



Alloy™ Software by IBM® and SAP®

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Lotus Client

Technology



The IBM SAP International Competence Center (ISICC)

Founded by IBM and SAP in 1993, located at the SAP headquarters in Walldorf, Germany

The IBM SAP International Competence Center is the information hub between IBM and SAP

Central point of access for IBM and SAP projects

Joint development

Executive briefings

Sizing workshops

Education



The Lotus Product Portfolio 2009



Lotus Notes and Domino
Mail, calendaring and rapid application development



Lotus Connections
Social software for business



WebSphere Portal
Composite applications and integration services with 7 accelerators



Lotus Protector
Security services for e-mail



Lotus Quickr
Collaborative content and team services



Lotus Forms
Pixel perfect, digitally signed forms



Lotus Sametime
Lotus Sametime Unyte
Unified communications and collaboration services



Lotus Mashups
Easily remix content and uncover insights



Lotus Expeditior
Eclipse based Client-side integration which extends composite applications to laptops, desktops, kiosks and mobile devices



Lotus Symphony
Free productivity tools for documents, presentations, and spreadsheets



Lotus Foundations
On-premise servers for small businesses



Lotus Greenhouse *Where Ideas come to grow*

Lotus Greenhouse is a premier showcase website to experience Lotus products.

It is a live community website to share information, collaborate, and exchange ideas on emerging technologies with Lotus and members of the Lotus Greenhouse community.



SW as a Service / Cloud Computing



One Client Platform – Multiple Products



Lotus Notes



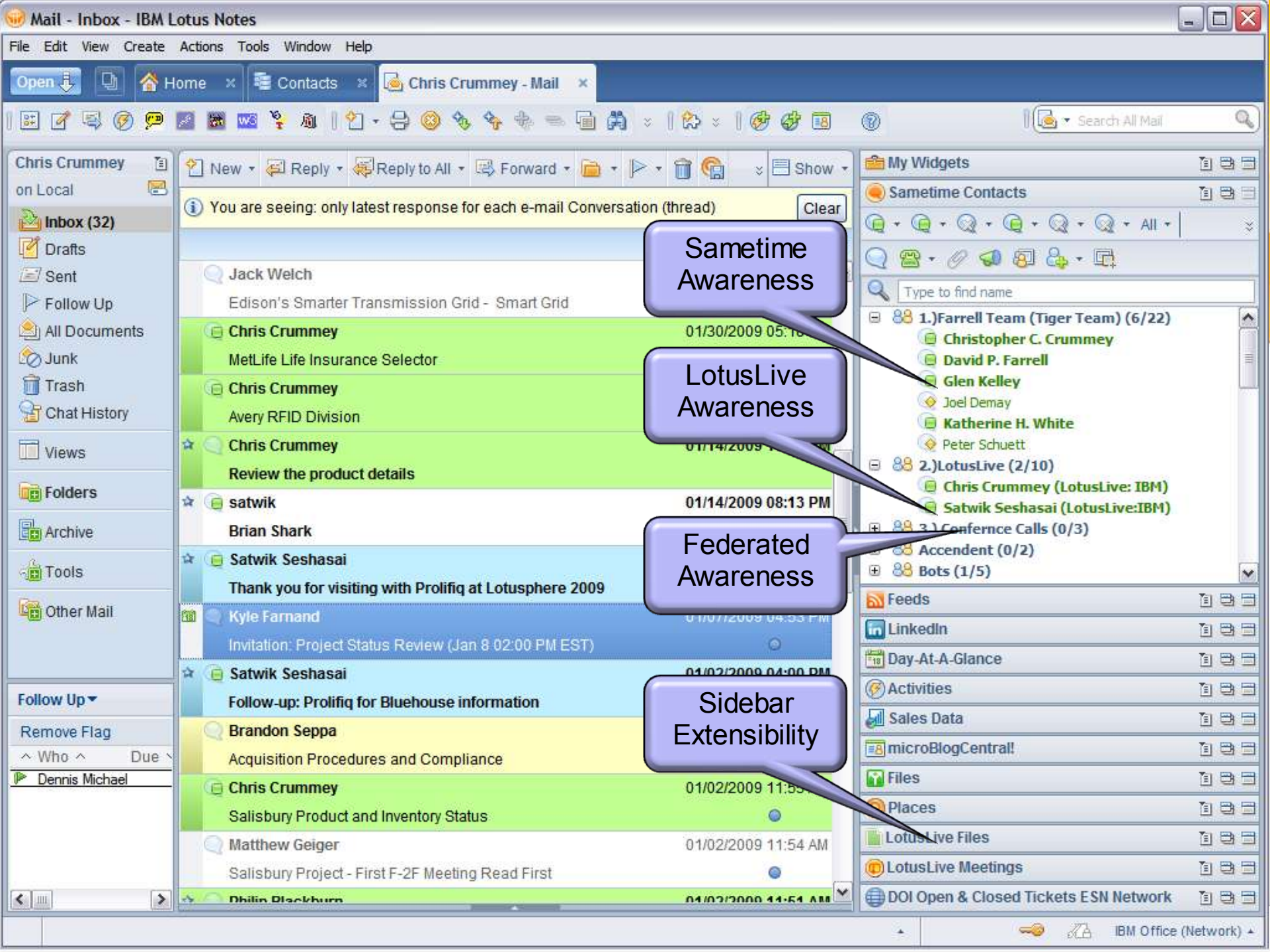
Lotus Sametime



**Lotus Expeditor
(stand-alone)**

Lotus Expeditor

Eclipse RCP Foundation



Sametime Awareness

LotusLive Awareness

Federated Awareness

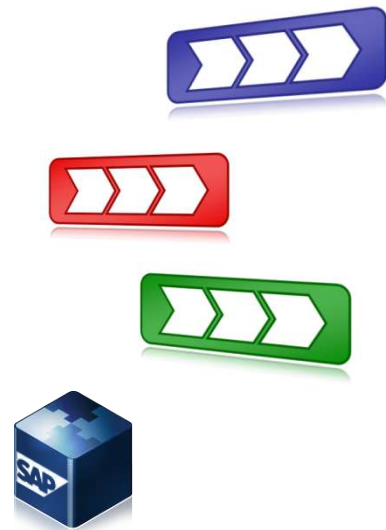
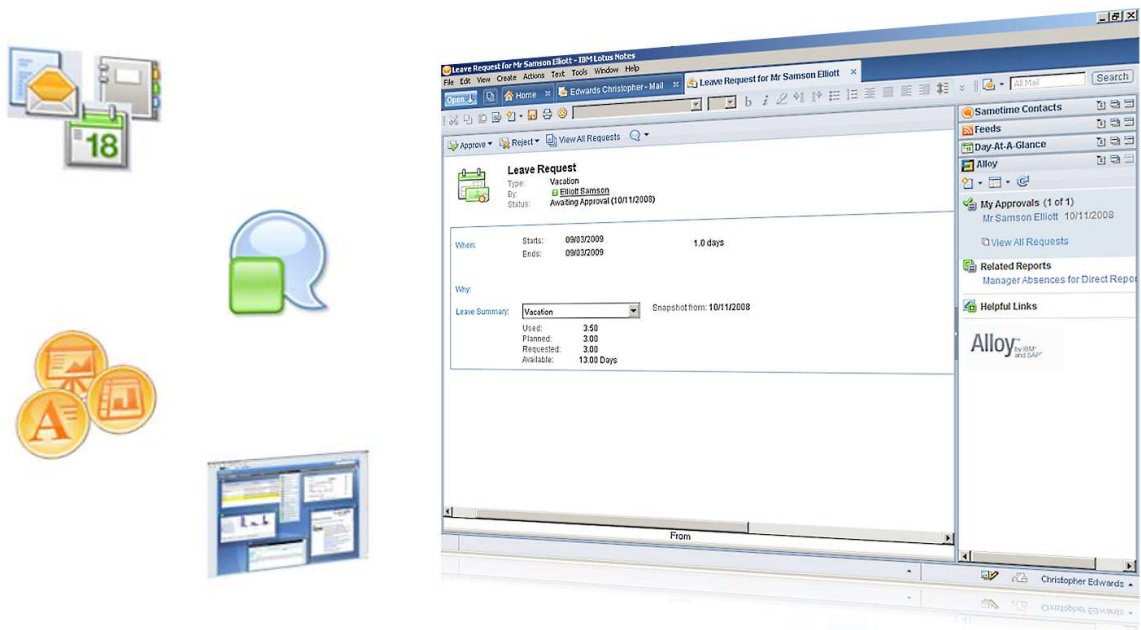
Sidebar Extensibility

Lotus Notes Offerings for SAP integration

- 96: Lotus Script Extension for SAP (LSX) discontinued
 - Development environment using Lotus Script
 - Support for SAP versions until R/3 4.6

- 98: Lotus Connector for SAP (still available)
 - Plugin into Lotus Enterprise Integrator (Batch) or Domino Enterprise connection Service (realtime)
 - Development environment using Lotus Script
 - Support old and current SAP versions (R/3 4.6 – ECC6)
- 06: Notes Access for SAP Solutions (only supported on Notes 7, no further development)
 - Lotus Connector based solution, simple standard BAPI based scenarios
- 09: Alloy by IBM and SAP
 - Fully SOA / Webservice based architecture
 - Supports ECC6

Alloy - Bringing SAP Software to Lotus Notes



Office productivity
Ad-hoc processes
On every desktop



Business processes
Industry expertise
System of record



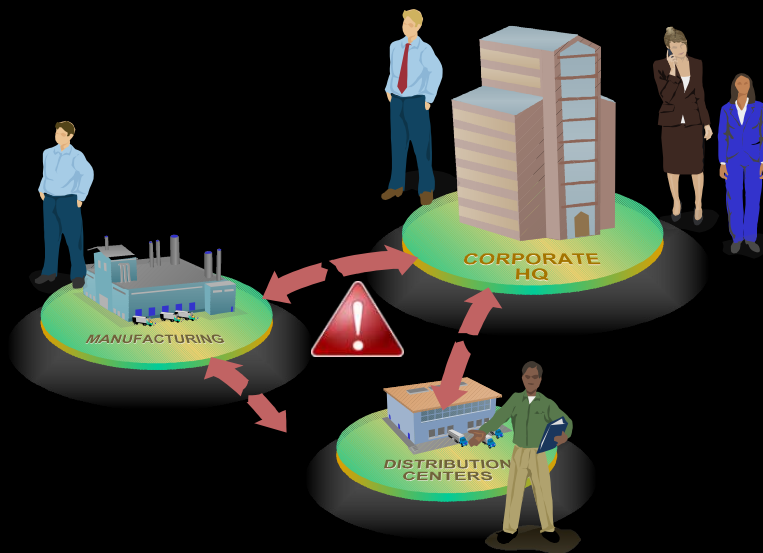
What is Alloy ?

