



IBM SOA PoT

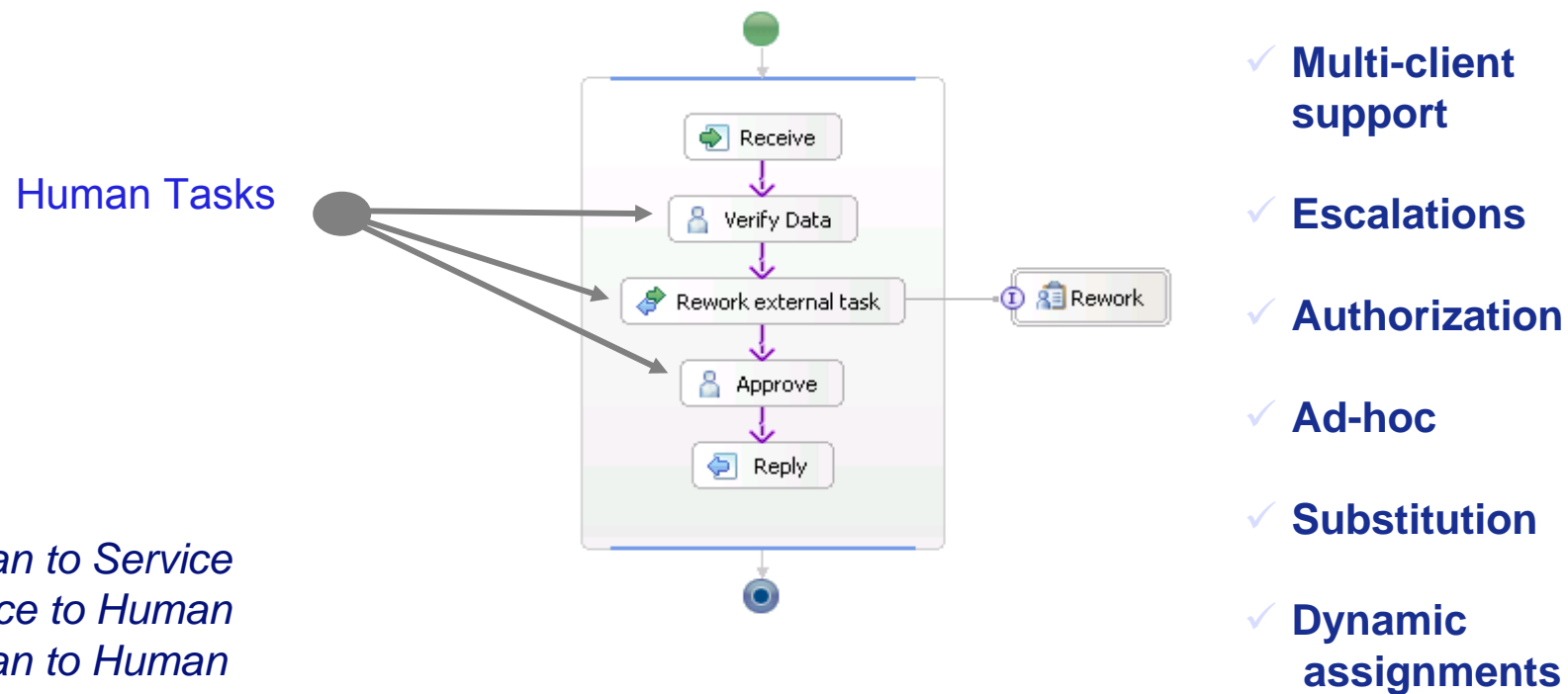
## C2070 Human Tasks



## The Construct of a Human Task

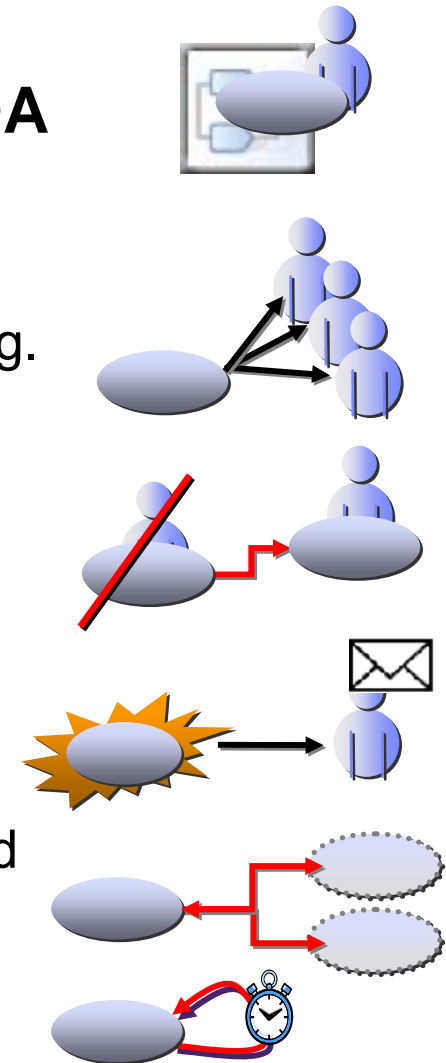
*Capabilities for creating powerful business scenarios that require human intervention*

Create powerful human-centric processes



## Human Task Manager - Supporting all aspects of human interaction

- **Full integration of human workflow into SOA**
- **Rich task assignment capabilities**
  - assign work using flexible **staff queries**
  - federate multiple **staff/organization directories**, e.g. LDAP
  - Ability for **dynamic task assignment**
  - **Re-direct work** to substitutes in case of absence
- **Multi-level escalation mechanisms**
  - **Notification** through e-mail and notification tasks
- **Support for ad-hoc human collaboration**
  - **Create human tasks on-the-fly**, extend pre-defined process models dynamically
  - **Follow-up** of manual tasks



