



# SAP & IBM Lotus Domino - von LEI bis Project “Atlantic” -

**Rainer Vetter**

Global IBM Lotus / SAP Alliance  
IBM Germany

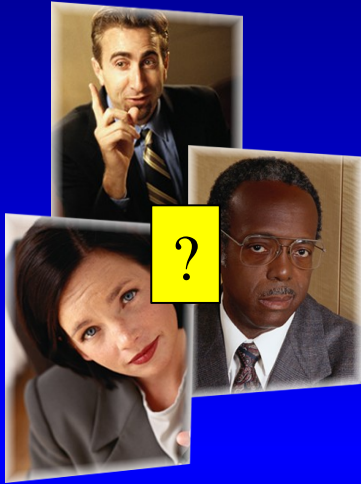
## Agenda

- ▶ Introduction
  - ▶ **Lotus Strategy (short!)**
  - ▶ **More about SAP & IBM Lotus (even shorter ;-)**
  - ▶ **SAP Integration into Lotus Notes – an evolution**
- ▶ Main Part:
  - ▶ **Demo of the current “Atlantic” prototype**
  - ▶ **“Atlantic” Architecture**
- ▶ Q&A



# Executive Challenge: Dealing With This New Era

## Virtual Workforce



privacy? accuracy? security?

## Generational Differences

## Corporate Transparency

# IBM Lotus Collaboration Strategy

Rich Clients



Browser



Portal



Mobile



Content Feeds



Task Specific Applications



Interaction and client services (online or offline)

Collaboration & Content Management



Communications & Social Software



Applications & Integration



Business process

Information

On Premise  
and/or  
Web As A Platform (SaaS)

## *One Client Platform – Multiple Products*



**Lotus Notes**



**Lotus Sametime**



**Lotus Expedito  
(stand-alone)**

**Lotus Expedito**

**Eclipse 3.2 Foundation**



## Composite Application for Support (used IBM internally)

- ▶ Integrates database of customers, their PMRs and probability of becoming a critsit with the...
  - ▶ ....database which holds PMR ids per customer to...
    - ...show historical data via a generated report
      - (e.g. PMRs with the related products that are associated to the specific customer )

- My Support
- CSI - CAPture
- My Crit Sits
- My Premium Customers
- My Profile

Search View FUP History Modify CSI Focus

ICNCC	Customer Name & (GEO)	CSI Odds	Total PMRs	PMR Avg Age (days)	Total APARs
<b>CSI Focus Report - 11/26/07 - [17 Customers]</b>					
0021027738	HSBC HONG KONG (HONG KONG) (APAC) PSP ONLY - THE HONGK (HONG KONG) (APAC)	100%	16	35.8	2
0125904866	PSP ONLY PRICEWATERH (UNITED KINGDOM) (EMEA), PSP ONLY (UNITED KINGDOM) (EMEA)	100%	17	45.1	2
0720710744	ITC INFOTECH INDIA L (INDIA) (APAC)	100%	17	15.6	1
0995623724	PSP ONLY - IBM DEUTS (GERMANY) (EMEA)	100%	17	28.8	1
0997410848	GS - ABB - 848 (SWITZERLAND) (EMEA)	100%	6	75.8	2
0733736744	TATA CONSULTANCY SER (INDIA) (APAC)	95%	17	43.2	1

Photo	Name*
	ABBASHKA@ie.i... 05259.999.066

Group Chat

CAPture Report http://localhost/\_862573A000030904... CSI History

Edit Help

## Customer PMR and OPC Activity Report

Created on: 11/26/2007 05:23:42 PM

Click on the field labels for help.

Step 1 - Select Customer and Div | Step 2 - Select Geo, Report Period, Output | Step 3 - Review Search Criteria and Get Data

**Search Type:** CSI  
**Brand:** Lotus  
**Customer Numbers (ICN or ICNCC):** 0125904866  
**Geography:** ALL  
**Report Activity Between:** 05/26/2007 and 11/26/2007  
**Spreadsheet:** MS Excel

All PMR activity from the last 2 years will be retrieved.  
The resulting spreadsheet will display graphs based on the dates specified for "Rep

Get Data  Get Data in Background Mode

Create Spreadsheet

## Task Worker



- **Sample roles:** payroll administrator, customer service representative, claims processor
- Area expert with defined tasks
- Conducts repetitive, structured transactional work
- Uses single or a few enterprise applications
- User interface of choice: SAP Portal

SAP  
“Power User”

## Information Worker



- **Sample roles:** business manager, sales representative, HR manager, CxO
- Knowledge worker or people manager
- Manages exceptions and coordinates activities & resources
- Aggregates and synthesizes information from many sources
- Spends a large portion of their day dealing with email, meetings, documents

Typical  
Lotus Notes User



## SAP NetWeaver Enables Enterprise SOA – SAP NetWeaver is the Enabling Platform for an Efficient Enterprise SOA

### Composition Platform

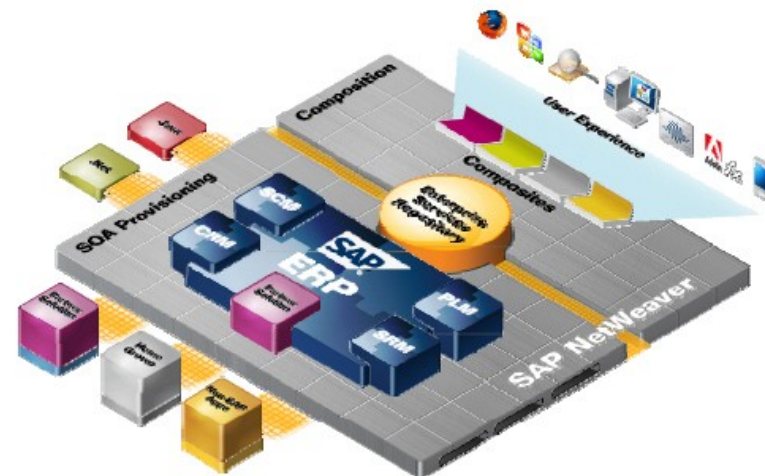
- Integrated composition environment
- Enhanced core processes
- Flexibility for change
- Composite Applications on top
- Leverage innovation at individual pace

### A New User Experience

- Simplified user experience
- Embedded analytics
- Multiple UIs

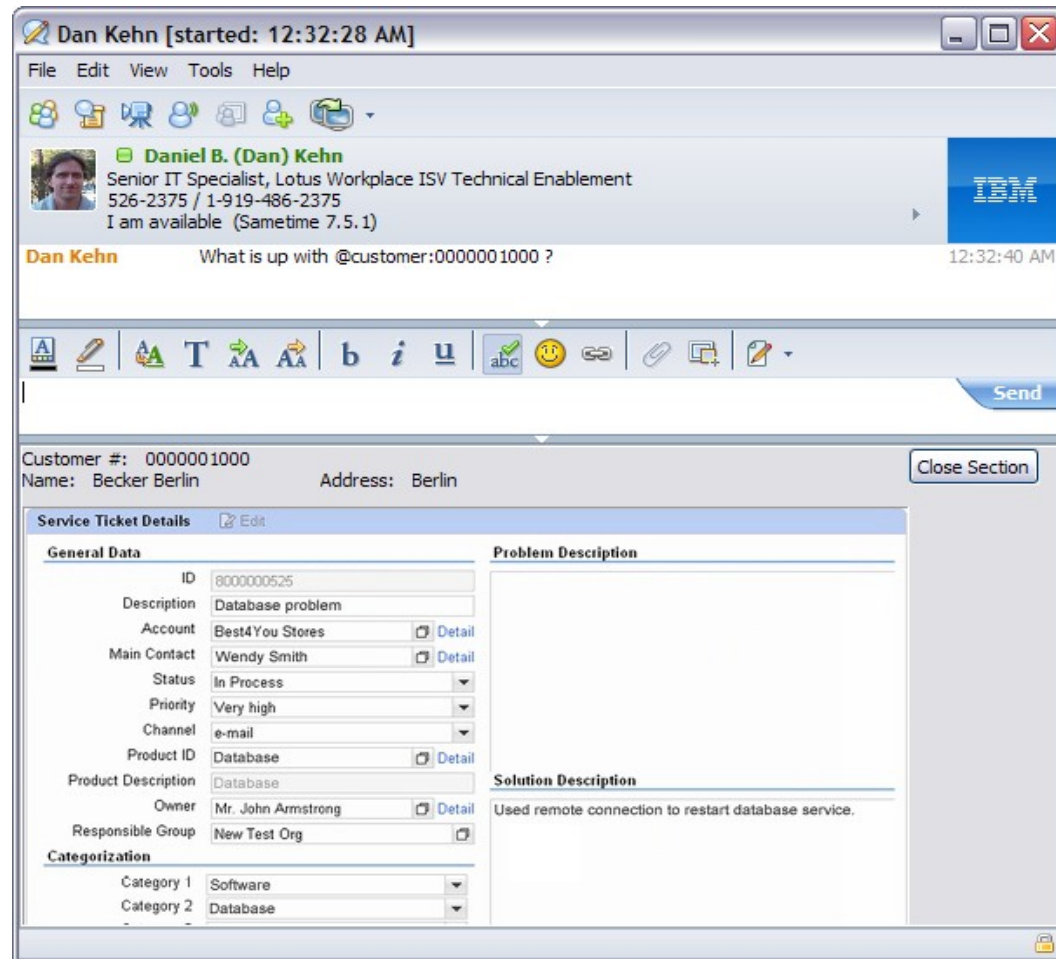
### Provisioning Infrastructure

- Application and Integration Platform
- Powering SAP Business Applications
- Delivering Technology Innovations
- Productized Enterprise Services
- One unified central repository
- Built-in Governance