- First jointly developed product of IBM Lotus and SAP AG that provides seamless access to SAP Systems from within Lotus Notes Client
 - Brings Business Data to the EndUser, not the Enduser to the Business Data
- Enriches Business Functionality with Collaboration Services and Collaboration Applications with Business Data from ERP Systems
- Easy to use and natural experience of SAP Data inside the Lotus Notes Client environment for
 - SAP Reports (Reporting Data) from ERP system and Business Warehouse Systems
 - Support of Decision step for any SAP Business Workflows
 - End to end Leave Management and Trip Management support
 - chosen because of deep integration into Calendar and PIM Integration
- Positioned by SAP as an alternative UI to SAP Gui and SAP Netweaver Portal

Alloy supports Business Transformation

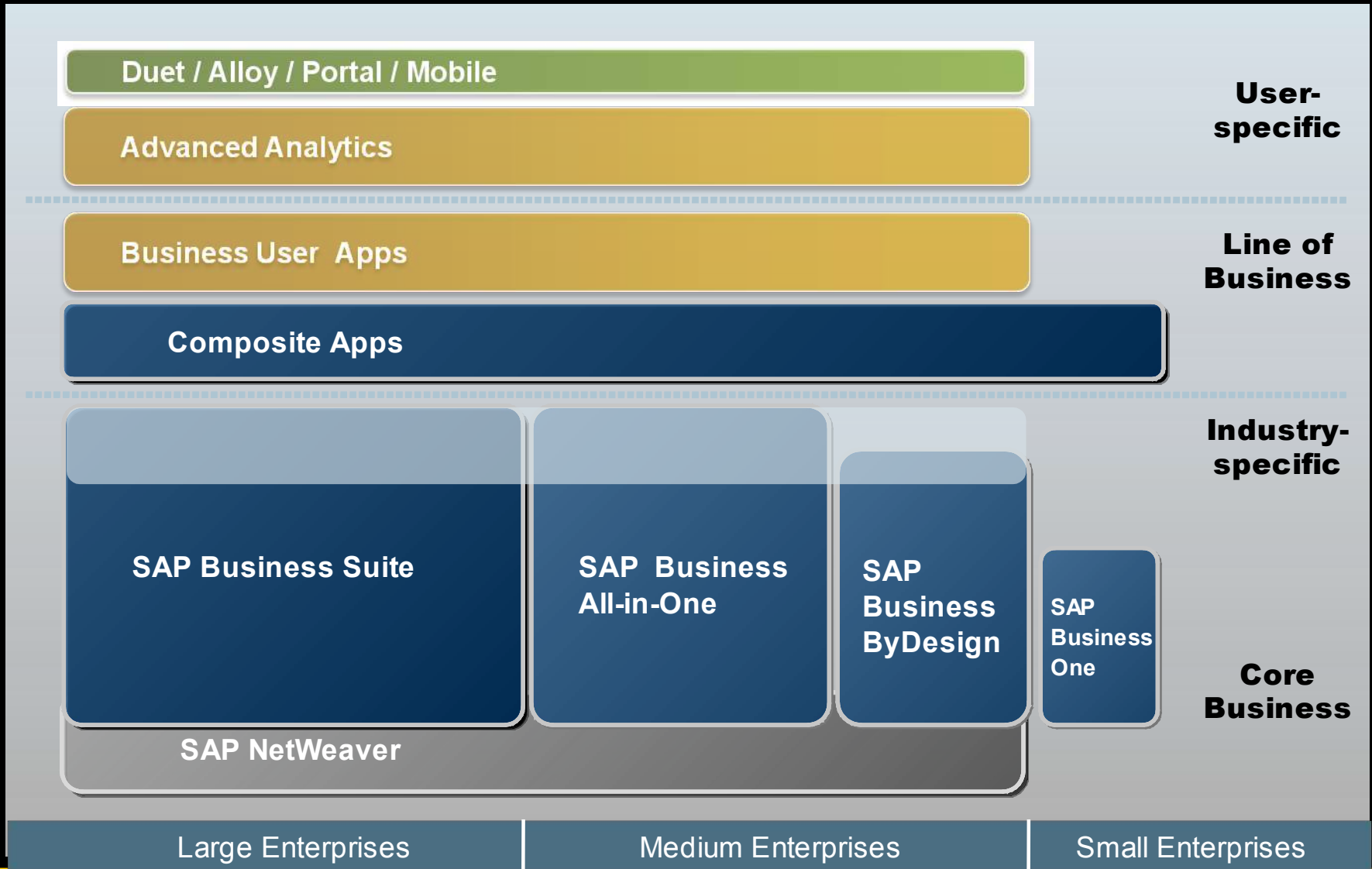
- The key value of Alloy is not directly the access to SAP Information from a Lotus Notes Client
- Alloy supports Business Process Transformation by
 - Removing the need of training people on new User Interfaces
 - Increase the acceptance of the new Processes by a consistent and easy to use Access into the new Systems and processes
 - Increasing the ROI for the transformation project by a quick and easy adoption
 - Drive Business Compliance internally and support legal requirements
- Examples are
 - HR Shared Service Center
 - New Sales Support Systems
 - Purchase Order management

Business Users are Disconnected From Enterprise Information and Processes....



- Productivity suffers from time wasted searching for and coordinating information
- Decision-making is impaired due to out-of-date or incomplete information
- Business innovation is hindered by inability to participate in enterprise processes
- The Architecture of Notes 8 enables Users to overcome these issues and bring *Information to People* instead of *People to Information*

Alloy positioning in SAP's Solution Portfolio

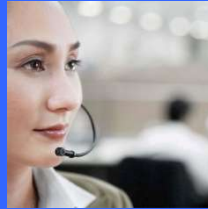


Alloy does not replace the Portal but coexists with it

- Alloy provides an additional Channel for Business User to interact with an SAP Backend System. There is not necessarily a conflict but rather an opportunity
- As the Business Processes are defined on the ERP System, adding Alloy into an environment does not create huge additional Efforts but it rather leverages the ERP Implementation
- Advantages to use Alloy in Environments that already run a Portal are
 - Alloy reaches Business User in their most important Application: eMail
 - Lotus Notes Client can link to Portal or WebDynpro pages via simple HTTP links
 - Easier adoption and change of the new Processes by ease of use – seamless access to Portal based application fragments through embedded browser in Notes Client

People Have Different Roles Within Organizations

Task Worker



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

SAP
“Power User”

Business User

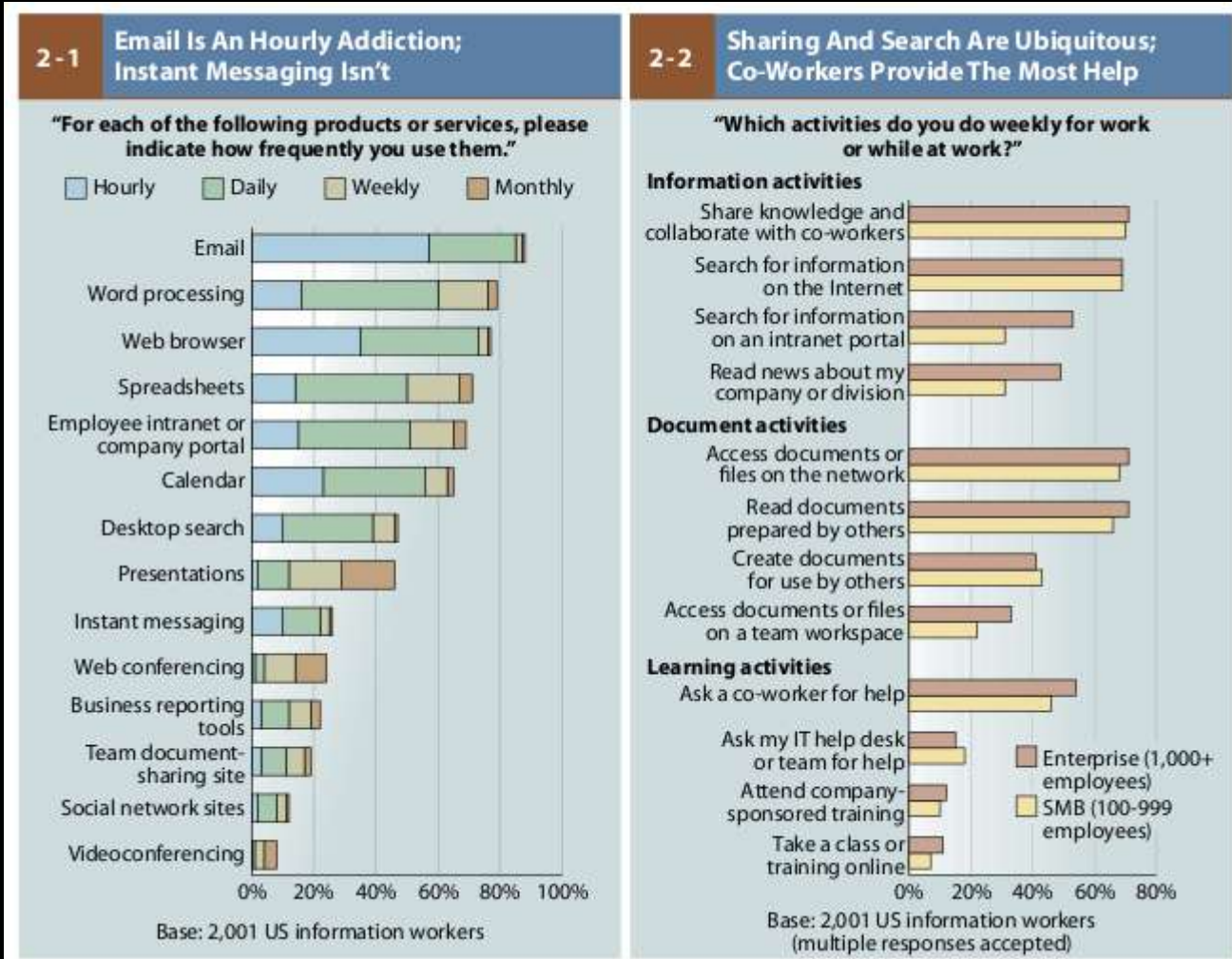


- **Sample roles:** business manager, sales representative, HR manager
- Knowledge worker or people manager
- Manages exceptions and coordinates activities & resources
- Synthesizes many sources of information
- Interface of choice: e-mail, desktop productivity tools

Typical
Lotus Notes User



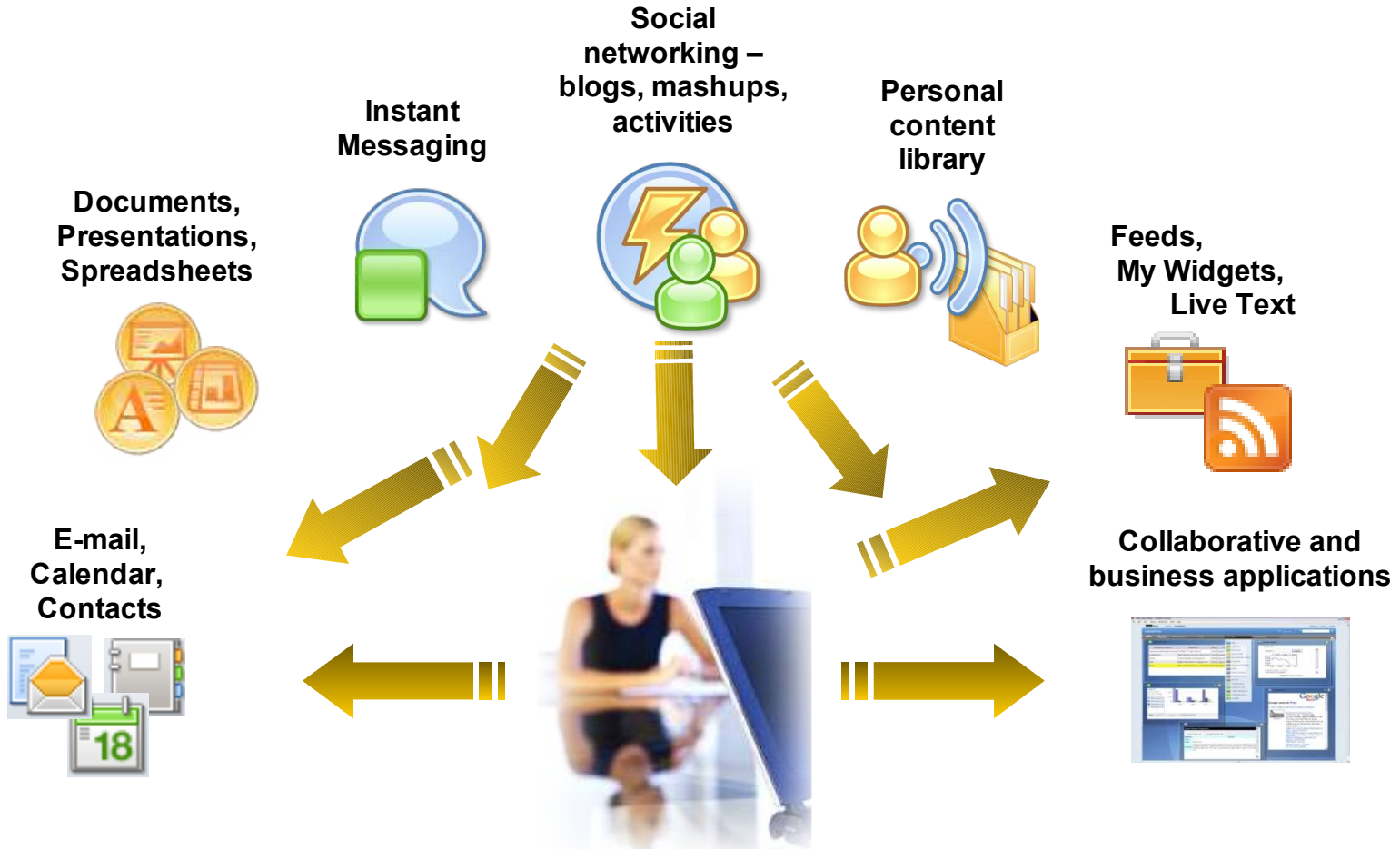
Information Worker spend most of their time in eMail and collaborate



Source: Forrester – A Day in a life of a US Information Worker (2009)

Business User's Inbox is a Catalyst for Productivity

Moving from it interrupts their workflow and introduces opportunities for distraction.



