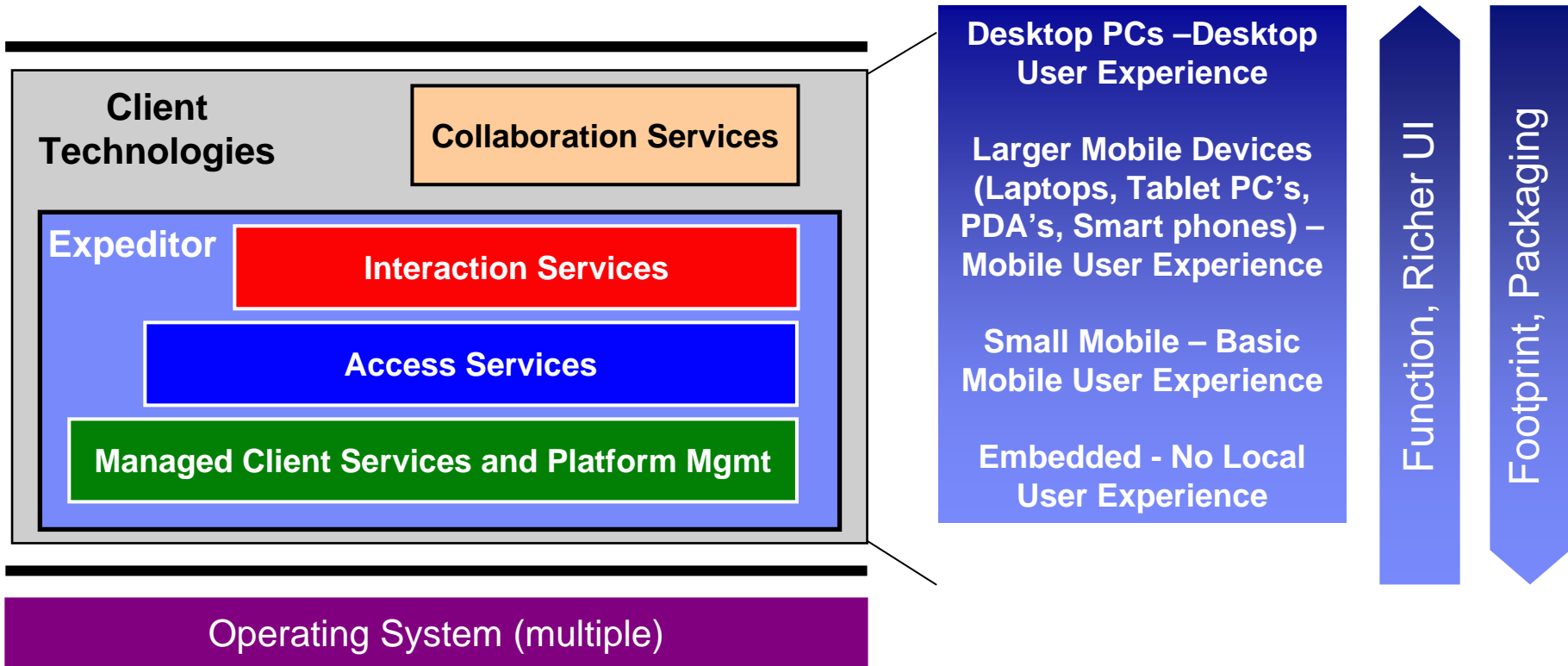
Lotus Expeditor



Architecture

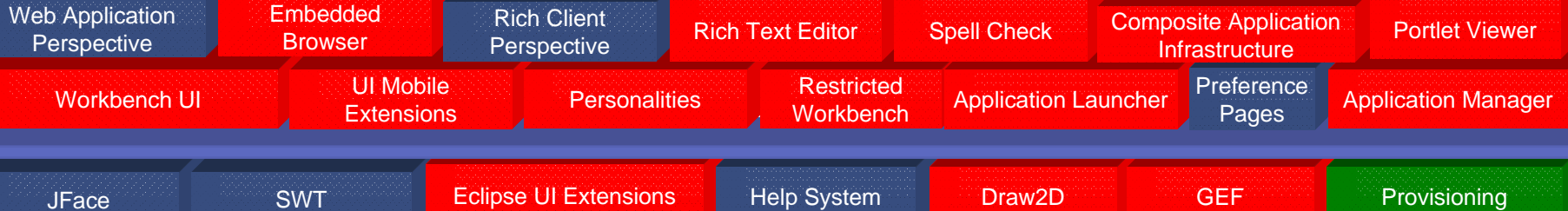
Samples

Foundation for Client Technologies