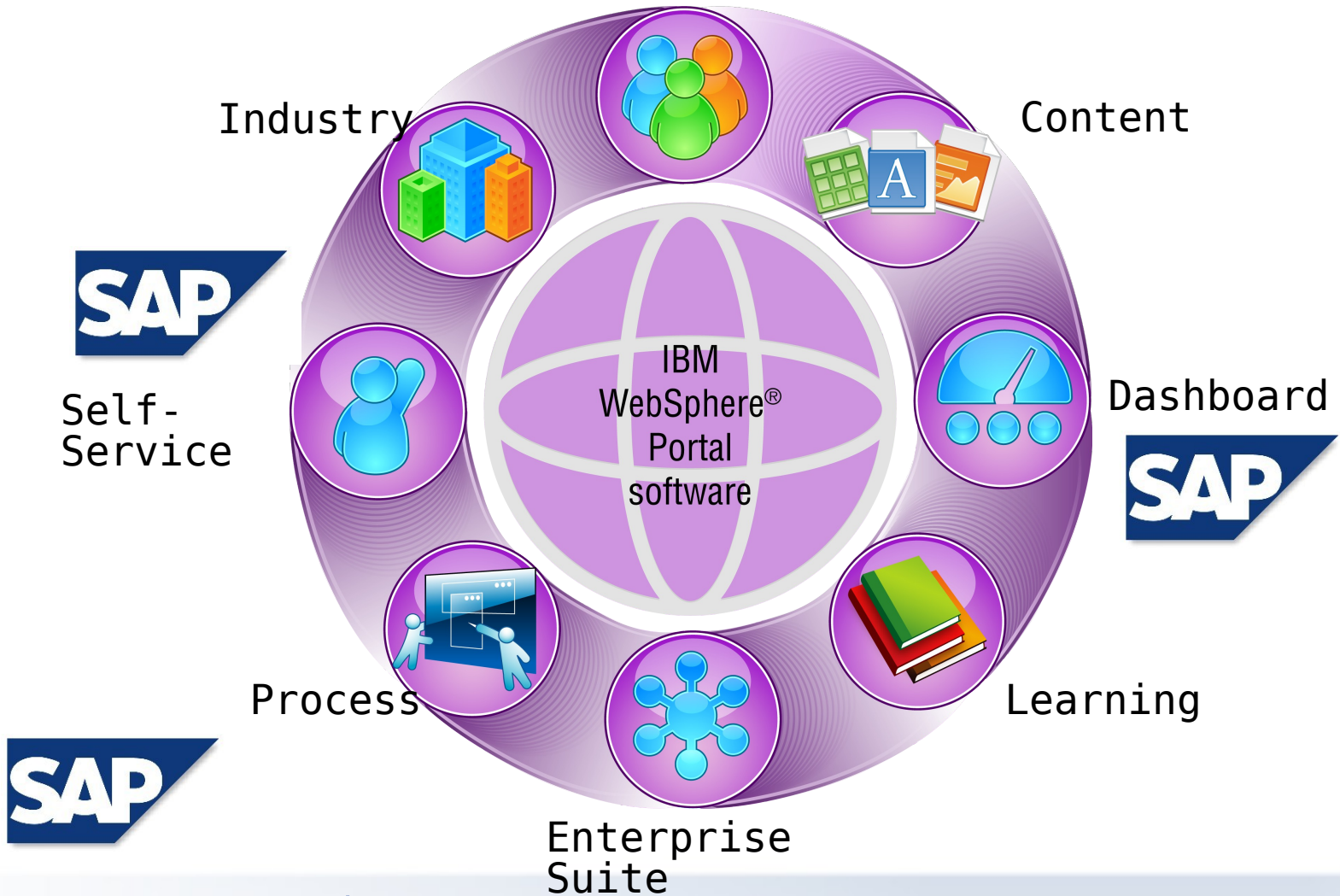


## Sametime and SAP

- ▶ The ISV Enablement Team implemented a prototype :-)
- ▶ Inside Sametime a customer number can be used to embed customer information directly into a ST chat
- ▶ PoC demonstrates the idea of how collaboration tools can be enriched and include contextual informations from Enterprise Systems like SAP



# IBM Accelerators for the WebSphere Portal Collaboration

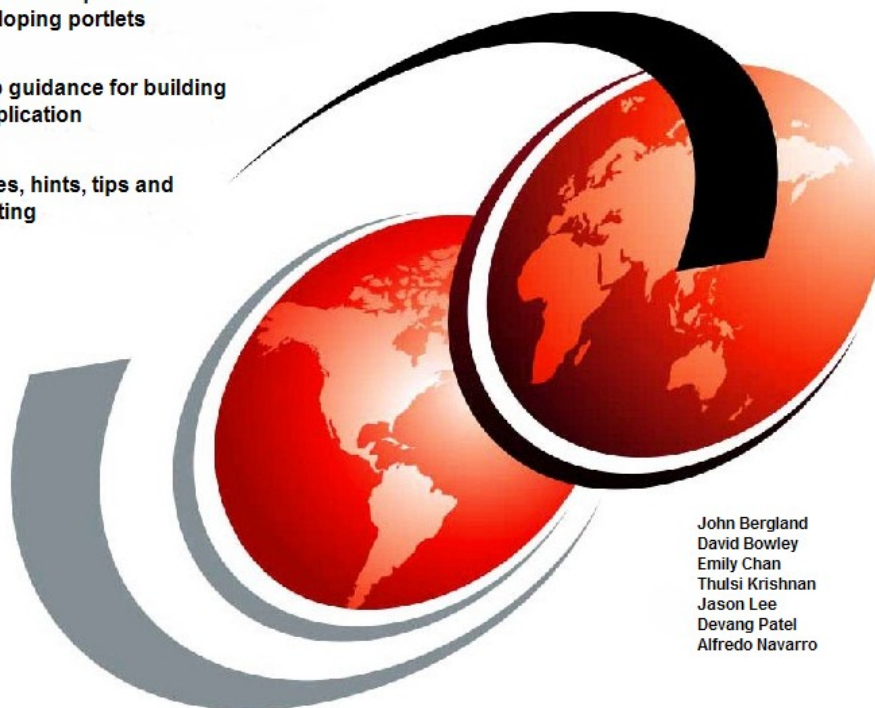


## Portal Application Development Using WebSphere Portlet Factory

Features and techniques for rapidly developing portlets

Step-by-step guidance for building a sample application

Best practices, hints, tips and troubleshooting



John Bergland  
David Bowley  
Emily Chan  
Thulsi Krishnan  
Jason Lee  
Devang Patel  
Alfredo Navarro

# Redbooks

[ibm.com/redbooks](http://ibm.com/redbooks)

### Abstract

WebSphere Portlet Factory is a powerful and flexible tool for rapidly building portlets on top of a service-oriented architecture. Developers are able to quickly and easily leverage their company's core assets, automatically assembling them into custom, high-value portlets.

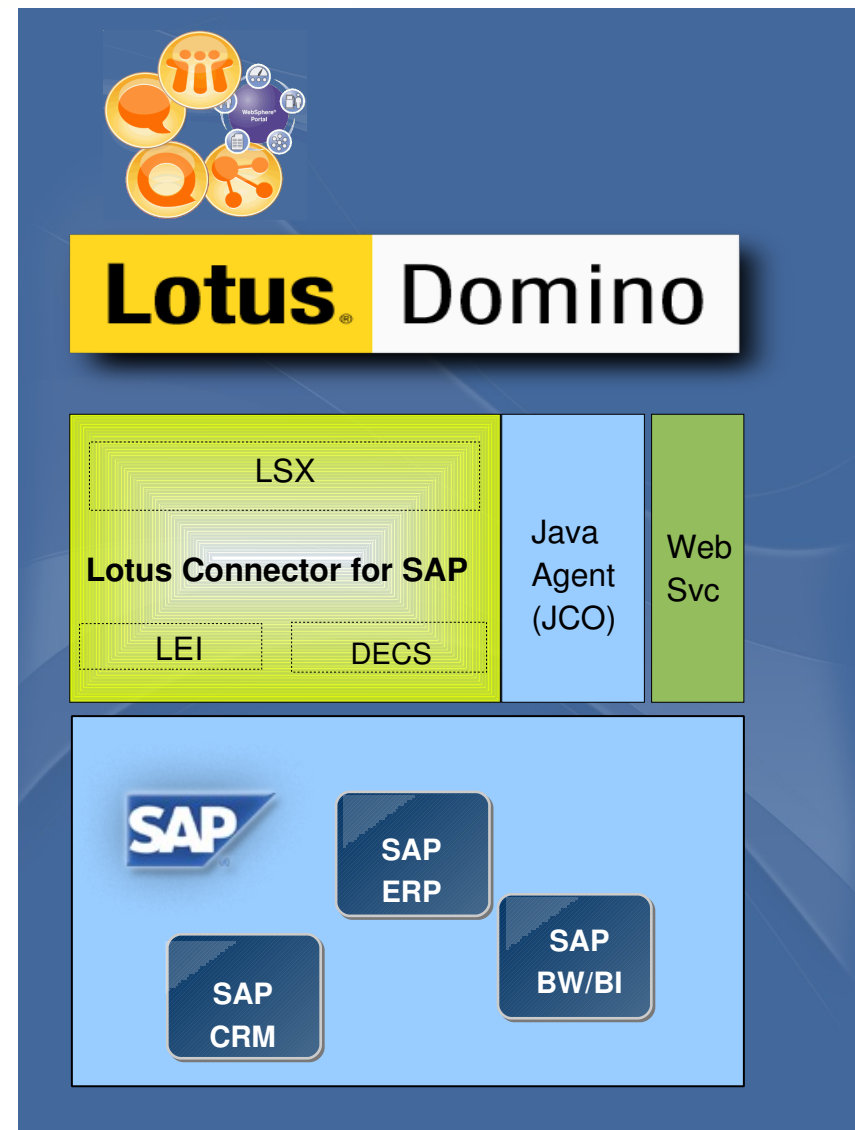
Within this Redbook, we show you specific techniques and a best practices approach for developing portlets using WebSphere Portlet Factory. Using a fictitious company scenario, we discuss how to build a Customer Self Service and Customer Representative application. Within this context, we cover the following topics:

- Installing and configuring the Portlet Factory development Environment,
- How to create and consume data services from SQL, Domino and a Web Service,
- Step by step guidance for creating the portlets and enabling inter-portlet communication,
- Advanced UI design techniques, including the use of AJAX for type ahead functionality and working with the DoJo Builders,
- Enabling the use of Profiling
- Deployment Production Considerations, and
- Troubleshooting and Debugging techniques

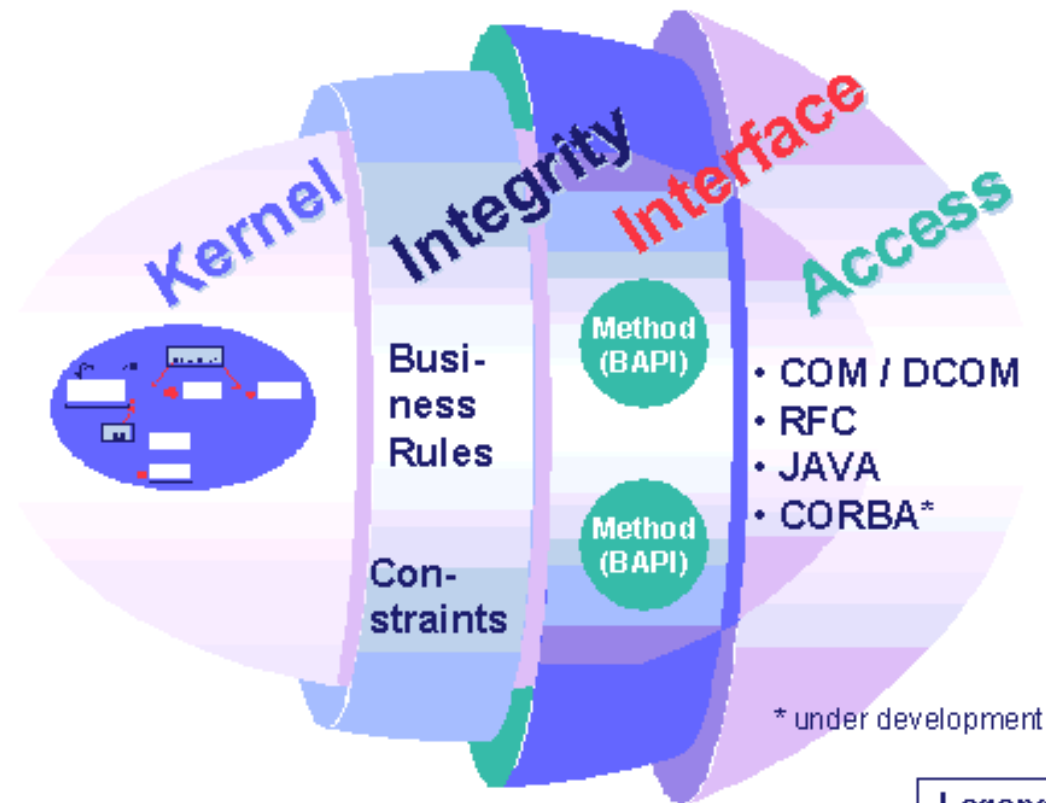
## Generation 1: Middleware

Lotus has been providing integration tools since a long time (> 10 years)

- LEI (Lotus Enterprise Integrator)
  - ▶ Batch tool to “pump” data between sources
- DECS (Domino Enterprise Connection Service)
  - ▶ Real-time integration of enterprise information into Domino applications
- Lotus Connector for SAP
  - ▶ Connector component to access SAP back-ends via LEI, DECS or Lotus Script eXtension

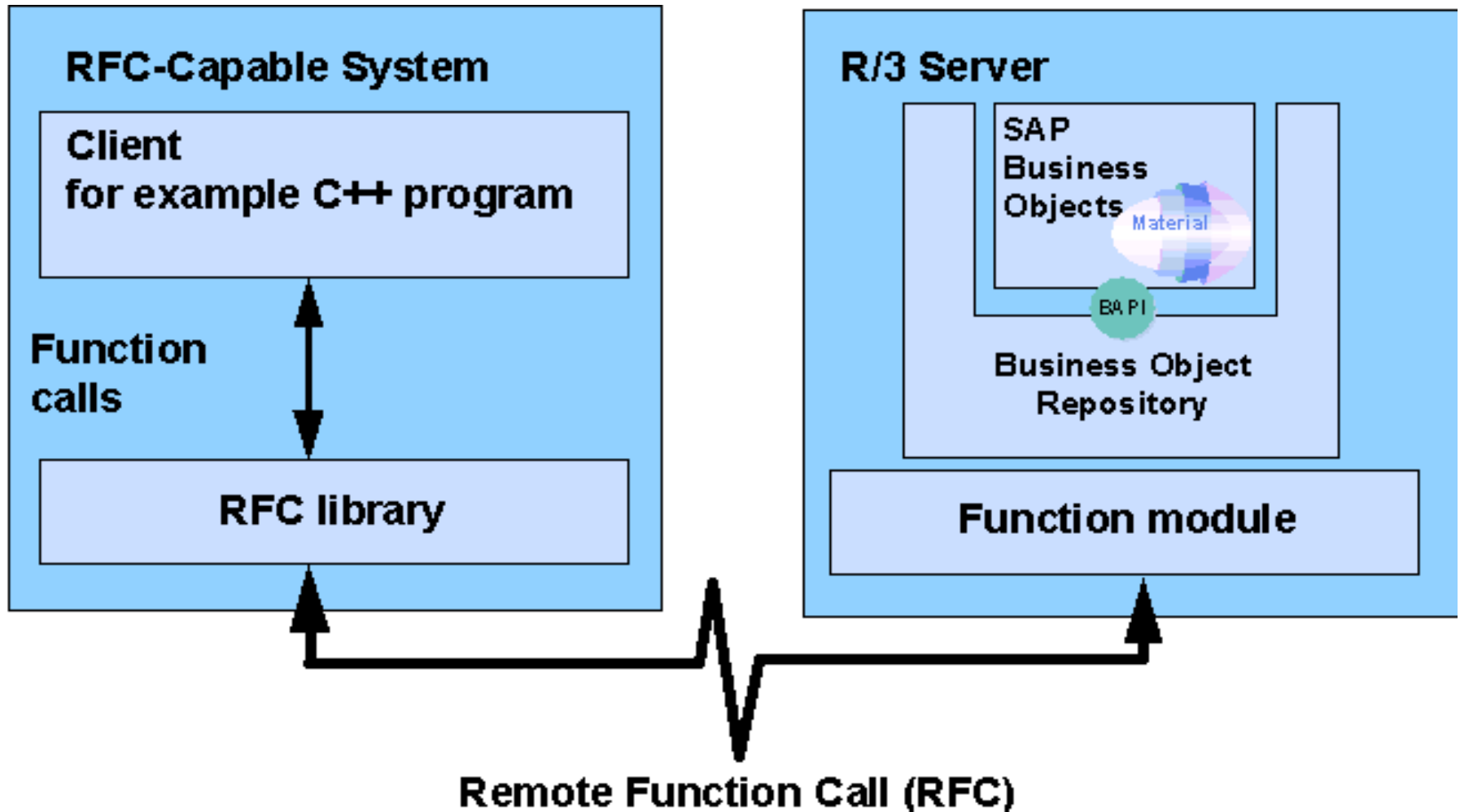


# SAP Interfaces



**Legend:**  
COM/DCOM = Component Object Model /  
Distributed Component Object Model  
RFC = Remote Function Call  
CORBA = Common Object Request Broker  
Architecture

## SAP BAPI Access via RFC



## RFC Environment Variables (Test)

Name	Default Value	
RFC_TRACE	0	
RFC_TRACE_DIR	<working directory>	
RFC_TRACE_DUMP	0	
RFC_MAX_TRACE	8MB	
RFC_DEBUG	0	(SAPGUI must be installed)

## Generation 2: IBM Product

### Lotus Notes Access for SAP Solutions (NaSS)

Available since Lotus Notes Client Ver. 7.0.1

Ships together with 7 pre-built scenarios

#### Base Technology:

Lotus Enterprise Integrator and Domino Enterprise Connection Service extensions for SAP – has been available since 1998

Calls published RFCs and BAPIs in SAP system – available since R/3 3.1

#### More info:

[Home page](#)