Alloy Executive Summary



Familiar Working Environment

Deliver SAP information and applications into Lotus Notes to improve productivity

Rapid Deployment

Ensure rapid adoption and minimal training for end users

Extensibility

Add functionality needed for each unique business user group

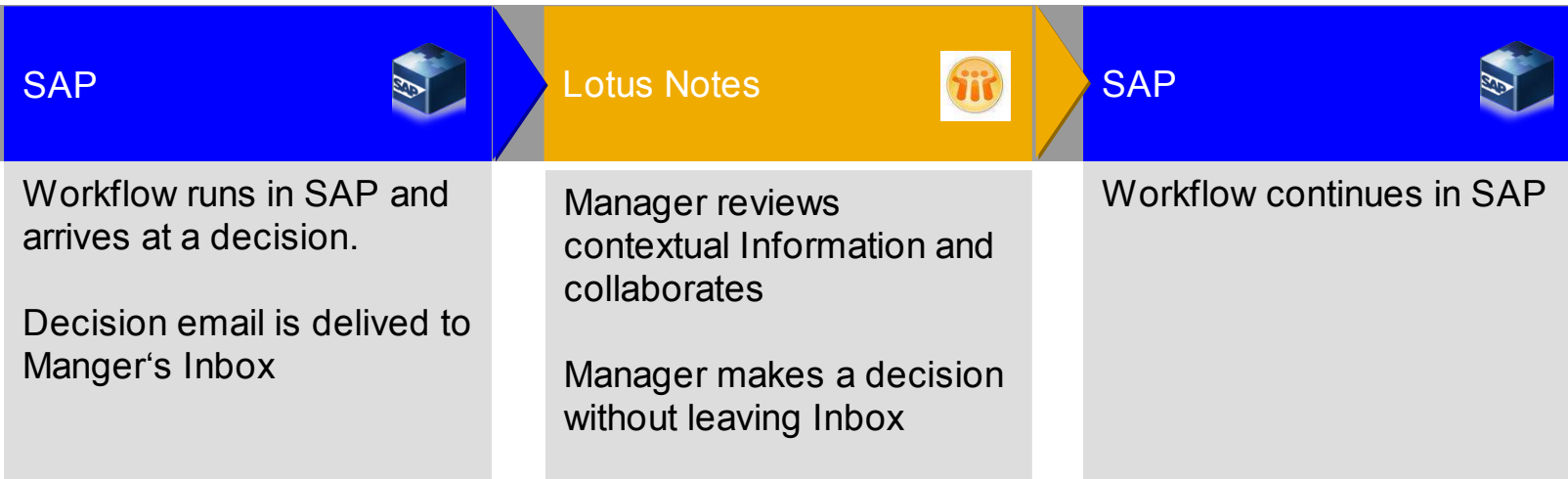




Familiar Working Environment



Workflow Decisions Management Details



Reports Management

Give users information to make good decisions

Report: Demo: ALV demo program: Output flights (simplest version) - IBM Lotus Notes

File Edit View Create Actions Tools Window Help

Open Home Gerhard Keller - Mail Report Catalog Report: Demo: ALV demo program: Out...

Run Again Open in Spreadsheet Share View Properties Run Report from Catalog View All Delivered Reports

Report: Demo: ALV demo program: Output flights (simplest version) Run Date: 12/22/2008 02:57 PM

Report Title: Demo: ALV demo program: Output flights (simplest version)
Run Date: December 22, 2008 8:57:24 AM EST
Parameters: Airline is DL

Airline	Connection Number	Flight Date	Airfare	Airline local currency	Plane Type	Maximum capacity economy class	Occupied seats economy class	Booking total
DL	106	2007-12-10	611.01	USD	A310-300	280	261	188557.9
DL	106	2008-01-07	611.01	USD	A310-300	280	266	192010.1
DL	106	2008-02-04	611.01	USD	A310-300	280	271	194020.3
DL	106	2008-03-03	611.01	USD	A310-300	280	268	190800.3
DL	106	2008-03-31	611.01	USD	A310-300	280	271	194643.5
DL	106	2008-04-28	611.01	USD	A310-300	280	271	192682.2

Report Description: ALV demo program: Output flights (simplest version)

Schedule: Scheduled to run every week on Monday at 08:43 AM GMT-05:00.

Previous Runs: 12/15/2008, 12/08/2008

Related Reports: No related reports

View All Reports

Alloy by IBM and SAP

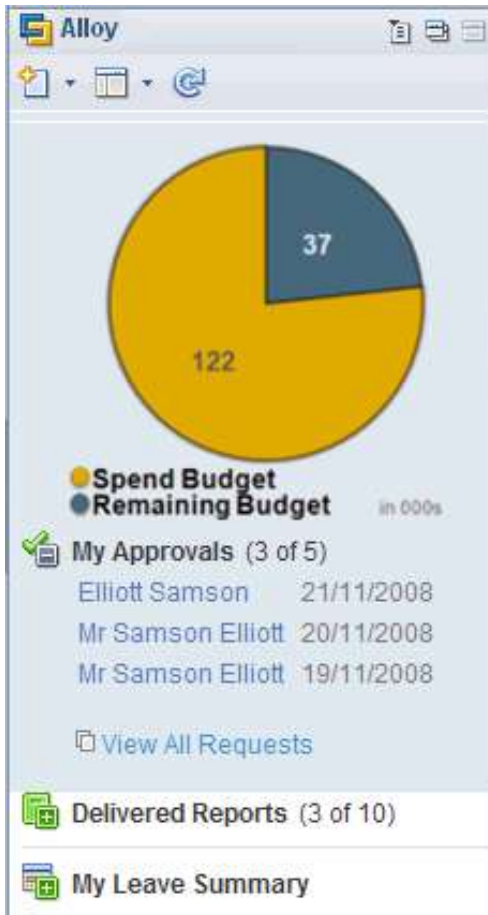
Easy access to BI, ERP and line of business reports

Self service subscription and personalization

Forward or access reports off-line

Links to related reports and information

Bring contextual information to facilitate better decisions



Bring contextual information from SAP Business Suite

Use standard customization tools like Lotus Notes Designer, Lotus Script, SAP Implementation Guide

Integrate additional helpful information into the sidebar

Customize email and document forms to fit your needs

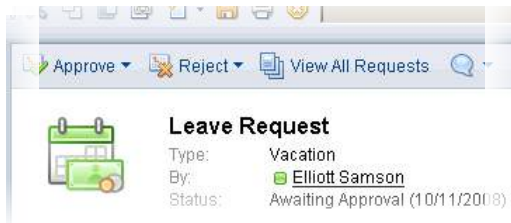
Intuitive Design

Build on what Notes users know and expect

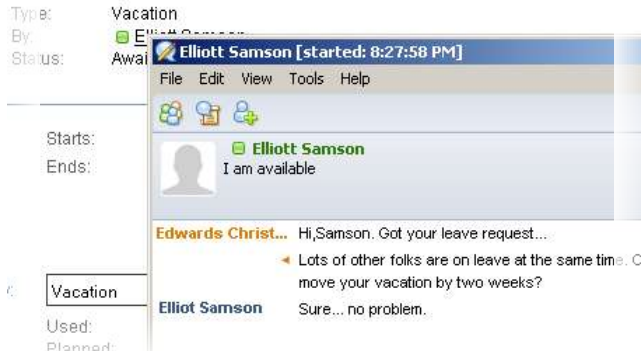


Embedded directly into calendar, e-mail

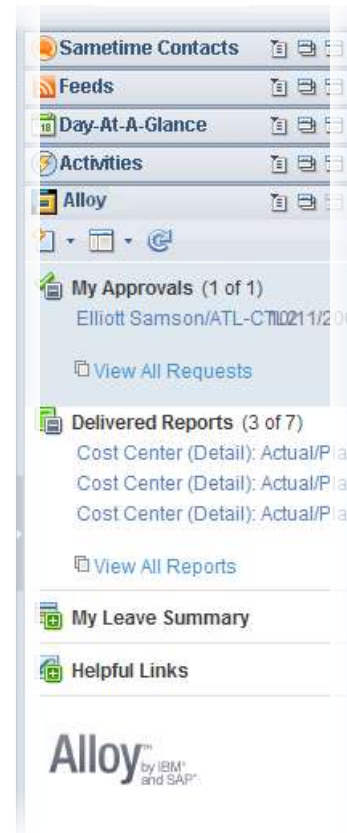
Simple action buttons for decision maker



Leave Request



One-click collaboration



Side bar adjusts to current user context

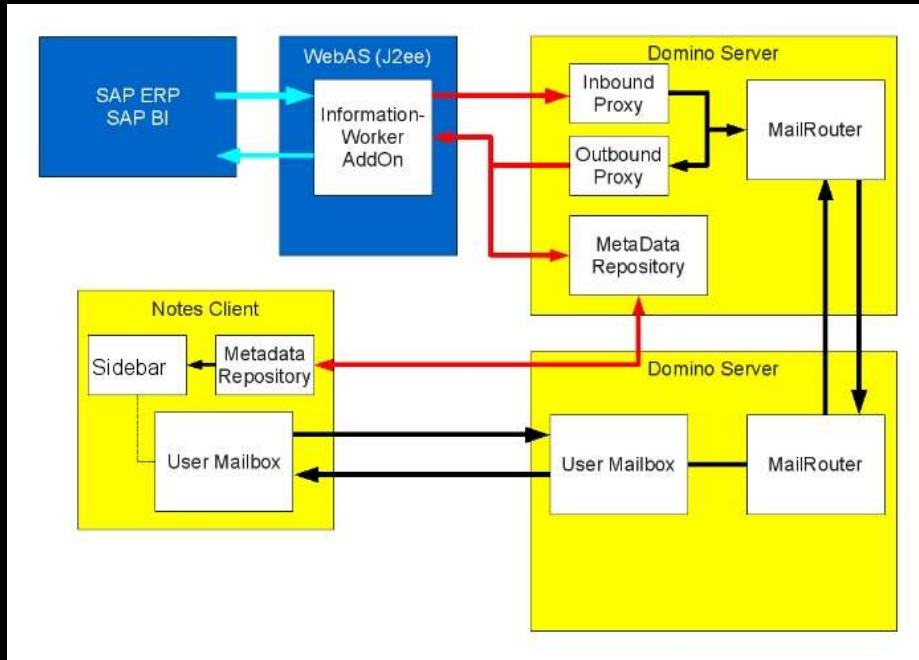




Rapid Deployment

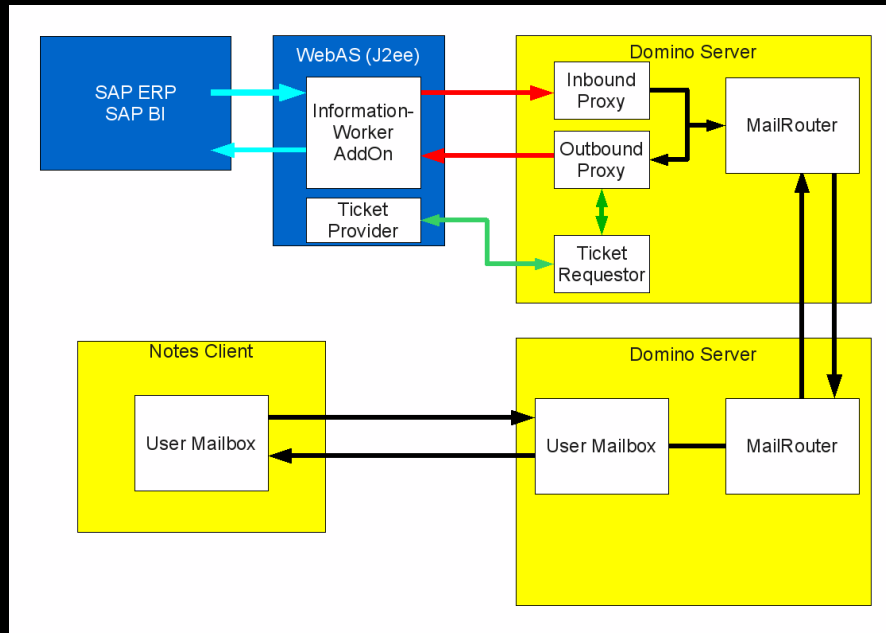


Rapid Deployment of Alloy into existing environments



- Deployment happens on the Alloy components only
 - existing Domino Mail Servers stay untouched
 - No installations on SAP Systems necessary
- The two Alloy components act as a Gateway into the respective environments
- Alloy respects for deployment well known mechanics:
 - “Designer” task for new Mail template
 - Widget catalog for Sidebar PlugIn
 - Notes DB for storage of Metadata