## Dynamic Human Workflow Concepts

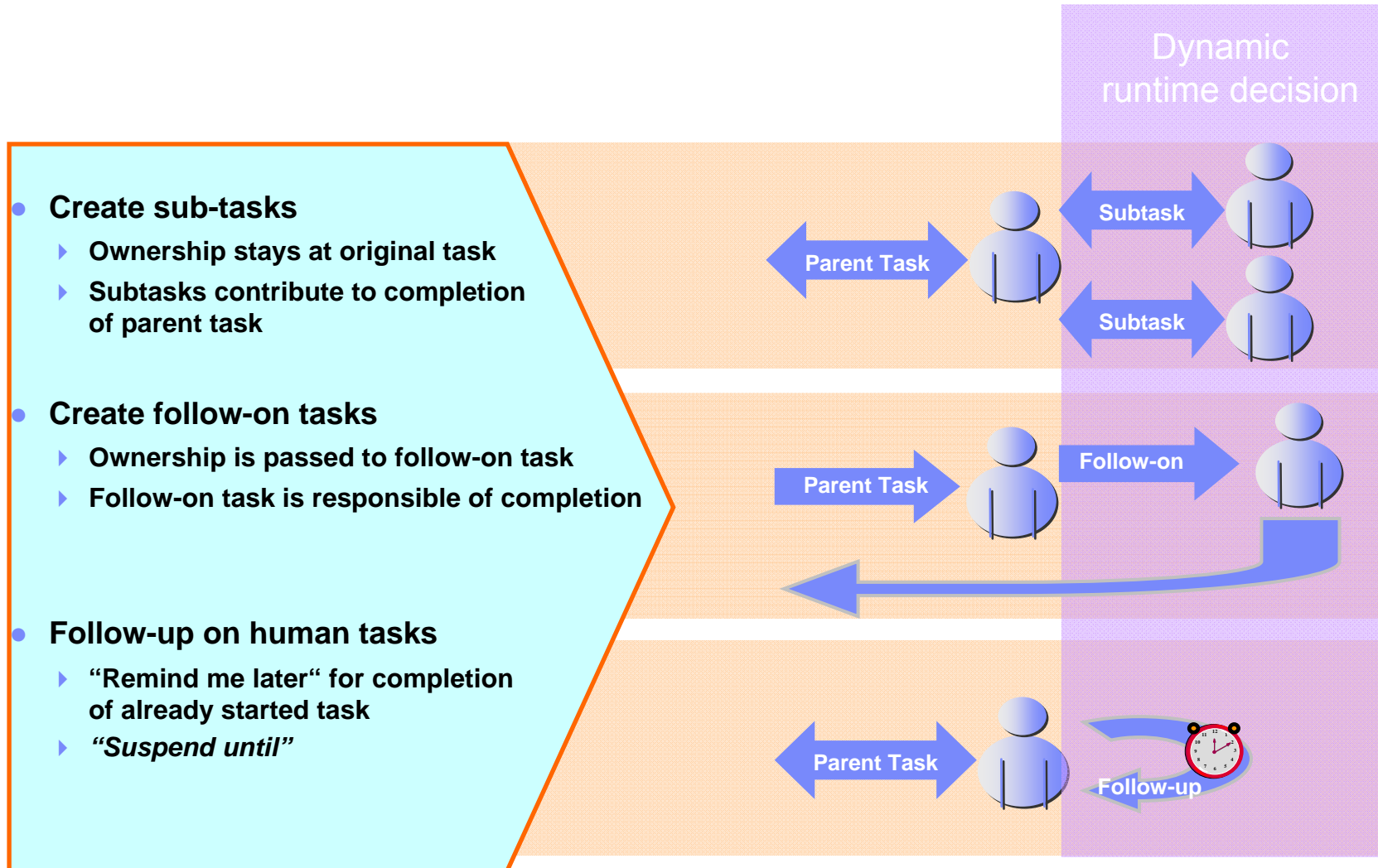
*Adding value to human-centric BPM*

- **Assign work dynamically using runtime information or staff relationships, e.g.**
  - ▶ Assign to user that started the process, then escalate to user's manager in case of escalation
  - ▶ Exclude user that approved previous step (4-eyes principle) in following (approval) step
  - ▶ Assign to user(s) based on business data, e.g. an external service providing the names of responsible users
- **Escalate human tasks to avoid service level violations...**
  - ▶ ..if work has not been started in time
  - ▶ ..if work completion is overdue