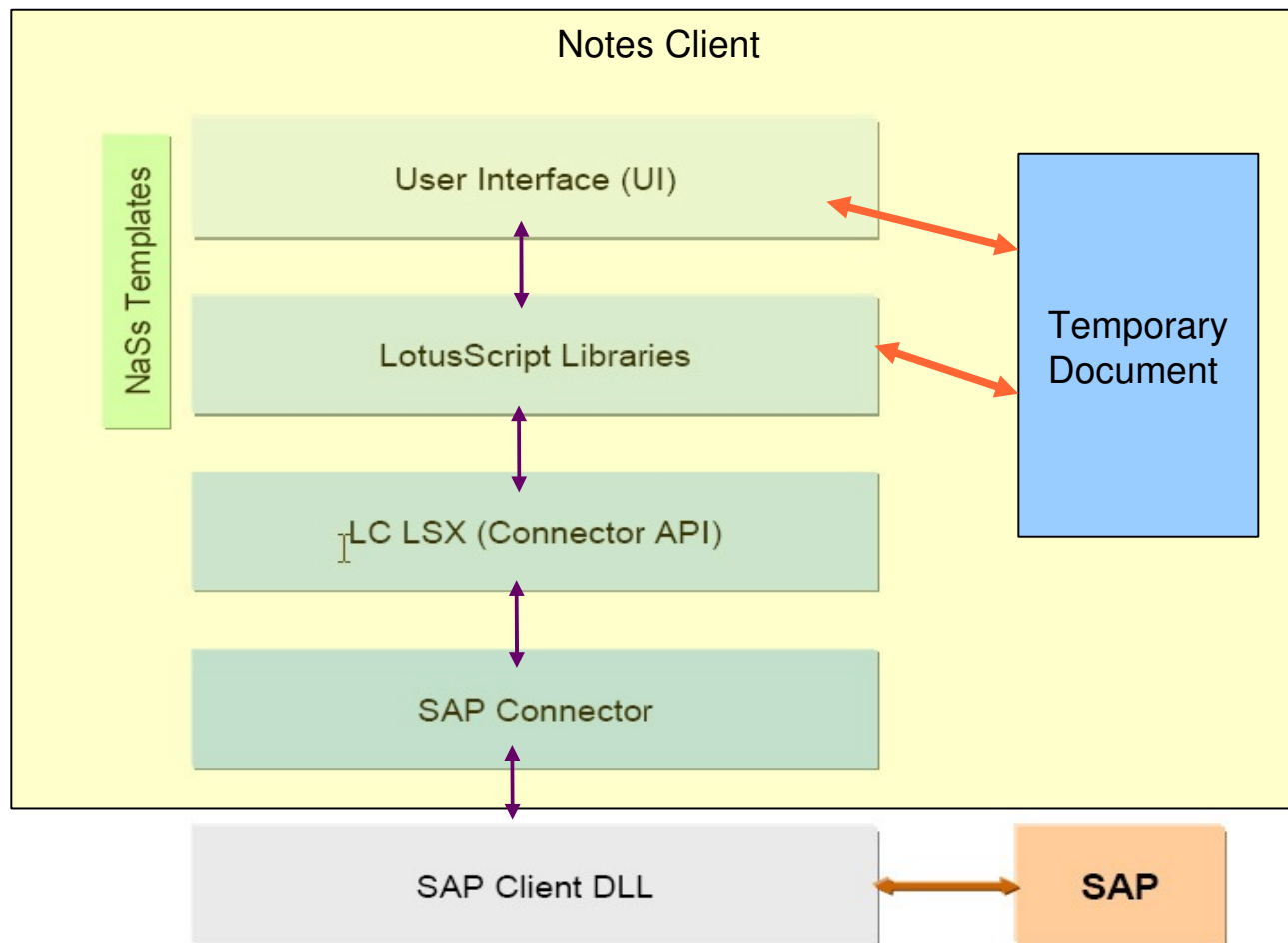
[developerWorks](#)

[RedPaper](#)

[External Technical article](#)



## NaSs Architecture – Building Blocks



## Features

- ▶ 7 pre-built scenarios
  - ▶ Vacation / Leave Request
  - ▶ Time Reporting
  - ▶ SAP Report Generation
  - ▶ SAP Workflow Integration
  - ▶ ESS / MSS HR Self-Services
  - ▶ Contact Management
  - ▶ Activity Synchronization
  
- ▶ Most functions are available offline through special caching / submission support

## Values

- ▶ Built on proven technology
- ▶ Neither upgrade of SAP ERP nor SAP NetWeaver required (supports SAP R/3 4.6c and higher)
- ▶ No additional charge for Lotus Notes users
- ▶ Seamless access to SAP processes from the familiar Notes UI
- ▶ Less training, improved productivity and better utilization of SAP within the company
- ▶ Pre-built scenarios are customizable with Lotus Designer
- ▶ New scenarios can be added

## But

- ▶ Quite some customization is required
- ▶ Customers are looking for a deeper integration than provided (example: workflows)
- ▶ The implemented SSO requires the credentials to be stored on the client

## Generation 3: Project “Atlantic”

### A joint product developed by IBM Lotus and SAP

- ▶ Project “Atlantic” provides integration of SAP business processes and data into the Notes 8 Client
- ▶ Initial shipment will include:
  - ▶ **Manager Package**
  - ▶ **Employee Package**
  - ▶ **SDK (Software Development Kit)**
- ▶ SAP Objects are delivered directly and can be used in the Lotus Notes inbox
- ▶ New side-shelf component in Notes will be introduced to display contextual information of the current SAP object



## Drivers for “Atlantic”

- ▶ Customers spend about 50% of their IT Budget on Enterprise systems like SAP
  - ▶ **SAP projects are LOB driven, not IT driven**
- ▶ Lotus and SAP have a huge customer overlap
- ▶ Customers are trying to articulate a UI strategy
  - ▶ **e.g. Portal vs. Rich Clients**
- ▶ Openness and integration pattern for Notes

**Frank Adams**

on Local

- Inbox (8)
- Drafts
- Sent
- Follow Up
- All Documents
- Junk
- Trash
- Chat History
- Views
- Folders
- Archive
- Tools
- Other Mail

**Follow Up**

Remove Flag

When

- New Reply Reply to All Forward More Show
- Sort by default
- Samantha Daryn 04/17/2008 10:00  
Fw: Interview with candidate Bonn
  - SAP Workflow Sy 04/17/2008 01:00  
Trip Request for Samantha Daryn
  - Deborah Sadler 04/18/2008 03:00  
Detailed Product Information
  - Frank Miller 04/20/2008 01:00  
System Log Example
  - Samantha Daryn 04/21/2008 04:00  
Configuration of my client
  - Lucille Suarez 04/22/2008 05:00  
Atlantic demo for sapphire
  - Samantha Daryn 04/22/2008 01:00  
Thanks
  - SAP Workflow Sy 04/22/2008 01:00  
Leave Request for Heather Reeds
  - Google Alerts 04/23/2008 07:00  
Google Alert - Atlantic SAP OR Lo
  - SAP Workflow Sy 04/24/2008 01:00  
Invoice Request for Saman
  - Lucille Suarez 04/24/2008 04:00  
Organizational Announcement
  - Julien Banks 04/26/2008 02:00  
Infosession on Performance
  - Workflow System 04/26/2008 05:00  
Shopping Cart #2573662
  - SAP Workflow Sy 04/29/2008 08:00  
Trip Request for Dan Misawa
  - SAP Workflow Sy 04/30/2008 03:00  
Leave Request for Samantha Dan
  - SAP 04/30/2008 07:00

Approve Reject

## Trip Request

From: Dan Misawa  
Status: requested  
Deliver Date: 04/29/2008

**Business Purpose:** Contract closure with Acme Corp.

Please approve my trip to L.A. I'll meet with Acme Corp. to finalize the contract and upon successful contract closure, we'll celebrate with them by attending the Lakers game with court side tickets.

<b>Where:</b>	Destination	Los Angeles, CA Atlanta, GA
<b>When:</b>	Departure:	22. June 2008
	Return:	25. June 2008

<b>Estimated Costs:</b>	Transportation:	1120,00 €
	Hotel:	750,00 €
	Meal:	400,00 €
	Other:	600,00 €
	<b>Total:</b>	<b>2870,00 €</b>

**Cost center:** 121354

Approver's Comments:

**Activities**

**Sametime Contacts**

"Atlantic"

**Workflow**

Approver: Frank Adams  
Requester: Dan Misawa

**Travel Budget**

**Related Reports**

- My team's travel spend - ytd
- Budget overview - ytd

**Good to Know**

- Travel policy
- Flight policy
- Trip FAQ

A future software product

SAP | IBM.

**Day-At-A-Glance**

**My Widgets**

**Places**

**TwitNotes v. 1.0.3**

## “Atlantic” Release 1: Manager Package

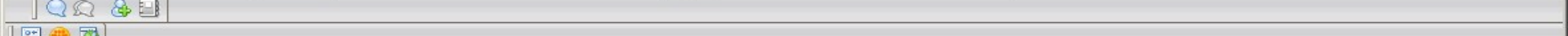
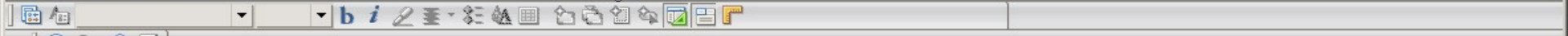
- Reports and Analytics
  - ▶ **Notes users are able to request or schedule any SAP report out of the Notes Client, incl. specific report parameters**
  - ▶ **Reports are delivered as an email message – either directly embedded or as an attachment**
  - ▶ **Side-shelf shows related links and actions**
  
- Workflow Approval
  - ▶ **Notes users are able to approve or decline SAP workflow items directly out of their Notes Client**
  - ▶ **Workflow items are delivered as eMail**
  - ▶ **Side-shelf shows related SAP data, links and actions**

## “Atlantic” Release 1: Employee Package

- ▶ Leave Request
  - ▶ **Notes users can start the *Leave* workflow request out of their Notes calendar**
  - ▶ **The approval can be done via the workflow approval in the Manager package, acknowledging Organizational Data provided in SAP HCM**
  
- ▶ Trip Request
  - ▶ **Employees can start the *Travel* Workflow request out of their Notes Client**
  - ▶ **The approval can be done via the workflow approval in the Manager package, leveraging the SAP Workflow engine and Business Rules**