Single Sign-On between Domino and SAP



- Alloy leverages SAML (Secure Assertion Markup Language) for Single Sign On
- Basic assumptions:
 - Lotus side and SAP side are in a trust
 - User is authenticated to a IBM Lotus Notes Client / IBM Lotus Domino® Server
 - SAP UserName is maintained in Domino Directory for mapping
- Basic Flow of the Single Sign-on:
 - Notes object is signed by the user
 - Domino Server requests SAP Logon Ticket on behalf of the user using SAML
 - WebServices Call is done on behalf of the user with SAP Logon Ticket

Alloy Metadata Handling Concept



- One of the common Integration problems is that only data is integrated, but configuration settings are not reflected
- Alloy reads SAP configuration (e.g. Leave Types or Report Templates) and provides them to the user
 - Client updates automatically
 - Application logic is driven from SAP customizing
 - Notes developer does not need to update Key mappings anymore
- The Sidebar Elements are stored in the Metadata repository, too
 - Provided in HTML which allows full customization and extension (e.g. Charts in the sidebar)
 - developers can easily do more customization than just changing the existing blocks
 - Integration of Real-time content from other server / services, e.g. communication through Ajax or a Webservice or Google Charts
 - Applying corporate UI Guidelines or CSS Stylesheets
- New Metadata / HTML fragments don't require Notes Design updates but are distributed through the Metadata mechanism down to the Notes Clients (WebService Call)

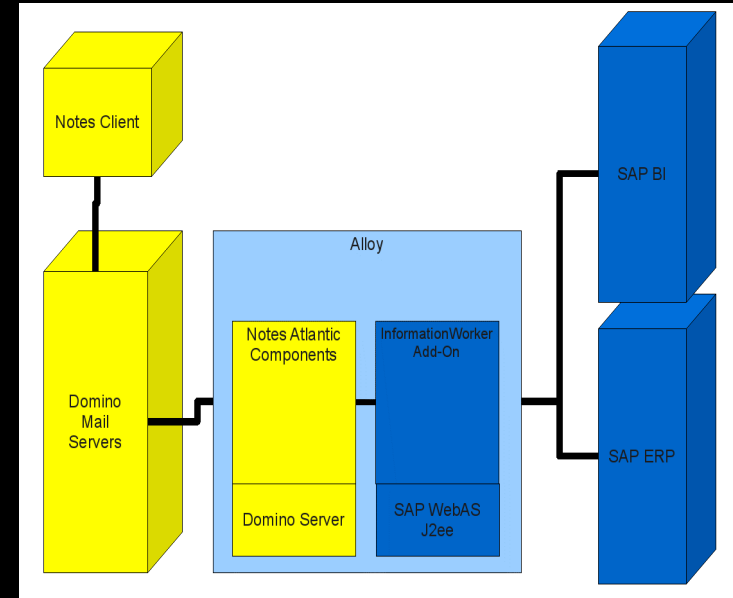
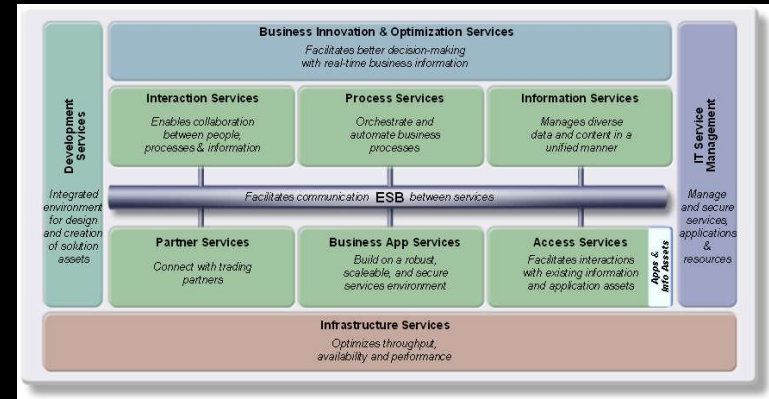


Extensibility

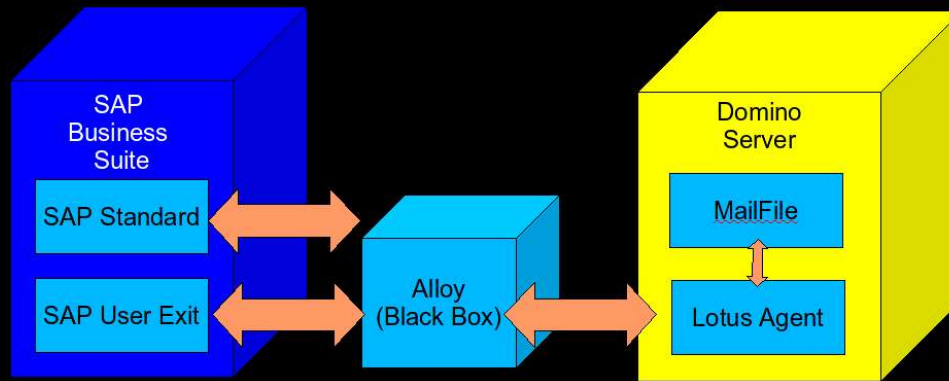


Alloy Extensibility is made easy through Architecture and its SOA compliance

- All communication in Alloy between IBM Lotus Notes and SAP Business Suite uses WebServices
- Transfer data format is XML, even for storage of certain data
- Metadata is either XML (for data) or HTML (for the sidebar)
- SAML is also based on WebServices, basically strict structure



Customizing / Extensibility in Alloy



- Customizing and Extensibility happens through normal mechanisms:
 - SAP Side
 - ABAP User Exits
 - Standard configuration
 - Lotus Side
 - Normal Notes Design Elements with Domino Designer
- No additional skills are needed to extend the functionality
- Alloy itself acts as a BlackBox which establishes connectivity and save delivery of Messages

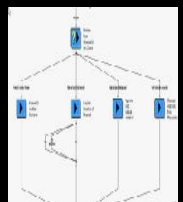
Quick Guide to Expose Workflow Decisions in Alloy

~15 Min.

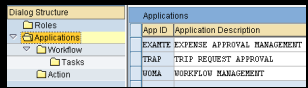
Step 1

Configure SAP Backend

IMG and Custom Handlers



SAP Business Workflow



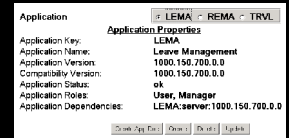
SAP Backend

~5 Min.

Step 2

Configure IBM Lotus Domino Server

Configure IBM Lotus Domino Server with the application id and bound type created in step 2



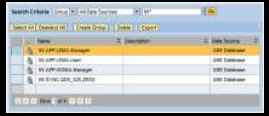
IBM Lotus Domino Server

~10 Min.

Step 3

Configure SAP Alloy Add-on

The IBM Lotus Domino configuration generates a user role on SAP Alloy Add-on. Assign user to this role.

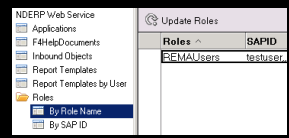


SAP Alloy Add-on

Opt: Step 4

Magnify Decision UI

Magnify and enrich the decision UI with additional information in the decision body and the Alloy sidebar



IBM Lotus Domino Designer

Travel Management

Request, review and approve trip details quickly

New Trip Request for Gerhard Keller - IBM Lotus Notes

File Edit View Create Actions Text Tools Window Help

Open Home Gerhard Keller - Mail New Trip Request for Gerhard Keller

Save and Send Request Save as Draft Check Calendar... Out of Office

Trip Request

Type: Non-billable to Customer

Mark Private
 Notify Me
 Mark Available

Personal Notes: Lotusphere

When: Leaving: 01/18/2009 08:00 AM
Returning: 01/22/2009 05:00 PM

Where: Country/Region: USA
Location: Orlando
(59 characters max)

Why: Lotusphere Conference
(59 characters max)

Comments: Education event
(255 characters max)

Estimated Costs: 1250 EUR

Assignment: Add... Reset

Sametime Contacts
Day-At-A-Glance
Feeds
Alloy™
Related Reports
Travel Expense Reporting by F
General Trip Data/Trip Totals
My Leave Summary
Alloy™ by IBM and SAP

Using application on Local GKeller

Schedule and approve trip requests

Links to key information, e.g. travel and expense policies

Link to collaboration tools to discuss and resolve quickly

Ensure data consistency and compliance

Examples of Workflows that can be brought to Alloy

Financial Transaction Release Workflow

Recruitment Workflow

Purchase Order Workflow

Material Creation Workflow

Sales Approval Workflow

Transport Workflow

Process Quality Workflow

Product Development Workflow

Purchase Order Workflow

Purchase Order Workflow
 From: Cuba Moore
 Status: In Process(Pending)
 Updated on: 28.05.2009

Choose one of the decision options given. This completes the processing of this step. Before you make a decision, you can display the attachments and objects which have been attached to the user decision. You can also create your own attachments. If you choose Cancel, the user decision remains in your inbox for processing.

Purchasing Document	4500000359
Created by	MOOREC
Created on	28.05.2009
Vendor	HT_500-High Tech Supplier
Purchasing Doc. Type	NB
Purchasing Group	001

Picture	Item	Material	Short Text	PO Quantity	Net price	Net order value
	00010	HT_001-1	Office Calendar	2 EA	10,00 USD	20,00 USD
	00020	HT_001-2	Note pad with hard cover	4 EA	12,00 USD	48,00 USD
	00030	HT_001-3	Laser Printer Paper 1000 sheet	6 KG	16,00 USD	96,00 USD

Budget

Available: 600k EUR
 Already spent: 400k EUR

Alloy™ by IBM and SAP

Manager can make decision right from Lotus Notes

Contextual Information

Details

Sales Approval Workflow

Sales Approval English
 From: SAP ALLOY
 Status: In Process(Pending)
 Updated on: 04/06/2009

Customer	Mayflower Inc.
Sales Volume	250.000,- EUR
Customer-Discout-Rate	25,00 %
Deal-Discout-Rate	30,00 %
Notes	We need to win this deal a

Executive Sponsor : Vonda Davis/ides
 Sales Account : Timmy Tabasco/ides
 Technical Account : Tom Bender/ides

Item	Product	Short Text	Quantity	Net price	Net value
00010	CL01	Cluster 5000/AIX	2 PC	120.000,- EUR	240.000,00 EUR
00020	CLMAT	Maintenance for Cluster 5000 1 year	2 PC	5.000,- EUR	10.000,00 EUR

Timmy Tabasco/ides [started: 1:57:54 PM]

Mark Taylor/id... hi Tim 1:57:58 PM
 Timmy Tabasc... Hi Mark 1:58:08 PM
 Mark Taylor/id... Could you provide me with some more background information why we give so much discount to Mayflower? 1:58:18 PM

Revenue Information
 Revenue situation

Month	Current Revenue	Revenue incl. Deal	Target
-3 Month	~1.0M	~1.0M	~1.0M
-2 Month	~1.2M	~1.2M	~1.2M
-1 Month	~1.4M	~1.4M	~1.4M
Today	~1.6M	~1.85M	~1.85M

Weighted Pipeline: 3.5M
 Pipeline # : 7

Manager can make decision right from Lotus Notes

Contextual Collaboration

Contextual Information

Details

Hiring Approval

Open Home Mark Taylor - Mail Mark Taylor - Requests Hiring Approval for SAP ALLOY http://idesalloyportal:1080/irj/ser...

