IBM SOA Architect Summit

SOA on your terms and our expertise
Actualities and Future Perspectives of SOA in Hungary
from technology perspective

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SOA projects in Hungary – as entry points

- „Front-End” solution
- Delivering standardized „SOA Framework”
- Workflow – Process Automation - BPM
- Classical application integration – introducing ESB
- SOA Governance - from Services perspective
Agenda

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Front-End projects

Implementing the „Unified desktop”

The goal is:
To implement a standardized (usually portal-based) view about the customers / services / contracts / ..... to support the productivity of marketing, multi-channel sales, x-selling , collaboration of employee, front-office, ...

One of the most complex project, requires:

- Integration not only on the desktop but (almost) all the back-ends
- End-to-end integration
- Additional solutions:
  - Content management
  - Business Process Engine
  - Unified authentication / authorization
  - Monitoring
  - ...

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The goal is:
To implement a standardized **application integration framework** what consist of:

**Toolkits / classes / services**
- Components for reuse in an effective development
- Pre-defined interfaces, attributes
- Business objects / Messages

**Methodologies**
- Development / Modeling regulations
- Testing methodology (performance / functional / security ...)
- Defines the specification process between departments

**Service development lifecycle**
- Service identification / definition process
- Versioning of the services assets / interfaces
- Relations with the service owners

**Provides unified solutions for centralized**
- Authentication
- Logging
- Reporting
- ...

**Unified application integration**
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Workflow projects – **Process Automation**

As a foundation of Business Process Management

- **Financial Management** (SOX Compliance)
- **Product Lifecycle Management** (Category Line Extension)
- **Marketing, sales, and services** (Contact Center Optimization)
- **Supply Chain** (Inventory Management)
- **Human Capital Management** (Employee On-Boarding)
The Fundamental Challenge

Manual Steps and Ad Hoc Integration
(Repetitive Data Entry, Paper Approval, ETL, FTP, P2P, etc)

- No formal linkage between business process and application system
- No capability to **manage and measure** the business process
- An inflexible IT system that **does not support changes in the process**
SOA and Process Automation

Order Fulfillment

Processes

Reusable Components

Services

Systems and Applications

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SOA and Process Automation

Consumers

Business Process
Composition; choreography; business state machines

Services
atomic and composite

Service Components

Operational Systems

Service Provider

Service Consumer

Channel

B2B

Integration (Enterprise Service Bus)

QoS Layer (Security, Management & Monitoring Infrastructure Services)

Data Architecture (meta-data) & Business Intelligence

Governance

Packaged Application

Custom Application

OO Application

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The Business Process Management Lifecycle
Flexible IT through composable services and processes

- Discover
- Construct & Test
- Compose

- Gather requirements
- Model & Simulate
- Design

- Assemble

- Integrate people
- Integrate processes
- Manage and integrate information

- Deploy

- Manage applications & services
- Manage identity & compliance
- Monitor business metrics

- Model

- Financial transparency
- Business/IT alignment
- Process control

- Manage

- Governance & Processes

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BPM with SOA Capabilities from IBM

- Business Modeling
- Business Rules
- Collaboration
- Process Choreography
- Business Monitoring
- Analytics and Optimization

BPM Core Business Expertise from IBM and Partners
- Process Knowledge and Industry Expertise
- Methodology and Governance
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Application Integration
Connectivity & Reuse with ESB

The goal is:

To introduce the „universal integration bus“ ....

ESB
- Message routing
- Message transformation
- Event services
- Wide range of protocol / standard support
- Robust / high performance
But there is a problem with the way ESBs are being deployed…
… IT analysts are identifying a proliferation of ESBs

“Eighty percent of large companies will have ESBs or similar SOA infrastructure products from three or more vendors in 2009 (0.7 probability)…”

“…but only half of all large companies will apply a systematic, federated approach to managing their disparate SOA domains and ESBs in 2009 (0.7 probability).”


The ESB companies don’t want…but sadly are getting

The ESB companies need
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Introducing Service Registry & Repository

*IT Governance – governing the key assets*

This could become…

*The promise of SOA*

… like this

*A pile of services*

… and so would go the promised benefits of SOA
Proper SOA governance answers customer questions about their SOA

**What is IT governance?**
Establishing decision making rights associated with IT
Establishing mechanisms and policies used to measure and control the way IT decisions are made and carried out

**What is SOA governance?**
Extension of IT governance focused on the lifecycle of services to ensure the business value of SOA

**Why SOA Governance matters?**
- Realize business benefits of SOA
  - Business process flexibility
  - Improved time to market
- Mitigate business risk and regain control
  - Maintaining quality of service
  - Ensuring consistency of service
- Improved team effectiveness
  - Measuring the right things
  - Communicating clearly between business and IT
What is a registry … a repository?

**Registry?**
Contains information about services such as:
- Service interfaces
- Descriptions
- Parameters

**Repository?**
Stores information about the nature of service usage

An integrated Registry / Repository Solution is needed to govern and manage SOA for maximum value.

- Business process vitality
- New value through reuse of assets
- Improved connectivity
- Closer alignment of IT to business
- Business Flexibility
SOA Governance and Service Lifecycle Management will be key to achieving overall SOA success.
Mapping to the IBM Products

- Rational Software Architect
- Rational Application Developer
- Rational Function Tester
- Rational Performance Tester
- Rational ClearQuest / ClearCase
- WebSphere Portal
- Enterprise Service Bus
- Interaction Services: Enables collaboration between people, processes & information
- Process Services: Orchestrates and automates business processes
- Information Services: Manages diverse data and content in a unified manner
- Development Services: Integrated environment for design and creation of solution assets
- Business Services: Supports enterprise business processes and goals through businesses functional service
- Partnership Services: Connect with trading partners
- Business App Services: Build on a robust, scalable, and secure services environment
- Access Services: Facilitate interactions with existing information and application assets
- Infrastructure Services: Optimizes throughput, availability and utilization
- WebSphere BPM Suite
- WebSphere Business Modeler
- WebSphere Integration Developer
- WebSphere Process Server
- WebSphere Business Monitor
- Management Services: Manage and secure services, applications & resources

WebSphere ESB
WebSphere Message Broker
WebSphere DataPower Integration Appliance
WebSphere Service Registry & Repository
WebSphere MQ
Thank You

 شكراً

 धन्यवाद

 Спасибо

 बापुकुन

 चुक्का

 Grazie

 Danke

 Grazias

 Merci

 Köszönöm

 감사합니다

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