## “Atlantic” SDK

- ▶ “Atlantic” includes SDK capabilities to adapt any customized SAP solution to the specific customer's SAP implementation and processes
  - ▶ **Limited SDK in release 1 will support customization of workflow scenarios and creation of custom workflow integrations**
  - ▶ **Full SDK in release 2 will add ability to customize existing scenarios and create new ones**
  - ▶ **The SDK will most likely consist of existing tools from both SAP and Lotus as well as newly developed tools**



Recent Databases

- View
- Agents
- Web Services
- Outlines
- Subforms
- Fields
- Columns
- Actions
- Script Libraries
- Shared Resources
- Composite Applications
- Other

Frank Adams  
Lotusphere/sdaryn.nsf

- Framesets
- Pages
  - CS Web Database Location
  - DOLS Blank
  - DOLS Load Download Page
  - DOLS Request Offline ID
  - DOLS Web Control
- Forms
  - SAP.ReportSubscription
  - SAP.SampleTravelReport
  - SAP.TravelPlans
  - SAP.TravelReport
  - SAP.TripApproval
- Views
- Folders
- Shared Code
  - Agents
    - Archive\Archive Now
    - Archive\Archive Selected C
    - Archive\Create Criteria...
    - Archive\Open Log
    - Archive\Settings...
  - Web Services
  - Outlines
  - Subforms
  - Fields
  - Columns
  - Actions

**Subject**

**Review Trip Request**

from: from

type: tripTypeDisplay

Why: Business Purpose: Purpose

Where: Destination: tripDestination

When: Departure: StartDate

Return: EndDate

Estimated Costs: Airfare: costAirfare #

- Approve
- Reject
- Request Information...
- Check Calendar

- Objects Reference
- costTotal (Field)
  - Approve (Action)
    - (Options)
    - (Declarations)
    - Click
    - Objectexecute
    - Initialize
    - Terminate
  - Reject (Action)
    - (Options)
    - (Declarations)
    - Click
    - Objectexecute
    - Initialize
    - Terminate
  - Request Information... (Action)
    - (Options)
    - (Declarations)
    - Click
    - Objectexecute
    - Initialize
    - Terminate
  - Check Calendar (Action)

**Reject (Action) : Click**

Run Client LotusScript

```

Dim doc As notesdocument

Set db = session.currentdatabase
Set agent = db.GetAgent("SAP.rejectLeaveRequest")

Set uidoc = ws.CurrentDocument
Set doc = uidoc.document

Call agent.run (doc.noteid)
TODO: add error handler

doc.processed = "declined"
doc.subject = "This trip request has been rejected"
Call doc.Save (True,False)

Set view = db.GetView ("($Inbox)")

```

Errors 18.2

# “Atlantic” Roadmap



current planning  
Subject to change

## 1Q2009

- “Atlantic” v1.0
- Manager Package
- Reporting & Analytics
- Workflow Approval
- Employee Package
- Leave Request
- Trip Request
- limited SDK

## 2010

### “Atlantic” v2.0

- Sales Professional Package
- Contact Management
- Activity Management
- Opportunity Management
- extensions to Manager Package
- Budget Management
- extensions to Employee Package
- Trip planning
- Time recording
- full SDK

## 2012

“Atlantic” v3.0:  
Additional business  
Packages dependent on  
customer feedback

## “Atlantic” 1.0: Pre-requisites and Characteristics

- ▶ Lotus

- ▶ **Lotus Notes Client 8.0.2 and above**
- ▶ **Lotus Domino Server 8.0.2 and above**
- ▶ **IBM “Atlantic” Connector Software**

- ▶ SAP

- ▶ **SAP ERP 6.0 or higher**
- ▶ **SAP BI 3.5 or 7**
- ▶ **SAP Add-on Software**

- ▶ Initial Languages



- ▶ Platform Support

- ▶ **Lotus Notes Client: Windows XP and Vista (32bit)**
- ▶ **Lotus Domino: Windows**

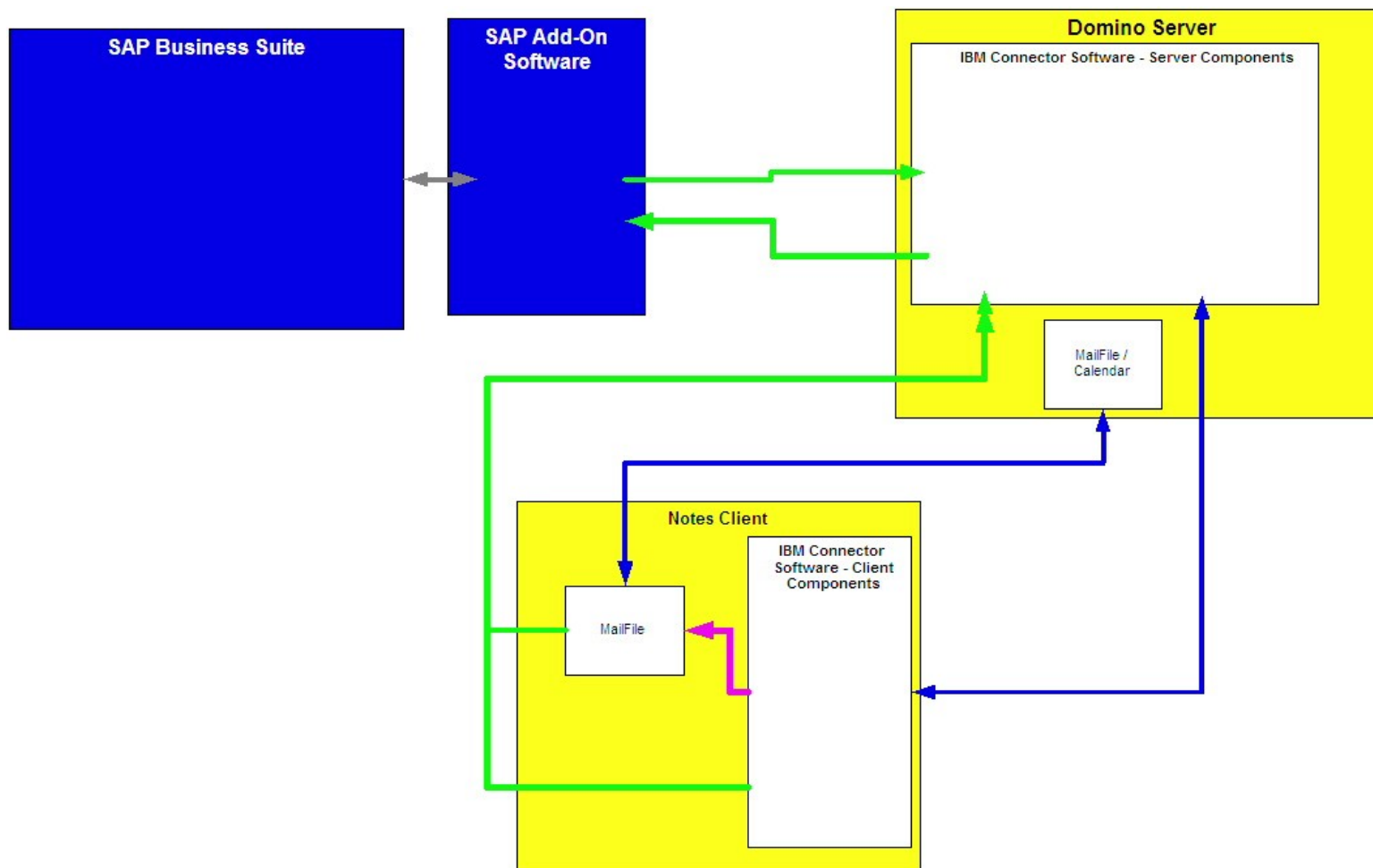
## “Atlantic” Technology Design Patterns

- ▶ “Atlantic” is an SOA implementation
  - ▶ **WebService calls**
  - ▶ **XML**
- ▶ Standard Notes design elements are used e.g.:
  - ▶ **Forms**
  - ▶ **Agents**
  - ▶ **WebService proxies**
- ▶ Side-shelf consists of HTML streams
- ▶ What about Customization?
  - ▶ **Standard development tools are used the Notes developers are familiar with**

## WebService Support in Notes / Domino

- ▶ Since version 8 Notes / Domino support native support to expose / consume webservices
  - ▶ **Special Design Elements in Notes**
  - ▶ **Allows a Domino Developer to develop code in Lotus Script**
- ▶ By loading a WSDL (WebService Description Language) File into Domino Designer a WS skeleton is generated
  - ▶ **Developer can write any kind of code in**
  - ▶ **Notes 8 also provides NotesStream Object class that allows handling of e.g. MIME data**
- ▶ WebServices allow the exchange of data between SAP and Lotus Notes as standard XML messages