Approve Reject View All Requests

Hiring Approval
 From: SAP ALLOY
 Status: In Process(Pending)
 Updated on: 28.04.2009

Sametime Contacts
 Feeds
 Day-At-A-Glance
 Alloy™
 My Approvals (3 of 5)

Org Unit	Sales
Group	HW Sales Services
Position	Sales Representative
Name	Sunil Jose
Start Date	01.09.2009
Manager	Bruce Illis
Salary class	SR04
Notes	This guy is really great!
Application #	20090522_34


Open Home Mark Taylor - Mail Mark Taylor - Requests Hiring Approval for SAP ALLOY http://idesalloyportal:1080/irj/ser...

v%20GBU/ERP/HCM/CYS/application20090522_34.pdf?_user=bendert8j_password=welcom

99%

Sunil Jose

294, 1st Cross Cambridge Layout, BANGALORE 560 008, INDIA
 Residence Phone: +91 80 51255737 Telefax: +91 80 25301614
 Mobile & SMS: +91 98450 22230 Email & chat: suniljose@hotmail.com



VISION & OBJECTIVE

Looking for challenging career, where there is scope for demonstration, always on a look out for a positive & bigger outlook, Currency are ideas, thrive on Imagination & Passion, Rigorous thinking and boundless curiosity, Sets levels & standards that exceed expectations, Have fun attitude is everything, Bottom line rises with the Organisation, A Learner for Life.

EMPLOYMENT HISTORY: 10 years of Senior Management-level experience.

March 2004 - Till date (SifyCare(Chennai) / Silver tree (Princeton US) Business Development Head

- In seeking new business in ISP Supports Services outsourced from US to India.
- New business in CPA in US outsourced to India

July 1998 - Till date - Retail, Distributor & Fund Facilitator for Acer India.

- **Entrepreneur skills**
- **Brand Launches & Management**
- **Operational & Employee Retention efficiency**
- **Visual Communicator**
 - ❖ Financial and logistics for Acer Direct Nationwide between the Partner and the Principal company.
 - ❖ Setting up BPO facilities in Chennai & Bangalore.
 - ❖ *Regional Head* at Salora INTERNATIONAL (FX Infotechnologies Limited) - Bangalore in Setting up Distribution, Channel development, Relationship management & Retailing of IT Products.
 - ❖ Being in creating & running a network for Acer Products as a NATIONAL DISTRIBUTOR

Pages
 Attachments
 Comments

Sametime Contacts
 Feeds
 Day-At-A-Glance
 Alloy™
 My Approvals (3 of 5)
 Timmy Tabasco 28.04.2009
 Timmy Tabasco 28.04.2009
 SAP ALLOY 28.04.2009
 View All Requests
 Delivered Reports (0 of 0)
 My Leave Summary
 Helpful Links
 Alloy™ by IBM and SAP

1 of 3

Key Benefits

For the business user, the enterprise and IT

Increase effectiveness, responsiveness, and productivity

- A smarter work environment for business users, integrating the collaborative capabilities of Lotus Notes with SAP applications, workflows, and information

Improve decision making

- Easy and intuitive access to relevant, contextual business information

Better risk management and mitigation

- Employees can more easily adhere to business processes, follow workflows, and act on essential information

Increase ROI

- Leverage existing investments in SAP applications and Lotus Notes.



What makes Alloy unique?

Reliable, simple and extensible



The first product jointly developed and supported by SAP and IBM

Eliminates the need to build and maintain expensive custom programming or interfaces to integrate SAP applications with Lotus Notes

Allows in-house developers and system integrators to customize and extend functionality to better serve unique needs



IBM Software Group

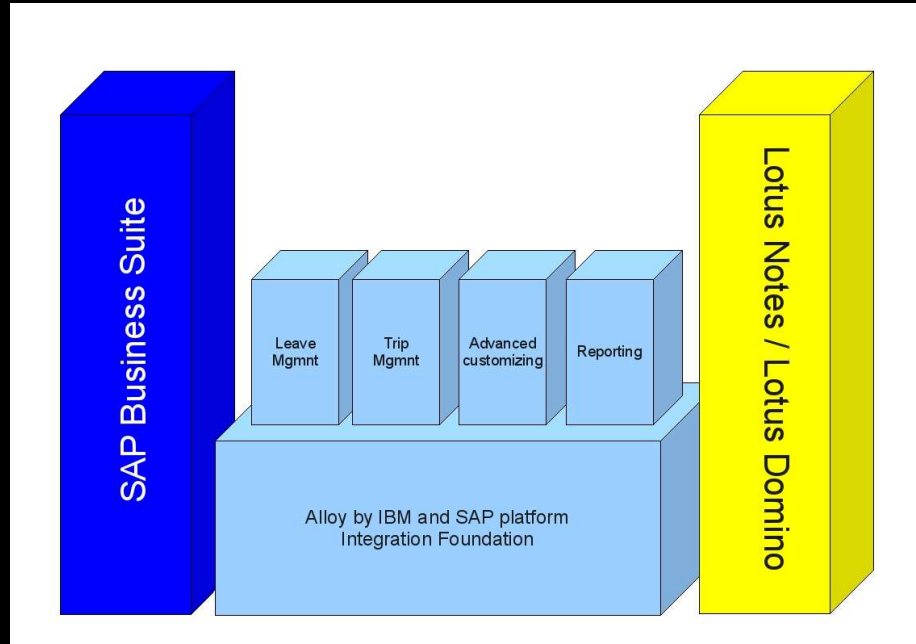
Architecture

“How it all works together ...”



Two Sides of Alloy

- Alloy acts as a **platform**
 - Provides integration for a set of SAP business objects
 - Transaction safeness
 - Single Sign On
 - Extensibility
 -
- Alloy Acts as a **Business Solution**
 - Provides Out of the Box business application together with Workflow support and reporting

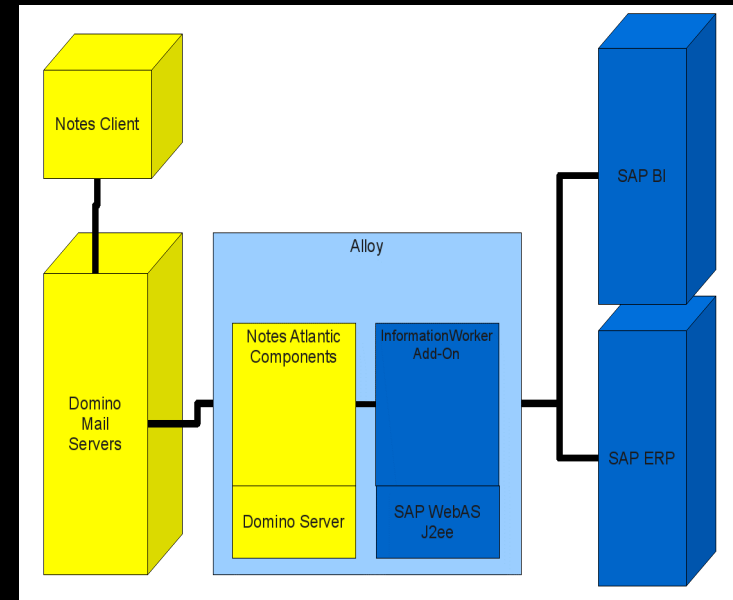
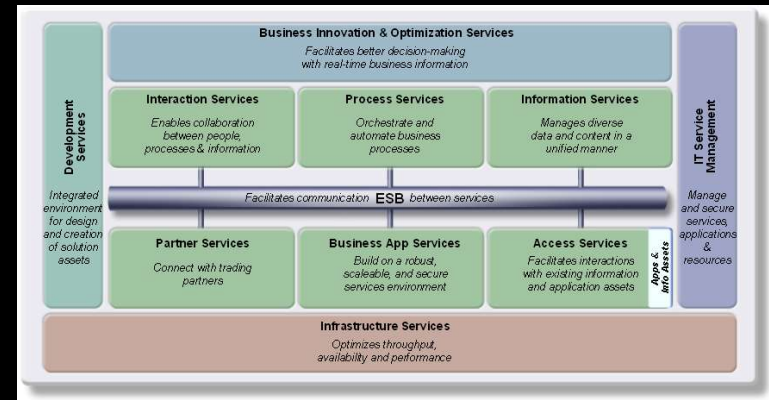


Alloy Extensibility is made easy through Architecture and its SOA compliance

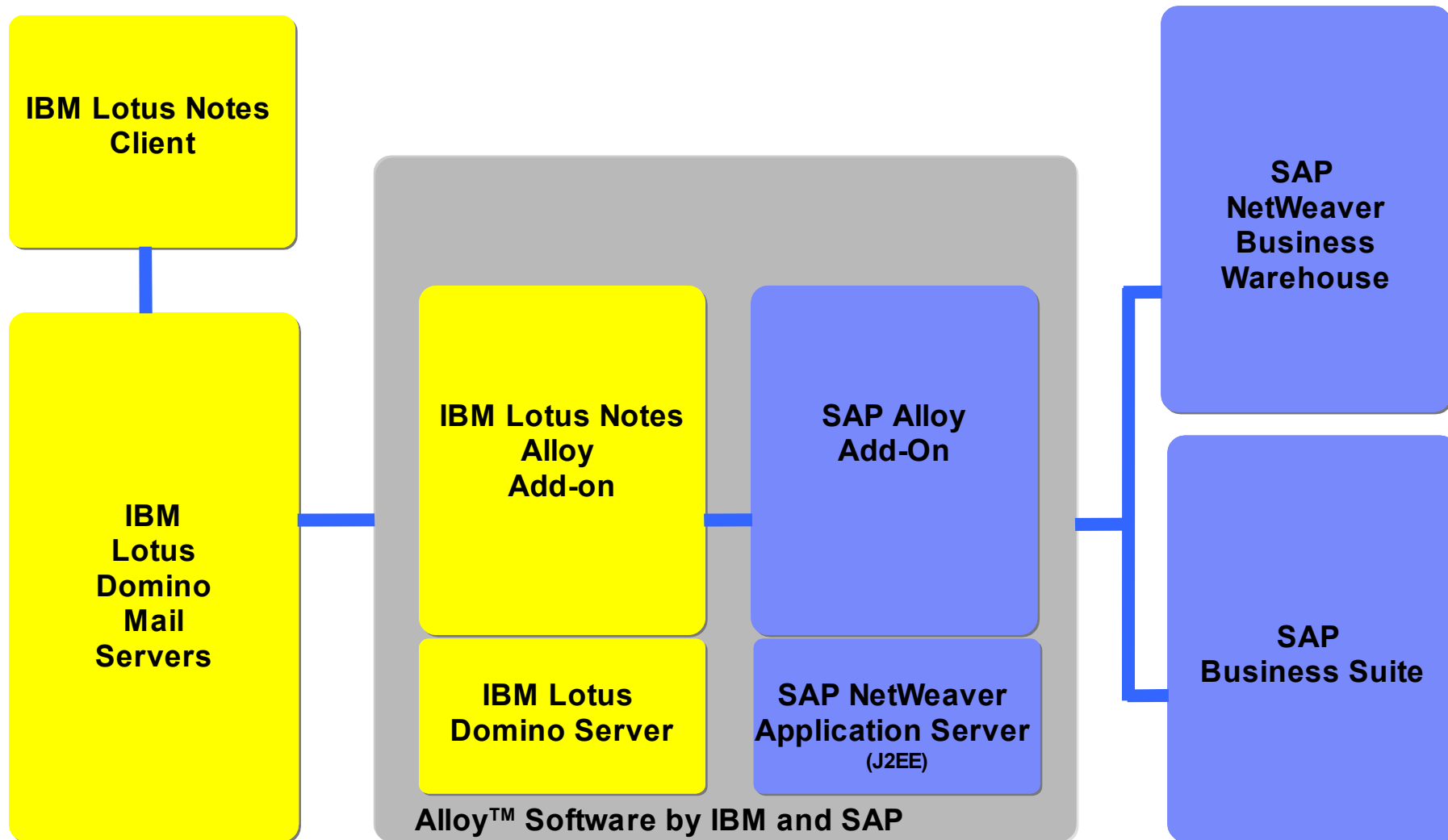
All communication in Alloy
between IBM Lotus Notes and
SAP Business Suite uses
WebServices