# Ad-Hoc support in WebSphere Process Server

*Allowing for dynamic changes in human workflow scenarios*



# Business User Client Generation for Human Workflows

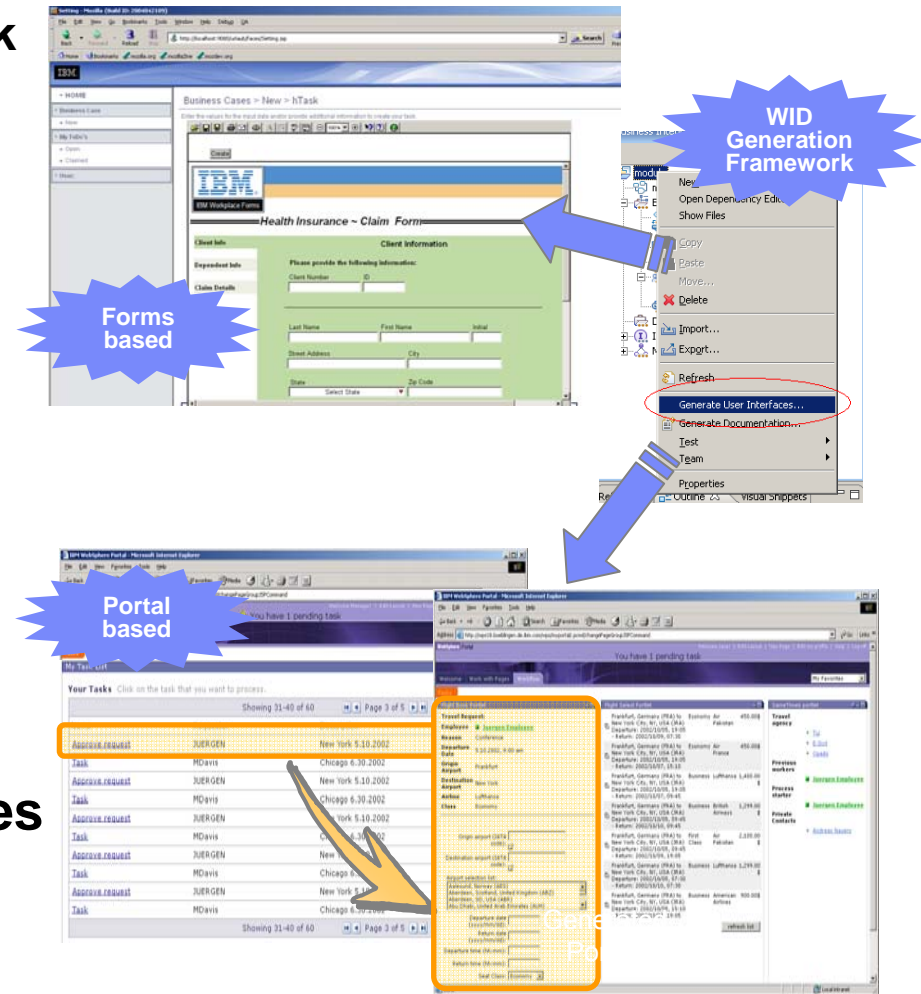
*Integrated generation framework for workflow clients*

- Out-of-the-box client generation for human workflows with just one click

- ▶ JSP-based client
- ▶ WebSphere Portal client
- ▶ Forms-based client

- Benefits:

- ▶ Click & Use for immediate results
- ▶ Focus: Business user
- ▶ Possible starting point for customers to add more features or create own client

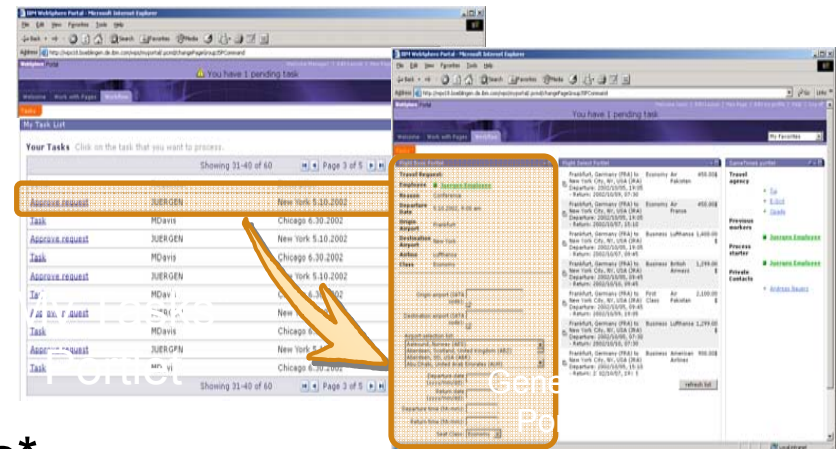


## Business User Clients: Forms support

- **Key Use Cases, where customer....**
  - ..already has forms and wants to get started with business integration (business processes, human tasks).
  - ... already has business processes with human tasks and wants to create forms as a front-end for them.
  - ... already has business processes with human tasks and forms and wants to combine them.
- **Support to edit Workplace Forms directly in WID and to display Forms in a web browser „out of the box“**
- **Things to be aware of**
  - **Tooling: Workplace Forms API bundled with WID, no limitations**
  - **Server: IBM Workplace Forms is not bundled with WPS. Customer needs to purchase separate IBM Workplace Forms license.**