# “Atlantic” High-Level Architecture

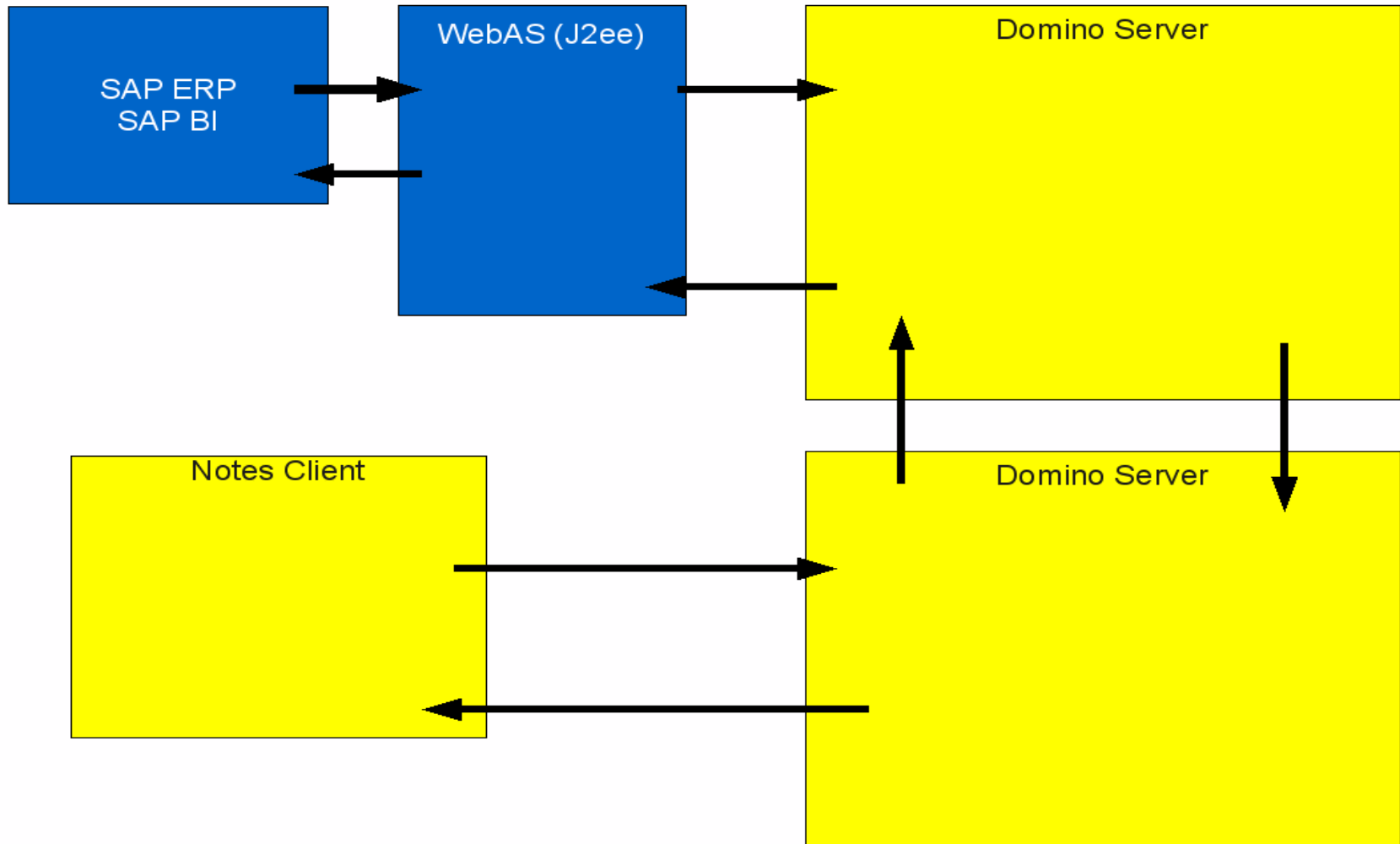


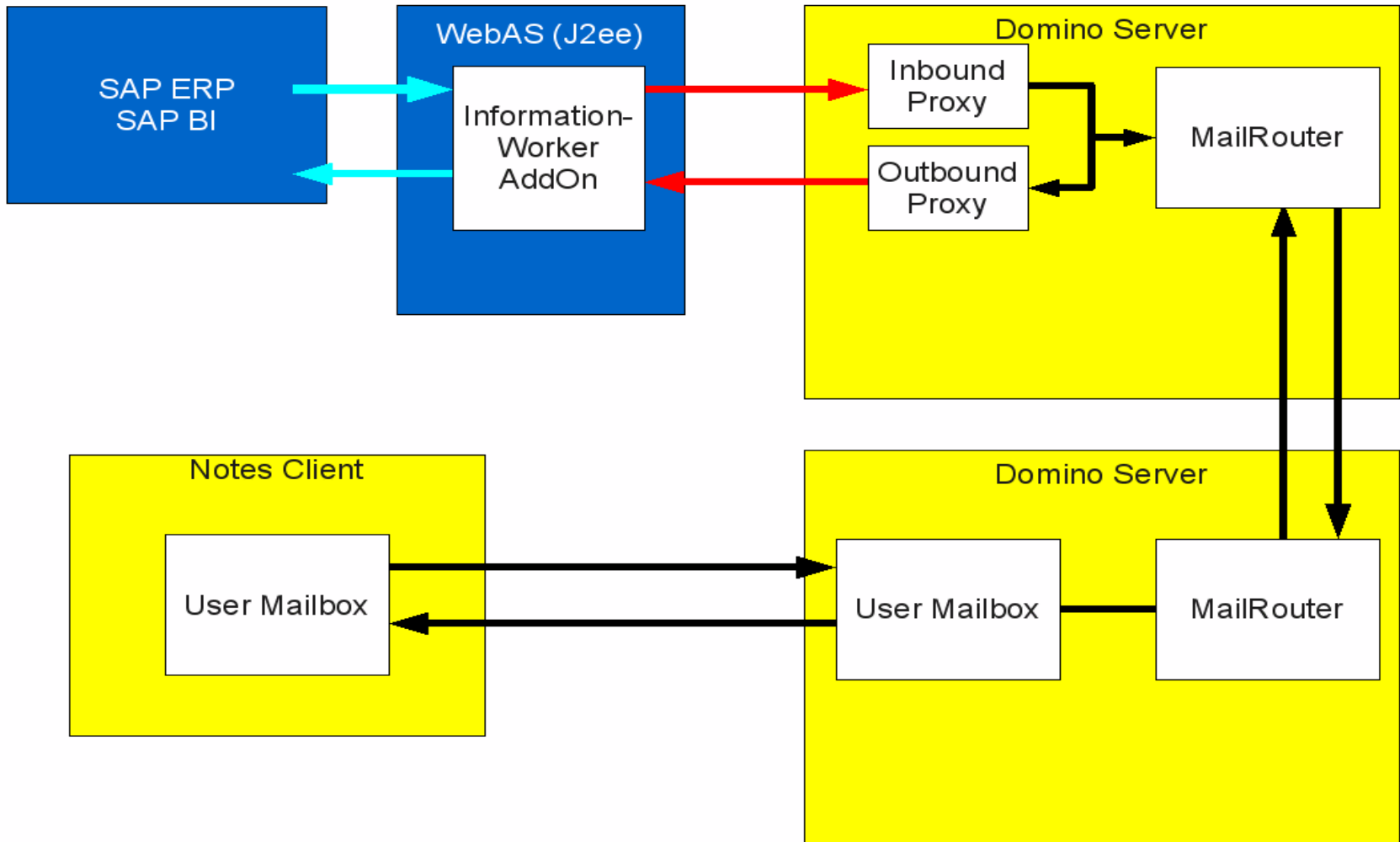
## How does it work? (inbound items)

- ▶ SAP item is sent from SAP back-end to SAP InformationWorker add-On (IWAO)
- ▶ SAP IWAO translates the item into a Webservice call with the according XML data and calls inbound proxy
- ▶ Inbound proxy determines the item type, translates the XML data into a Notes document, and sends it to user
- ▶ This document shows up in the Notes Inbox and user takes action on it
- ▶ Message on action travels back to “Atlantic” Domino Server (Mail-In DB)
- ▶ Outbound proxy translates object into WS-Call and calls SAP IWAO
- ▶ SAP IWAO calls SAP back-end

## How does it work? (outbound items)

- ▶ User in Notes uses specific Notes form to create a request (e.g. for report)
- ▶ Message travels as mail document to “Atlantic” Domino Server (Mail-In DB)
- ▶ The outbound proxy translates the document into a WS call which calls a specific WS endpoint on the SAP IWAO
- ▶ IWAO translates the request and triggers function in the SAP back-end