Transfer data format is XML, even
for storage of certain data
Metadata is either XML (for data)
or HTML (for the sidebar)

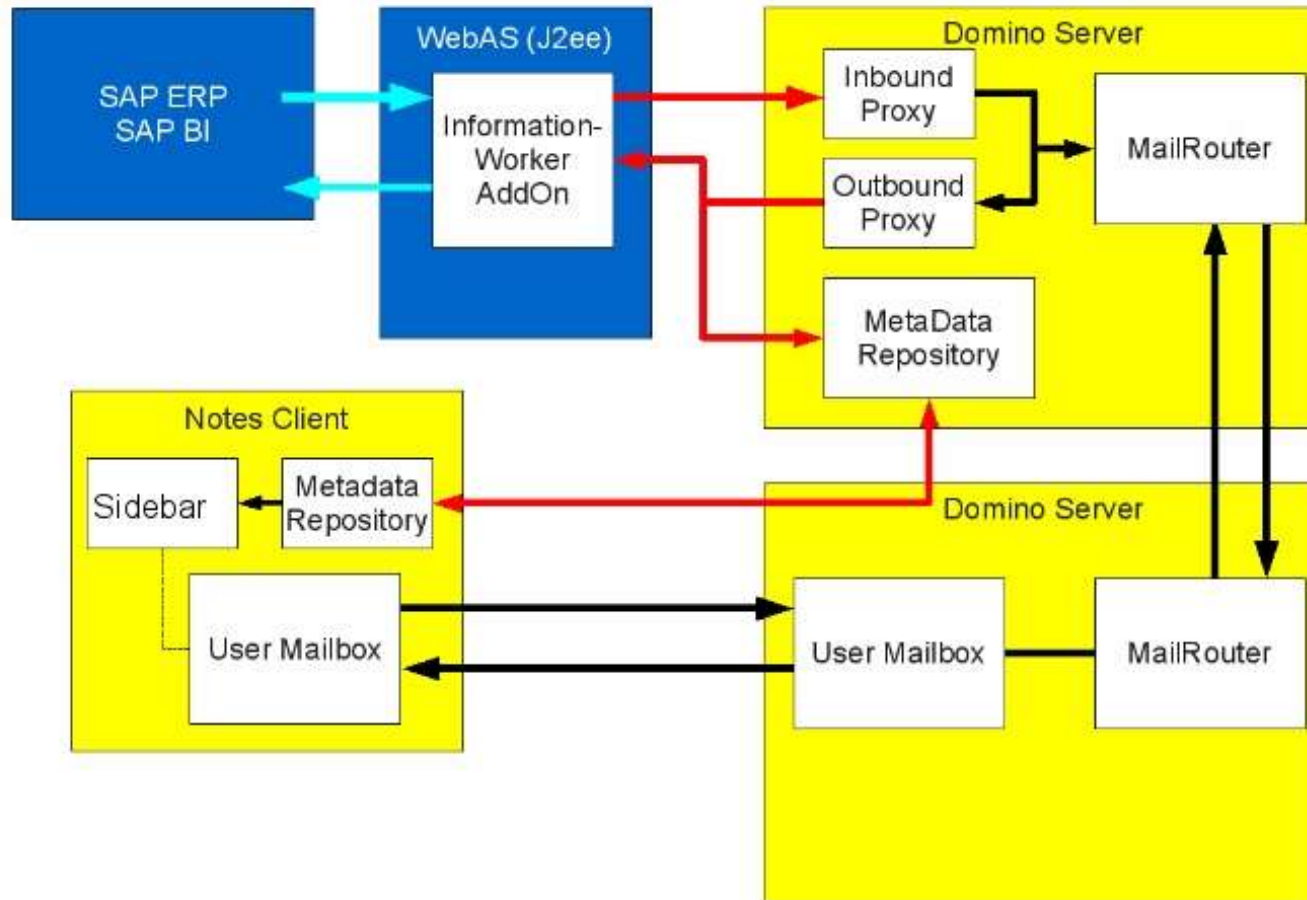
SAML is also based on
WebServices, basically strict
structure



Alloy 1.0 Architecture



The Architecture behind Alloy



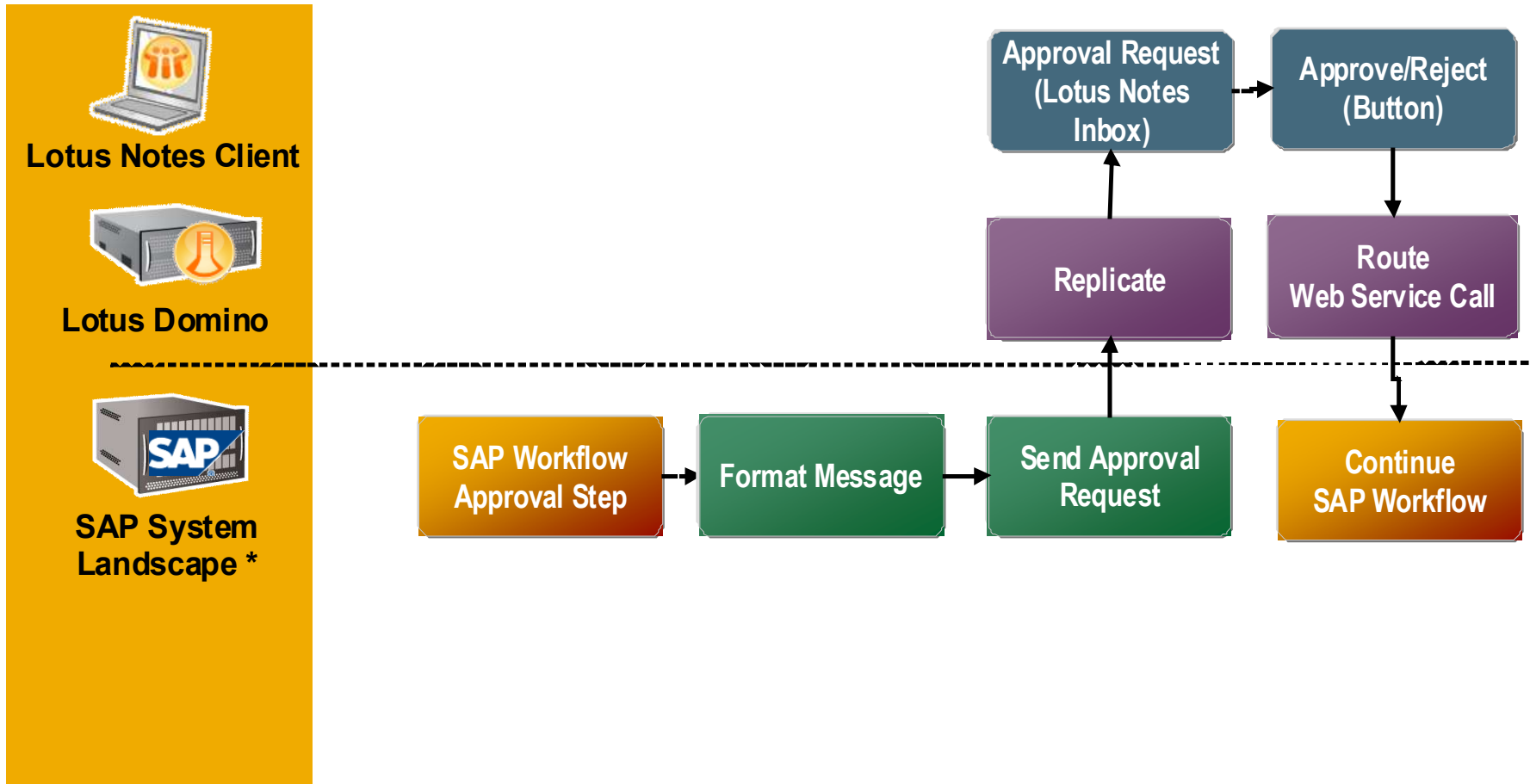
Alloy Metadata Handling

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- Alloy reads SAP configuration (e.g. Leave Types or Report Templates) and provides them to the user
 - ▶ Client updates automatically
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- The Sidebar Elements are stored in the Metadata repository, too
 - ▶ Provided in HTML which allows full customization and extension (e.g. Charts in the sidebar)



Alloy Workflow Approval Flow

- Not limited to SAP delivered approvals or decisions



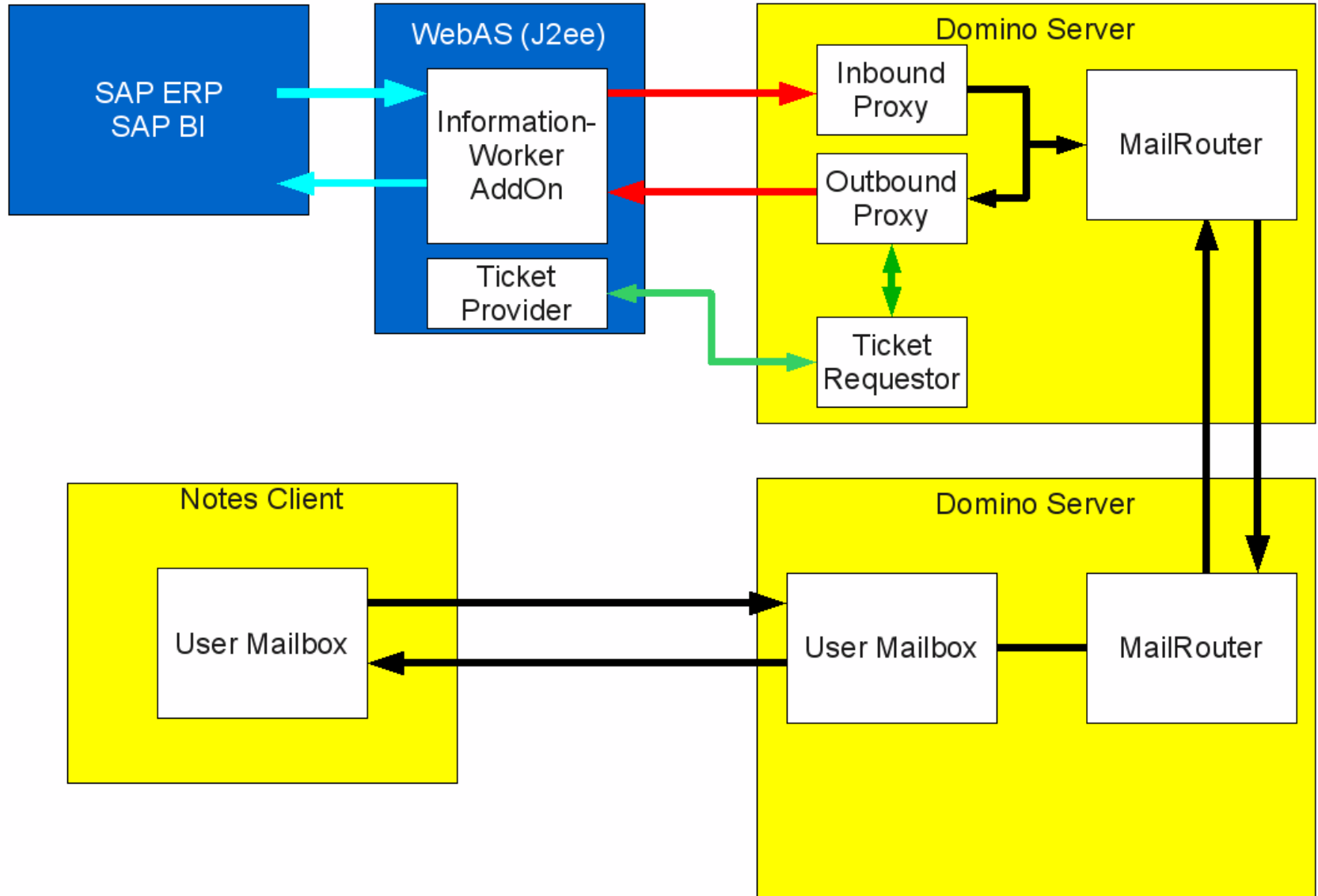
Single Sign-On

- Alloy leverages SAML (Secure Assertion Markup Language) to enable Single Sign-On between IBM Lotus® Notes® and SAP Business Suite