Enterprise / ISV Applications



Eclipse Core Extension Point Framework (Eclipse 3.2)



OSGi R4

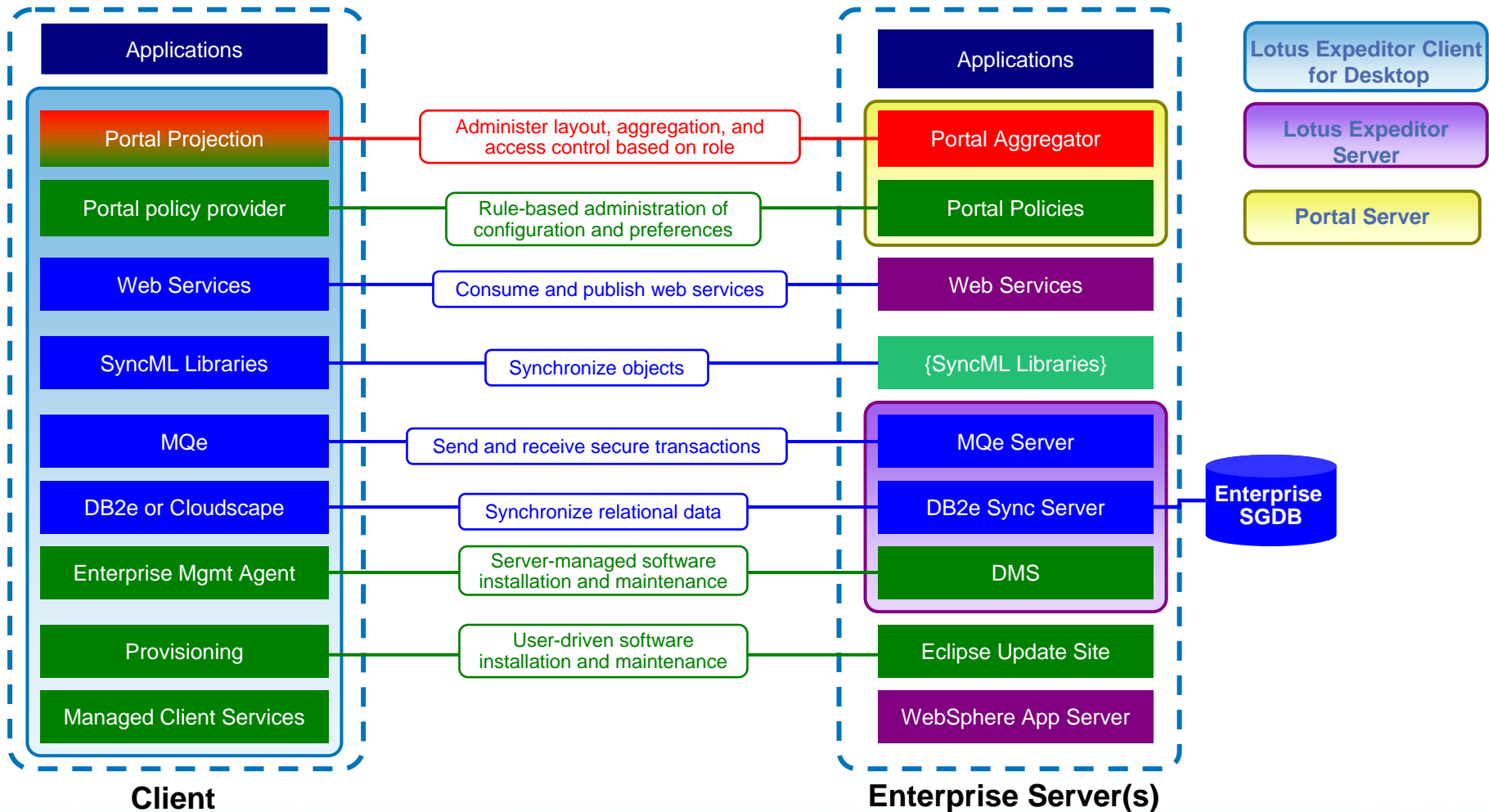
Java Class Library (jclDesktop, Java SE 5.0)