## Business User Clients: Portal support







- **WebSphere Portal Server integration:**
  - Generates portlets for handling human tasks.
  - Used in combination with WebSphere Portal's "My Tasks" Portlet
- **Key Use Case:**
  - Customer uses MyTaskList portlet and wants to create portlets for human tasks
- **Things to be aware of**
  - Requires Portal Toolkit to be installed with WID
  - Works in combination with "My Tasks" Portlet
  - Only supported for To-do Tasks\*



\*formally "participating tasks"



## Human Tasks Component

- **A stand-alone Component not restricted to invocation form a BPEL Process**
- **Machine to Human**  → 
  - A Component creates a work item for Human interaction
- **Human to Machine**  → 
  - Human interaction invokes a Component (i.e. Business State Machine)
- **Human to Human**  → 
  - Human interaction invokes a Component which creates a work item for another Human

**New Human Task**

**Human Task: Select Type of Interaction**

There are several kinds of human tasks. Select the appropriate interaction for your task.

<input checked="" type="radio"/>	<b>To-do Task</b>	Applies the service-to-human scenario: A service schedules work for a human.
<input type="radio"/>	<b>Invocation Task</b>	Applies the human-to-service scenario: A human uses a service.
<input type="radio"/>	<b>Collaboration Task</b>	Applies the human-to-human scenario: A human task is created by a human and assigned to another human. Neither human has a relationship with a service.

## Human Task Editor

Human Task

- **General Properties**
  - Staff Plug-in Provider, Calendar, etc..
- **Permission Settings**
  - Specify Verb and Parameters for Roles
- **Client Settings**
  - Web, Portal interface
- **Escalations Settings**
  - Defines escalation actions
    - Notification
      - e-Mail
      - Human Task
      - Event
    - Priority Aging

The screenshot shows the Human Task Editor for a task named 'FinalApplicationReviewFolloOnTask'. The interface is organized into several sections:

- Collaboration Task:** Shows the task name and display name.
- Service Interface:** A table listing the interface, operation, input, and output.
 

Interface	FinalApplicationReview
Operation	finalApplicationReview
Input	Input
Output	Input1
- People Assignment (Originator):** Shows 'Potential Creators' set to 'Everybody'.
- People Assignment (Receiver):** Shows roles like Administrators, Potential Owners, Editors, and Readers, all set to 'Everybody'.
- User Interface:** Lists client types such as 'IBM Lotus Forms client', 'Business Process Choreographer Explorer', and 'Portal Client'.
- Escalation:** Shows three escalation points: 'Ready' (with Escalation1 and Escalation4), 'Claimed' (with Escalation2), and 'Subtask started' (with Escalation3).

## Lab Objectives

- **Add a task to the BPEL process**
- **Integrate business processes end-to-end**
- **Include human tasks with automated business processes**
  - **Assign the right work to the right people at the right time**
  - **Human task must be repeatable, reusable, auditable**
  
- **Role: Integration Developer**
- **Tools : WebSphere Integration Developer**

## What are we going to do in the Lab?

- **Define the Interface for the new 'Generate Acceptance' task**
- **Add the GenerateAcceptance Task to the SimpleAccountVerification BPEL Process**
- **Add the implementation for the new Generate Acceptance task**

## What are we going to do in the Lab? ..... Cont

- **Create a Human Task to start the process**
- **Convert the Pricing and Approval Java component to a Human Task**
- **Generate a web client for the Start Process Human Task**
- **Generate a web client for the Pricing and Approval Human Task**
- **Retest the SimpleAccountVerification process**
- **Use the Human Task client to start the process**
- **View the Process State**
- **Use the Human Task client to perform Pricing and Approval**

# Labs 9 & 10

## 45 Minutes

# Thank You