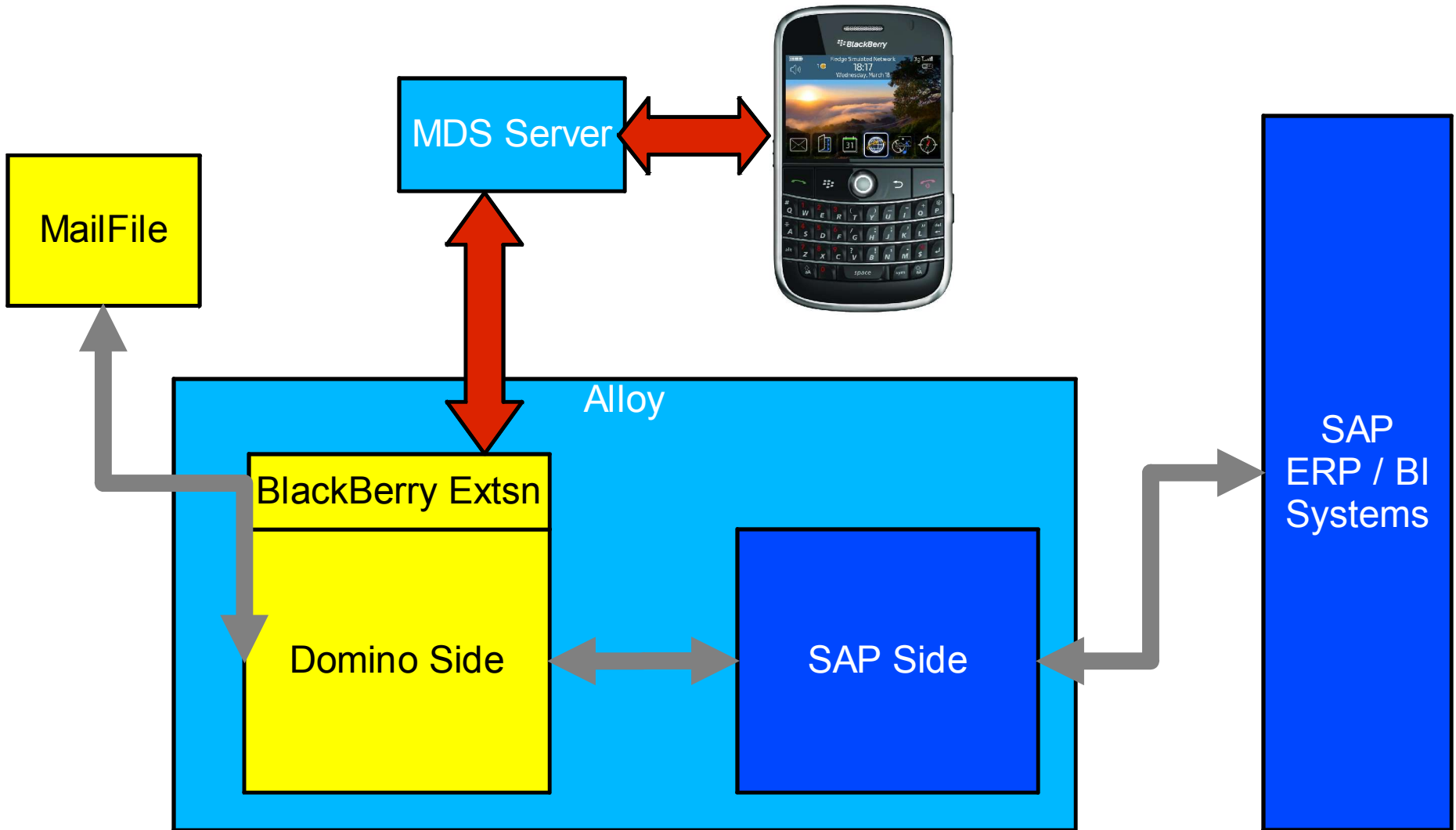
- Basic assumptions:
 - ▶ Lotus side and SAP side are in a trust association
 - ▶ If a user is authenticated to a IBM Lotus Notes Client / IBM Lotus Domino Server this authentication is also used for SAP
 - ▶ SAP UserName is maintained in Domino Directory as it is probably different from Notes Name

- Basic Flow of the Single Sign-on:
 - ▶ Notes object is signed by the user
 - ▶ Domino Server requests SAP Logon Ticket on behalf of the user using SAML
 - ▶ WebServices Call is done on behalf of the user with SAP Logon Ticket





Extending Alloy to the BlackBerry



Notes Technologies that enables us to build Alloy

- Alloy relies on a set of product capabilities from Domino and Notes
- New capabilities from Release 8:
 - ▶ **WebService Support** for Data Transfer between Lotus Domino and SAP Business Suite
 - ▶ **Sidebar Plugin** to render supporting data for a Business Object
 - ▶ **Widget Catalog** to allow easy provisioning of the Sidebar plug-in
- Previous capabilities
 - ▶ **Mail Routing** to establish communication to Client
 - ▶ **Template inheritance** to bring Alloy specific mail template extensions into production
 - ▶ **HTML** to define Layout of the sidebar



Deploying Alloy

- Deployment of Alloy happens in 2 parallel streams
- SAP Administrator
 - ▶ Setup of SAP WebAs (J2ee Server) [suggested]
 - ▶ Deployment of Alloy components
 - ▶ Configuration against SAP ERP / SAP NetWeaver BI
- Domino Administrator
 - ▶ Setup additional Domino Server [suggested]
 - ▶ Deployment of additional templates
 - ▶ Creation of Alloy Domino Databases
 - ▶ Setup of UserMapping for Single Sign-On
- Joint tasks
 - ▶ Connecting the two systems
 - ▶ Test connectivity



Deployment Options for Alloy

- Basically 2 deployment options are seen
 - Proof of Concept Deployments
 - ▶ SAP ERP/ SAP NetWeaver BI Servers are existing
 - ▶ Alloy (SAP WebAs / Domino Server) get deployed on one machine
 - ▶ Possible routing to additional Mail Servers in Domino Environment
 - Production Deployment
 - ▶ SAP ERP / SAP NetWeaver BI Servers or Instances are available
 - ▶ SAP WebAs gets installed on one Box
 - ▶ Domino Server to host Alloy components gets installed on one Box
 - ▶ Domino MailServer stay untouched



Alloy System Prerequisites for v1.0

IBM Lotus

- ▶ Lotus Notes 8.0.2 or above
- ▶ Lotus Domino 8.02 or above



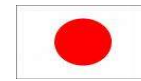
SAP

- ▶ SAP EPR 6.0 or higher
- ▶ SAP BI 3.5 or 7.0



Initial Languages

- ▶ English, German, French, Italian, Japanese



Platform Support

- ▶ Lotus Notes client – initially Microsoft Windows XP 32 bit and Windows Vista 32 bit
- ▶ Domino – initially Microsoft Windows Server



Alloy initial Deployment steps – SAP side

- Deploy and configure SAP Information Worker Add-on
- Establish trust between SAP Systems and SAP Information Worker Add-on
-
- Perform configuration in the SAP System (Alloy IMG)
 - ▶ For Reporting maintain report data for the report catalogs
 - ▶ For custom workflows configure Workflow Decision Management



Alloy initial Deployment steps – Domino Side

- Addition of Alloy Design Elements to mail8.ntf
- Update of MailBox Design
- Setup of Sidebar plug-in in Widget Catalog
- Creation of Domino Policies for ECL updates, notes.ini parameters
 - ▶ \$NDERPMDWS_URL=http://sapdomqe.notesdev.ibm.com/NDERPws.nsf/MetaDataService?openwebservice
 - ▶ \$NDERPMID=Alloy Mail In Database@Hannover
- Configuration of Alloy Databases on the server
- Setup of SSL on Domino Domino Server hosting Alloy (SAML requirement)





IBM Software Group

Custom Development

“How to make it work for you ...”



The key development / design Patterns are simple:

The business process remains at one place – The ERP System

Business Configuration is driven through ERP System only

No rebuilding of the SAP System / UI if not necessary

Open and extensible concepts on Notes Side – so Notes developer can add functionality

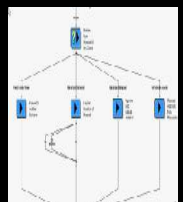
Quick Guide to Expose Workflow Decisions in Alloy

~15 Min.

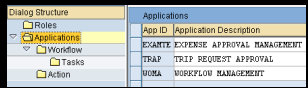
Step 1

Configure SAP Backend

IMG and Custom Handlers



SAP Business Workflow



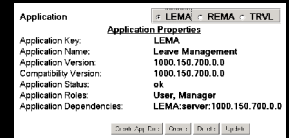
SAP Backend

~5 Min.

Step 2

Configure IBM Lotus Domino Server

Configure IBM Lotus Domino Server with the application id and bound type created in step 2



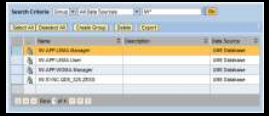
IBM Lotus Domino Server

~10 Min.

Step 3

Configure SAP Alloy Add-on

The IBM Lotus Domino configuration generates a user role on SAP Alloy Add-on. Assign user to this role.

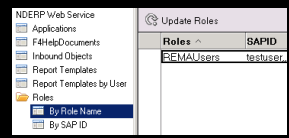


SAP Alloy Add-on

Opt: Step 4

Magnify Decision UI

Magnify and enrich the decision UI with additional information in the decision body and the Alloy sidebar



IBM Lotus Domino Designer

Configure Workflow to use Alloy

New Entries: Details of Added Entries

Table View Edit Goto Selection Utilities(M) System Help

Dialog Structure

- Roles
- Applications
 - Workflow
 - Tasks
 - Action

Application ID: ZMATCR

Workflow ID: WS99900404

Sub-Workflow ID: WS99900404

Workflow Task ID: TS00008267

Workflow step: 4

Groupware Object Type: TASK Task

Recipient Role type: APPROVER

Tasks

Sub-Workflow Type: 0 Standard Workflow

Task Agent's Role type: APPROVER

GPV Bound Item type: MaterialMasterCreation/Workflow.ApproverTask

Configuration of the WF Details is performed and the BoundItemType added

Register Workflow on Lotus side

The registration is done in the NDERPWS.nsf Application by mapping to the Application Key and the BoundItemType (Maps to definition in the SAP System)

Application: - IBM Lotus Notes

File Edit View Create Actions Text Tools Window Help

Home x NDERPws - Applications x Application: x New Topic x

Default Sans Serif 10 b i

Save & Close Cancel

Application Properties
* Required

Application: Customized Decisions

Application key *: ZMATCR

Application name (Default)*: My Material Creation Workflow Import Export

Application Locales:

Application Name:

Application version: 1000.150.700.0.0

Compatibility version: 1000.150.700.0.0

Application status: ok

Application roles: Manager

Application dependencies: WOMA:server:1000.150.700.0.0

Bound item type *: MaterialMasterCreationWorkflow.ApproverTask

Form name: (GenericCustomApprovalWorkflow)

Status update form name:

Custom agent:

Form name

IBM DE

Generate Elements for Alloy in Notes

And the field names as they are coming from SAP and appear in the Notes Document. The Fields should be set to computed to prevent editing

The screenshot displays the IBM Lotus Domino Designer interface for a subform titled "MaterialMasterCreationWorkflow.ApproverTask". The main workspace shows a "Newly created material" section with the following fields:

- ID : ZMaterialNumber
- Name : ZMaterialText
- Group : ZMaterialGroup
- Net Weight : ZMaterialNetWeight
- Weight Unit : ZMaterialWeightUnit
- Created by : ZSenderName

The "ID" field is highlighted with a red box. The "Outline" pane at the bottom left shows a tree view of the subform's structure, including "ZMaterialNumber (Field) : Value". The "Properties" pane at the bottom right shows the "Value" property of the "ZMaterialNumber (Field) : Value" field, which is set to "WorkflowContainer00ZMaterialNumber".