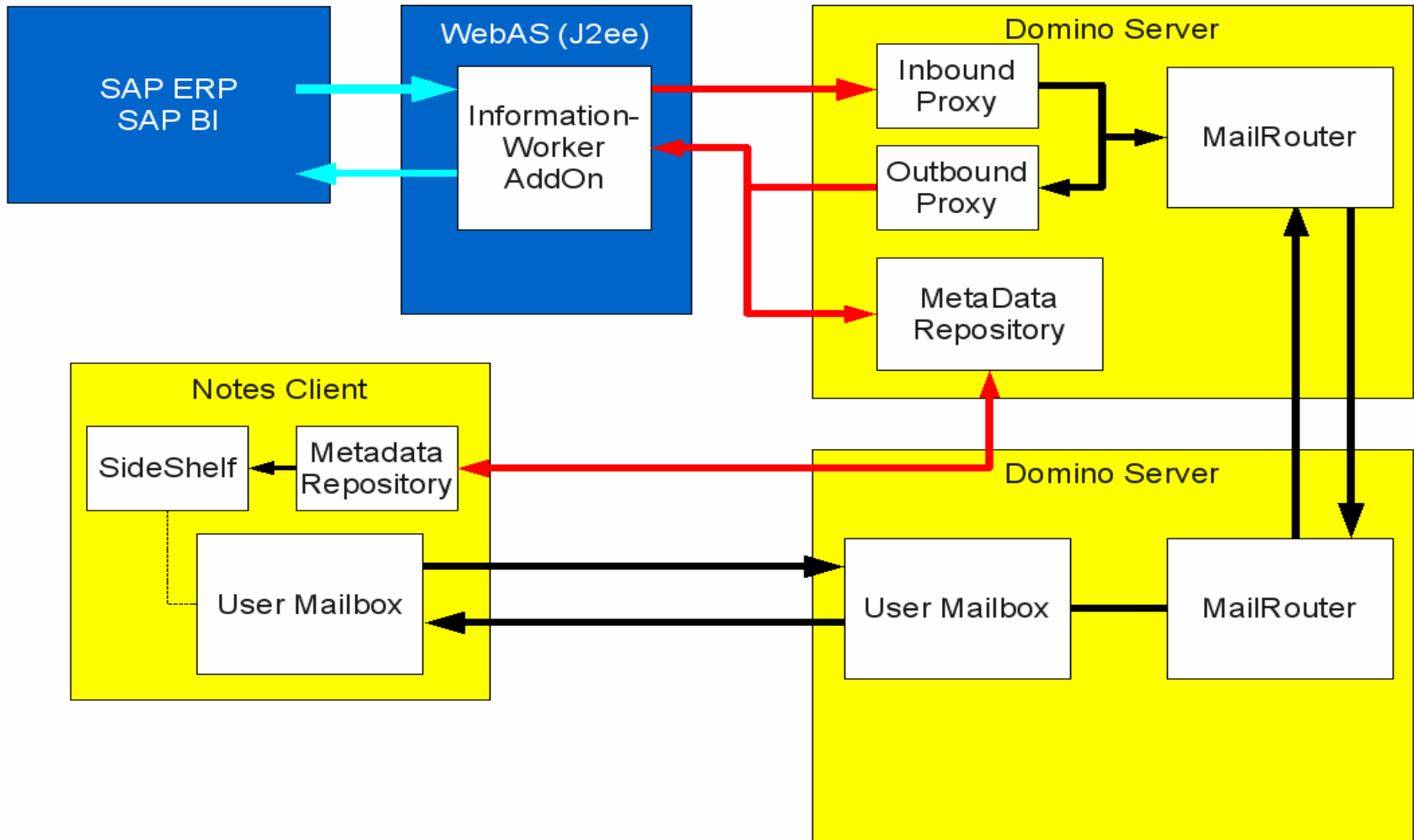


## Side-Shelf Plugin

- ▶ The side-shelf is a new construct in the Notes 8 full client
  - ▶ **Basically it runs Eclipse Plugins**
  - ▶ **Standard client ships Sametime, Activities, etc.**
- ▶ “Atlantic” also leverages the side-shelf to display relevant informations for the current SAP Item
  - ▶ **Acts on context changes in the main Client**
  - ▶ **Displays informations related to e.g. the decision**
  - ▶ **Can be extended w/ additional informations**
- ▶ Design pattern is to only display supporting informations in the side-shelf not the critically needed ones

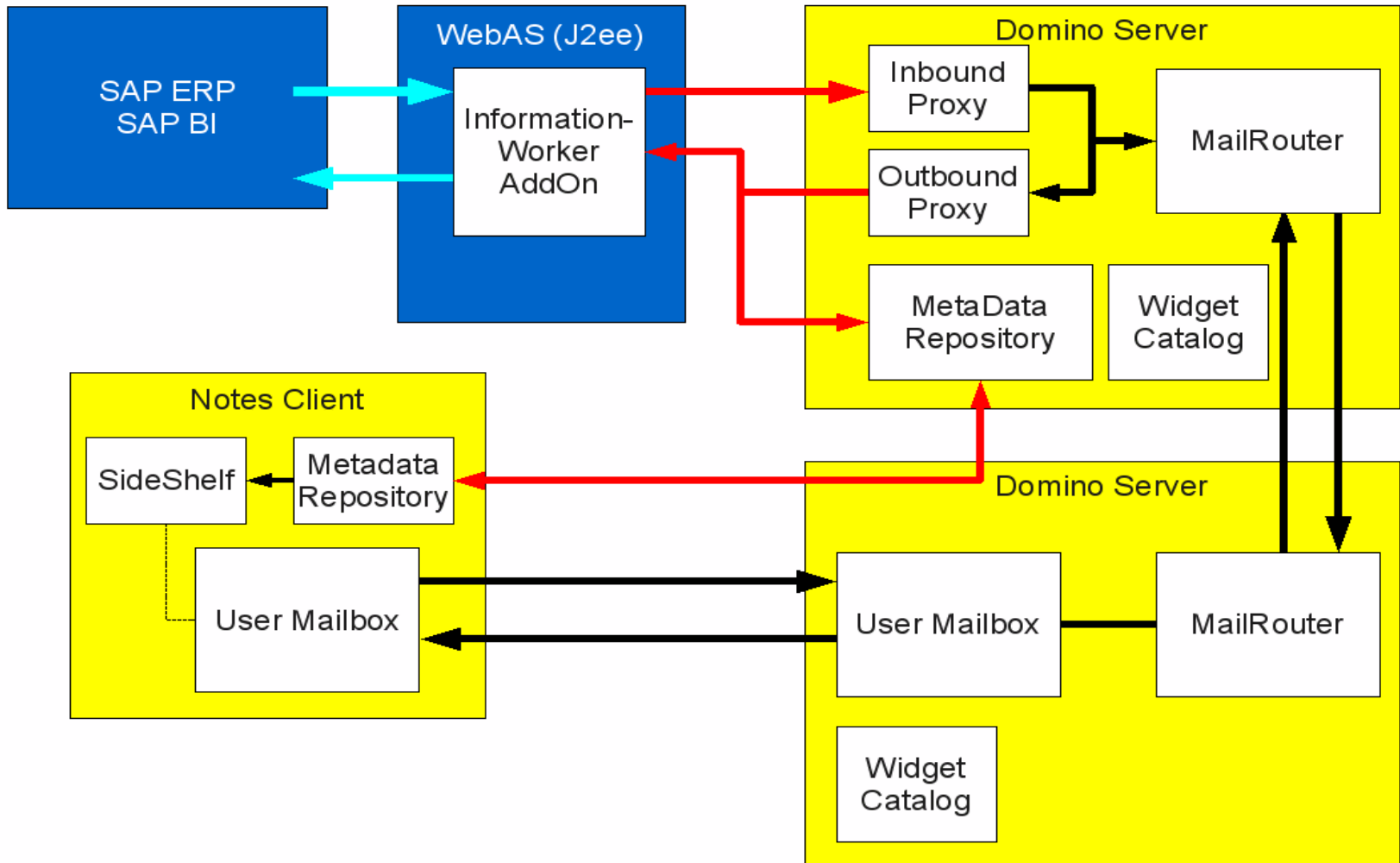
## Meta Data

- ▶ “Atlantic” keeps a balance between static design elements and meta data driven elements e.g.:
  - ▶ **Leave types**
  - ▶ **Mandatory parameters for reports**
- ▶ “Atlantic” reflects configurations from a SAP System into the Notes Environment via meta data
- ▶ Elimination of the need for a Notes Developer to adjust code on changes to the SAP back-end
- ▶ Meta data hold personalized data on the Notes client that is queried by e.g. the side-shelf or the mail file extensions
- ▶ Meta data is updated through asynchronous events on the Notes Client