Virtual Machine (IBM J9 Technology for jclDesktop or JavaSE 5.0)





End-to-End Connections with Expeditor and Portal servers



At the quest of a new Rich Client Platform ?
Extend the SOA beyond the Data Center

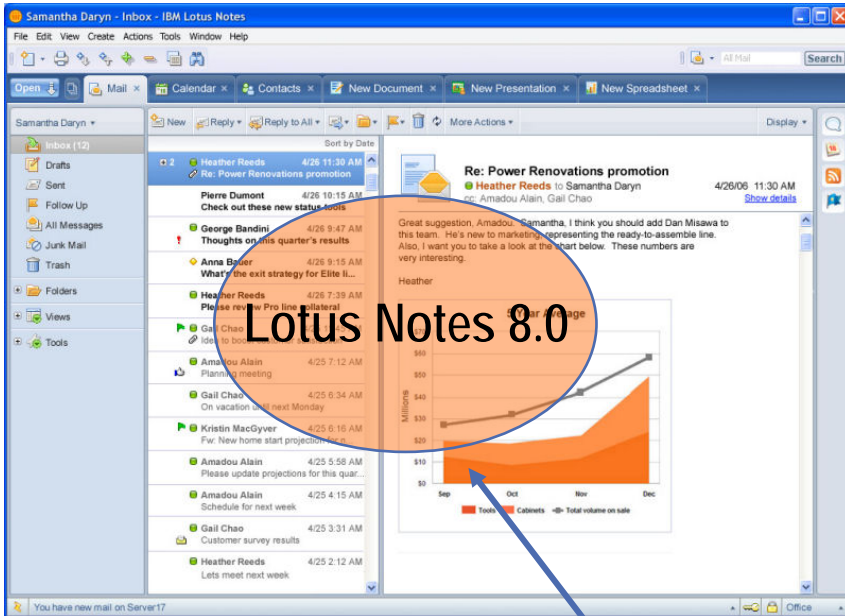
Lotus Expeditor

Architecture



Samples

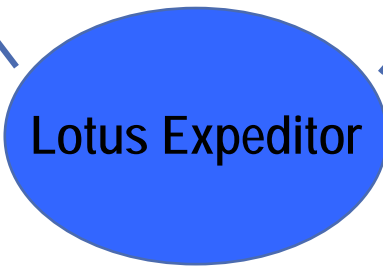
Lotus Expeditor – Core of Lotus Rich Clients



Lotus Notes 8.0



Lotus Sametime 7.5




Credit Card Authorization - Lotus Expeditor

File Tools Help

Launch Application Catalog ITSO Car Rental


Customer Information

Please use either 1234, 4321 or 1111.



Name : Rodriguez, Juan
 Street : 6290 Redbook Street
 City : RTP, 27122, NC
 Phone : +1 919 555 1234
 Email : juanrodr@us.ibm.com
 Card : VI-4321 7654 3030

Select your car size:

Photo	Manufacturer	Model	Rate	Color	Shift
	Toyota	Corolla	49.95	Silver	Automatic
	Opel	Astra	76.89	Silver	Manual

Car Information


Show preferred cars Show all cars

Make	Model	Size	Color	Slot	Rate
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Booking Information





Start date : Amount :
 End date :

Card Information



Transaction Amount Transaction Result

ITSO Weather Channel

Today	Tomorrow	Thursday	Friday
			
Occasional Light Rain	Likely Light Rain	Mostly Clear	
High: 69F High: 63F	High: 66F High: 52F	High: 71F High: 58F	High: 56F High:

Online

Desktop Integration

Java Applications

ActiveX Components



Web Applications

Messages

Search in: All Mail Search for:

IBM United States

Home | Products & services | Support & downloads | My account

Select country / region

Select one

Resources for:

- Home / home office
- Small & medium business
- Large enterprise
- Government
- Education
- Developers
- IBM Business Partners
- Investors
- Journalists

Jobs at IBM

Training

Administrative support

IBM TV ads

ibm.com May sale

Find the technology you need now at special savings through 5/31 only. → Learn more.

Transform medicine

Learn more about Information based medicine solutions from IBM.

Big-time results

See how IBM Express Middleware helps mid-sized companies succeed.

ibm.com May sale: Find the technology you need now at special savings through 5/31 only. Learn more.

Solutions

Solving business problems:

IBM solutions integrate hardware, software and services to meet the challenges of your industry.

Select an industry

News

Corporations hear siren call of Internet telephone service

HTML Portlet Applications

Calendar

Friday 30

2:00

2:30

3:00

3:30

4:00

4:30

5:00

People Finder

Search by:

Name

Search for:

Advanced Search

April 2004

Su Mo Tu We Th Fr Sa

28 29 30 31 1 2 3

4 5 6 7 8 9 10

11 12 13 14 15 16 17

18 19 20 21 22 23 24

25 26 27 28 29 30 1

Today is April 30, 2004

New Message | Reply | Forward | Delete | Folder | Find Related Documents | Print | Properties

Test message 2

Date: Mo, 4/12/04 1:39 PM

From: wps admin <wpsadmin@austin.ibm.com>

To: wpsadmin@austin.ibm.com

Cc:

This is a test

WCI Embedded Browser (IE)

Launcher | Perspective | en_US | Keyboard | 11:13 AM

System Services

Text Terminal Emulator

Java Apps

Sametime window showing a contact list:

- Account Team
- Managers
- WED Dev Team
- WED PO Virtual**
 - abirnbau@us.ibm.com
 - pbergju@us.ibm.com
 - ajerniga@us.ibm.com - Anthony L Jern
 - antony_satyadas@us.ibm.com - Antony
 - bill_kilduff@us.ibm.com - Bill Kilduff/M
 - btaylor1@us.ibm.com - Brent Taylor/Austin/
 - chrisput@us.ibm.com - Christopher M I
 - davemars@us.ibm.com - Dave Marshal
 - dutcher@us.ibm.com - David Dutcher/

IBM Lotus Sametime

Select [Keyboard Icon] Actions

Start window showing Mobile Adjuster application:

Mobile Adjuster [ok]

Home Create Claims View All Cust [Left Arrow] [Right Arrow]

Mobile Adjuster

Stored data:

- 4 customer policies
- 5 total claims
- 0 pending claims
- 9 parts for damage calculation

Refresh status:

Data refreshed successfully

Command

Mobile Adjuster window showing claim details:

Mobile Adjuster [ok]

Home Create Claims View All Cust [Left Arrow] [Right Arrow]

Mobile Adjuster

New Claim Information

Claim ID:	88221116_adj
Status:	Not Submitted
Adjuster:	adjuster1
Customer:	IS89UI12
Date:	2006-10-25
Claim Item:	JK Auto Luxury Sedan 2.5
Loaner Needed:	No
	Yes

Damage calculation:

BM843JK8	No Damage
----------	-----------

Command



Our mission...

Make **more** people...
more productive...
in the **context** of what they
do... **everyday**



 **IBM Lotus Expeditor 6.1**
Accelerate your business with a universal client

IBM LOTUS NOTES 8
Taking collaboration to a whole new level.



 **IBM Lotus Sametime 7.5**
REAL-TIME. RIGHT NOW.



Thank YOU



For more information...

IBM home page www.ibm.com

Lotus software home page www.ibm.com/lotus

Lotus Expeditor <http://www.ibm.com/software/sw-lotus/products/product1.nsf/wdocs/expeditor>