The SAP approval Item is available in Lotus Notes

This is how the result in Notes will look like – therefore the WF needs to be registered in Lotus Notes

The screenshot displays the Lotus Notes application window titled 'Arla Material Workflow for Jens Ole Lassen - IBM Lotus Notes'. The main content area shows an email-style notification for 'Arla Material Workflow' with the following details:

- From: Jens Ole Lassen
- Status: In Process
- Updated on: 13-01-2009

The body of the notification contains the text: 'Choose one of the decision options given. This completes the processing of this step. Before you make a decision, you can display the attachments and objects which have been attached to the user decision. You can also create your own attachments. If you choose Cancel, the user decision remains in your inbox for processing.'

Below the text, there is a section titled 'Newly created material:' followed by a table:

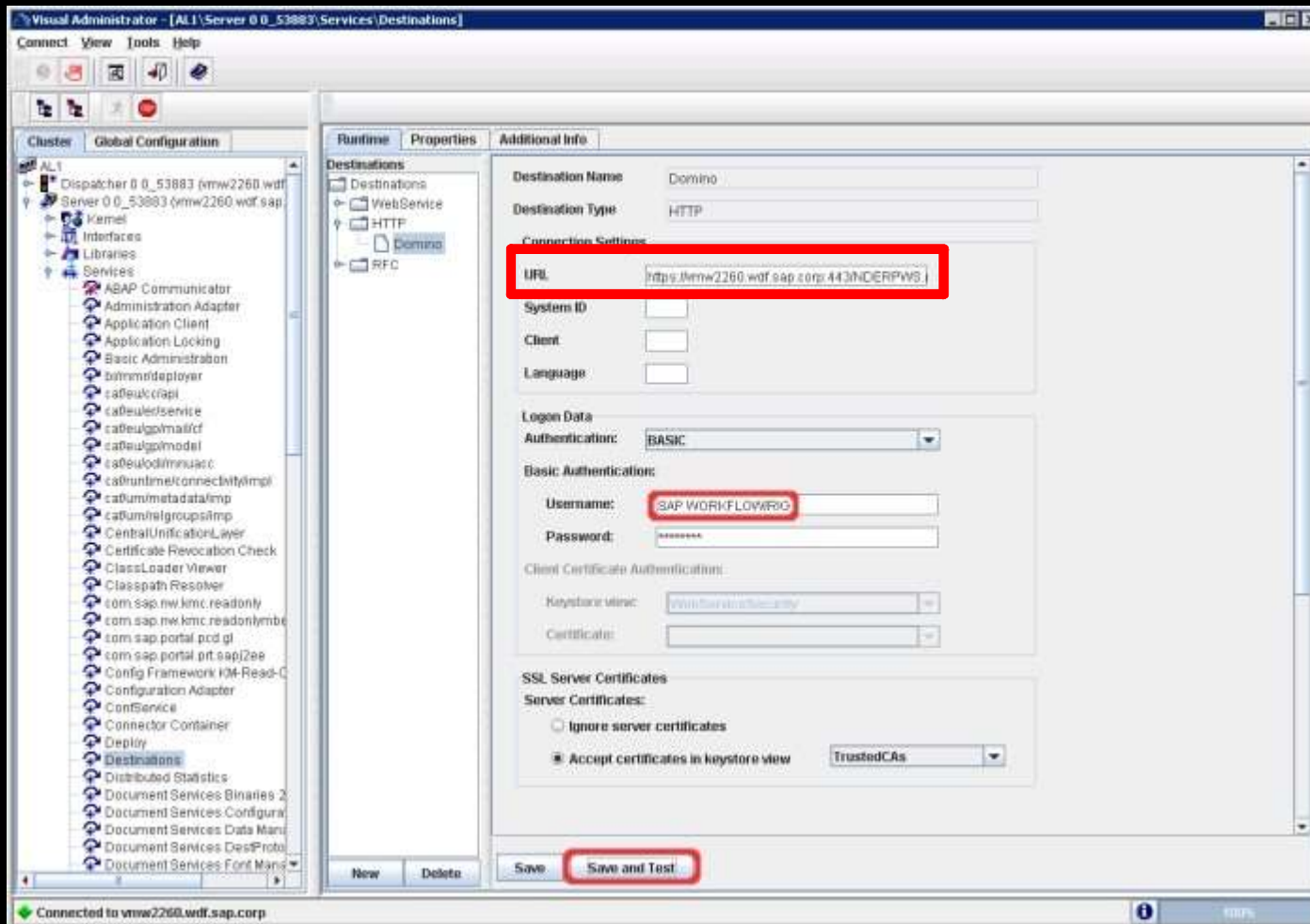
ID:	ARLA-1
Name:	Cheese
Group:	000017516
Net Weight:	5,000
Weight Unit:	KG
Created by:	Paul Battey/PBAT/GB/Ar...

A tooltip is visible over the 'Created by' field, showing a profile picture and the text: 'Paul Battey is away or not using the computer now. Paul Battey/PBAT/GB/Arla Foods - paul.battey@arlafoods.com Right-Click for More Options...'

The right-hand side of the interface features a 'Feeds' panel with sections for 'My Widgets', 'Day-At-A-Glance', 'Sametime Contacts', 'Atlantic', 'My Approvals (2 of 2)', 'Delivered Reports (2 of 2)', and 'My Leave Summary'. The 'My Approvals' section lists two items from 'Jens Ole Lassen' dated '13-01-2009' and includes a 'View All Requests' link. The 'Delivered Reports' section includes links for 'Existing Objects' and 'Display Absence Quota Information - JOL'. The 'My Leave Summary' section includes a 'View All Reports' link and a 'A joint effort by:' logo for SAP and IBM.

The bottom of the screen shows the Windows taskbar with the Start button, several open applications, and system tray icons including the date 'DA', '100%' battery, and the time '16:12'.

Administration SAP Side: Server



WS Endpoint in
Domino

Admin user name for
Requests (inbound
for Domino)

Administration Lotus Side: Server

Alloy extends the standard mail8.ntf with a set of additional DesignElements

Reason for 8.02 is beyond performance the fact that the 8.02 mail template already holds Alloy Design elements – so nothing is overwritten

Role out of the Alloy Design is very easy and done via designer task
Other tasks are normal Domino Admin tasks

Sign Design Elements

Setup of Alloy Databases / Deployment of jar Files

Setup the username mapping for the SSO

Tivoli Directory Integrator can help

Administration Lotus Side: Server

Server Properties Client Properties	
Requests to SAP J2EE Server	
SAP J2EE server address:	https://sapj2eeqe.notesdev.ibm.com:50001
Retries before reporting error:	
Time between retry attempts:	
SAP Name Mapping	
Map SAPID to:	<input checked="" type="radio"/> Use sap=statement in User name or Short name field <input type="radio"/> Use first name specified in a form field
SAML Settings	
Source ID:	0123456789
SAML issuer:	www.ibm.com
SAML retries:	2
Not before (min):	
Not after (min):	
Connection time-out:	20
Socket time-out:	20
System Landscape Directory (SLD) Registration	
SLD server address:	https://sapj2eeqe.notesdev.ibm.com:50001/sld/ds
Registration user name:	j2ee_adm_at3
Registration password:	*****
Cluster Information	
Is Cluster:	<input type="radio"/> Yes <input checked="" type="radio"/> No

SAP J2ee Server Address

SAML User Mapping

SAML Security Settings

SLD Registration

Clustering (targeted SP1)

Administration Lotus Side: Server

Server Properties	Client Properties
Client Configuration	
Mail In Database:	Atlantic Mail In Database@Hannover
Metadata Fetch Schedule	
Client Configuration:	Every 30 Minutes
Report Catalog:	Every 20 Minutes
Roles:	Daily at 02:00 AM
Leave:	Daily at 04:00 AM
Trip:	Daily at 05:00 AM
Related Reports:	Daily at 03:00 AM
Sideshelf:	Daily at 02:00 AM

Mail-In Database Name

Metadata Sync schedule

Administration Lotus Side: Client

Deployment of Alloy on the Client is very easy
Sidebar component needs to be installed

Either through

SW rollout

Update Site

Widget Catalog

The Sidebar creates the Metadata NSF and initiates the sync for the initial use of Alloy
Mailfile changes come down on the Client through Replication
Client holds 2 Notes ini parameters in Alloy 1.0 that need to be set

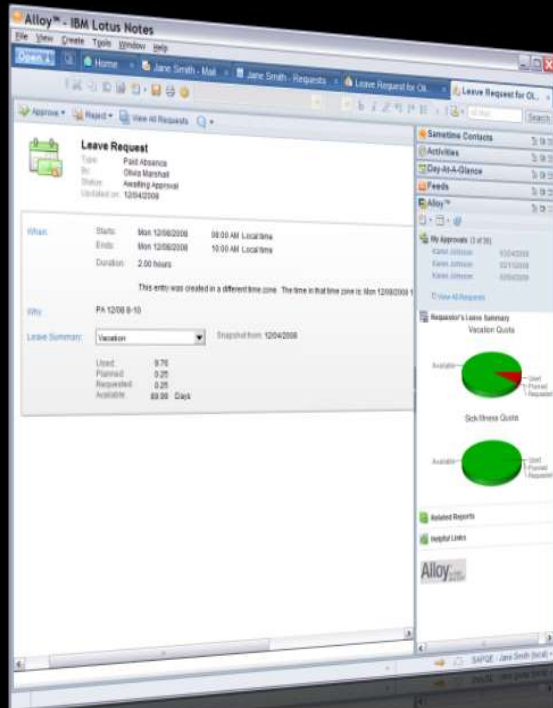
Client side Communication endpoints

`$NDERPMDWS_URL` [*URL for Metadata Sync*]

`$NDERPMID` [*Mail-In DB for Requests*]

Management per Domino Policies

Customizing: Adding Charts to the sidebar



As the Sidebar Widget is simply constructed out of HTML fragments
In this example

Google Charts are added to display Business Data

HTML fragments are stored in Metadata repository

A simple Notes Agent overrides the HTML Data and constructs the HTML code to embed the charts. Data is read from the Notes Document

In general any data from the workflow container is available either as Notes field or in a base64 encoded XML stream inside the Notes Document

Comparison of Alloy and Duet

Feature	Duet	Alloy	NaSs
Mission Statement	One size fits all	integration foundation that keeps the balance between out of the Box content and reusable patterns	Notes based solution
Architecture	Duet Server, consisting of WebAs and MS Server	Alloy relies on WebAS and Domino Server. No new Server developed	Notes Server only, no WebAS
Scenarios	10 announced, not all delivered yet http://www.duet.com/about/features/index.aspx	3 main scenarios: Leave Management, Trip Management, Reporting and Analytics	7 basic scenarios
extensibility	None – scenarios can't be customized nor extended	Open foundation, Workflow is a generic pattern that allows any decision step from Business workflow to be exposed to Notes (done via Abap Workbench / Domino Designer)	via Lotus Script / domino Development
ERP supported	ERP 2005	ERP6 SPS17	R/3 4.6 and 4.7
BI Supported	3.5 and 7	3.5 and 7	none
WebAS preReq	WebAS 6.40	WebAS 7	none
Client PreReqs	Office 2003 Enterprise Edition SP2, .net framework, SQL Server	Notes 8.02	Notes 7.02
other Server preReqs	SQL Server 2003, Exchange 2003, Active Directory	none	none

Reference materials

- On the Internet
 - ▶ <http://www-01.ibm.com/software/lotus/products/alloy/> - on IBM.com
 - ▶ <http://www.sap.com/solutions/alloy/index.epx> – on SAP.com
- Documentation and Forums
 - ▶ IBM wikiA
 - ▶ SAP SDN – search on Alloy

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