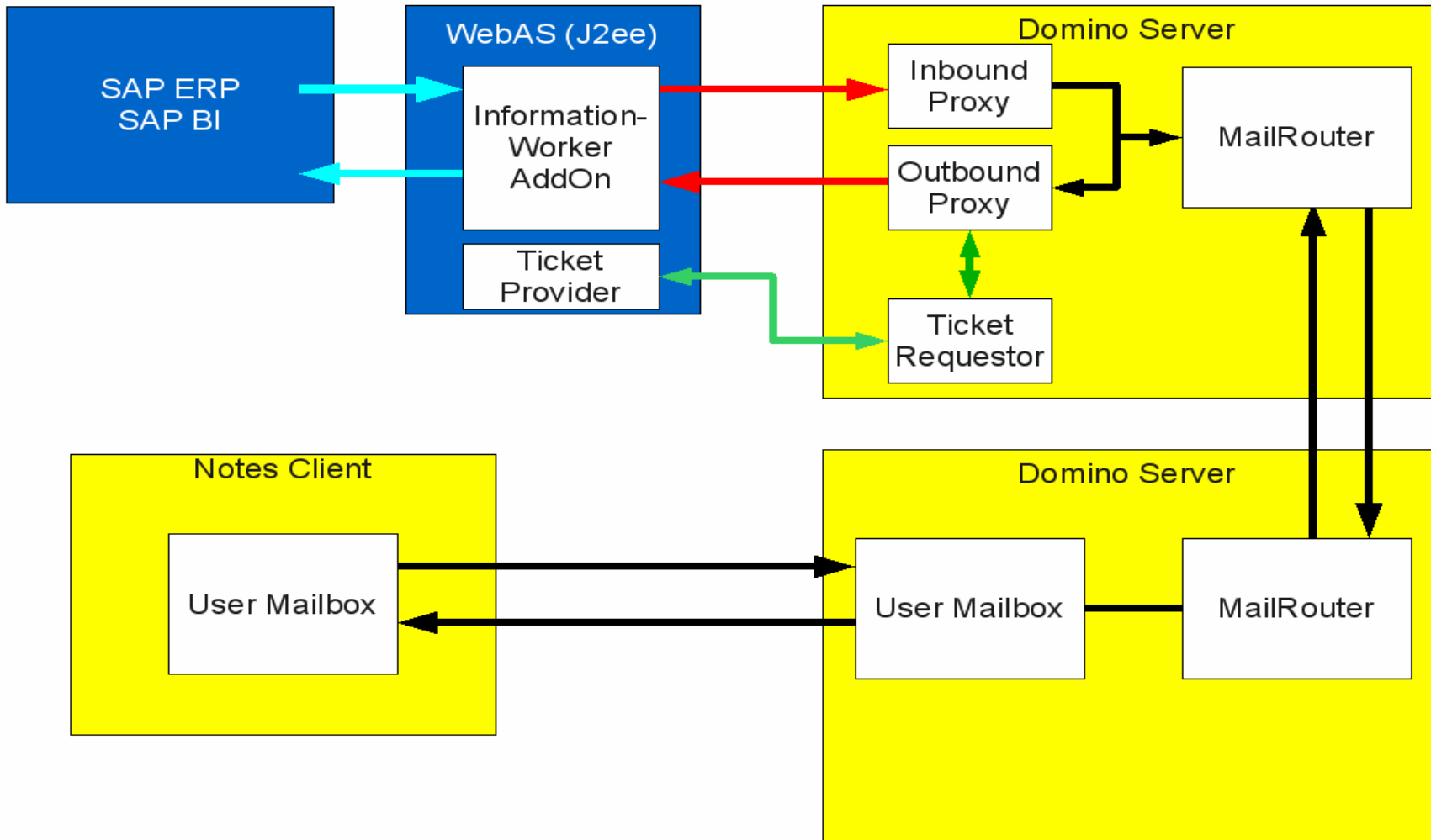
## Widget Catalog

- ▶ The widget catalog is a Notes database where side-shelf widgets can be stored centrally on the server
- ▶ Users can access this database and install widgets from there
- ▶ This feature eliminates the need of touching the client
  - ▶ **Users get access to widget**
  - ▶ **Widget is installed locally into the side-shelf**
  - ▶ **Client updates side-shelf plug-in automatically**
- ▶ The access is controlled using policies



## Single Sign On

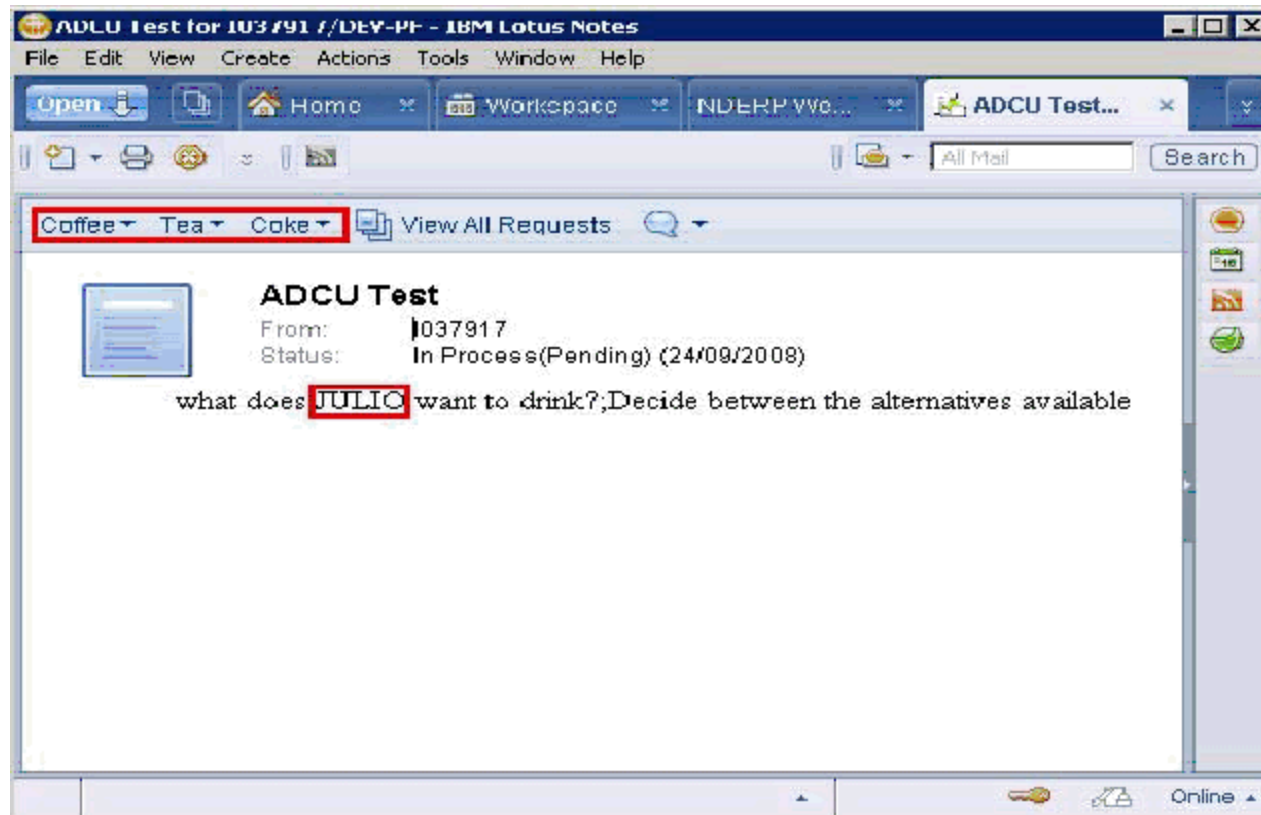
- ▶ “Atlantic” leverages SAML (Secure Assertion Markup Language) to enable Single-Sign-On between Lotus and SAP
- ▶ Basic assumptions:
  - ▶ **Lotus side and SAP side are in a trust association**
  - ▶ **If a user is authenticated to a Notes Client and/or Domino Server this authentication is also used for SAP**
  - ▶ **SAP user name is maintained in Domino Directory as it is probably different from Notes user name**
- ▶ Basic Flow of the SSO:
  - ▶ **Notes object is signed by the user**
  - ▶ **Domino Server requests SAP Logon Ticket on behalf of the user using SAML**
  - ▶ **WebService Call is done on behalf of the user with SAP Logon Ticket**



## Generic Work-flow Pattern

- ▶ “Atlantic” is able to handle generic work-flows in release 1
- ▶ Work flows can be exposed from the SAP side
  - ▶ **Extension of work flows is possible using standard User Exits**
  - ▶ **Extension of x-Props (XML-Data-Model) can be achieved with ABAP code**
- ▶ SAP data is transformed into Notes Document
  - ▶ **Association of new / specific Notes form to document type**
  - ▶ **Extraction of Data from XML data streams**
- ▶ Handling of generic decision work-flows will be automatic
- ▶ Extension are optional

## Example of Generic Decision Work-flows



## Sample Extension of “Atlantic” Work-flow Pattern

- ▶ Create work-flow in SAP system
- ▶ Configure work-flow to interact with SAP “Atlantic” components
- ▶ Item is sent to Notes
  - ▶ **Item is routed to Domino Inbound proxy**
  - ▶ **Item can be “massaged” using Lotus Script**
    - **Extraction of XML data into Notes fields**
    - **Switch of Notes forms**
    - **Switch of User**

## Differences between “Atlantic” and NaSs

	NaSs	“Atlantic”
Interface	RFC/BAPI	WebServices/XML
Requirements	<ul style="list-style-type: none"> <li>Lotus Notes 6.5.3 or higher</li> <li>Lotus Domino 6.5 or higher</li> <li>SAP GUI 6.40 (for workflow)</li> <li>SAP license</li> <li>SAP R/3 4.6c or higher</li> <li>Also SAP CRM, SAP BW, ...</li> </ul>	<ul style="list-style-type: none"> <li>Lotus Notes 8.0.2 or higher</li> <li>Lotus Domino 8.0.2 or higher</li> <li>“Atlantic” license (tbd)</li> <li>SAP ERP 6 and above</li> <li>SAP BW 3.5 / SAP BI 7</li> </ul>
Integration Level (only a few examples)	<ul style="list-style-type: none"> <li><b>Work-flow:</b> Notes based</li> <li><b>Reports:</b> no direct delivery</li> <li><b>SSO:</b> handled by client-side credentials</li> <li>In general: scenarios are “pure” Notes applications -&gt; no contextual rel.</li> </ul>	<ul style="list-style-type: none"> <li><b>Work-flow:</b> SAP work-flow items are routed</li> <li><b>Reports:</b> direct delivery to Notes in.box</li> <li><b>SSO:</b> “built-in”; Domino and SAP servers are mutually trusted entities</li> <li>In general: scenarios are composite applications, i.e. -&gt; more modular approach -&gt; extensible with “mashup” technologies</li> </ul>
Architecture (high-level)	<ul style="list-style-type: none"> <li>2-tier: SAP and Notes client</li> <li>Synchronous calls</li> <li>No cache</li> <li>No special navigation</li> </ul>	<ul style="list-style-type: none"> <li>4-tier: SAP, Gateway, Notes Domino, and Notes client</li> <li>Domino server is connected to Gateway (Information worker add-on)</li> <li>Client calls SAP asynchronously</li> <li>Gateway and Domino server cache backend data</li> <li>Side-shelf allows special navigation</li> </ul>
Dev. Tools	Domino Designer	Domino Designer / Eclipse / more... (tbd)
Support	IBM only (on request)	IBM and SAP ( <b>joint product</b> )

## Current Ideas And Discussions (IBM - SAP)

- ▶ Lotus Quickr as repository in SAP environments
- ▶ Lotus Connections (Profiles) to be synchronized with SAP HR
- ▶ Lotus Connections (Activities) and SAP BPM (Business Process Management)
- ▶ The role of mobile devices in “Atlantic”
- ▶ Telephony integration into Sametime and “Atlantic”

All's well that front-ends well :-)

## Lotus and SAP – A powerful combination



*The best of two worlds !*

Contact:  
eMail:

Rainer Vetter  
[rainer.vetter@de.ibm.com](mailto:rainer.vetter@de.ibm.com)

Christian Holsing  
[holsing@de.ibm.com](mailto:holsing@de.ibm.com)