

BPM OpenMic 之

IBM Business Process Manager 7.5 产品与技术支持介绍

BPM 技术支持 唐嘉 tangjia@cn.ibm.com

Agenda

- BPM 7.5 产品概述
- BPM 7.5 中 WPS 和 WLE 的集成开发
- 如何实现向 BPM 7.5 的迁移?
- BPM 7.5 在中国的技术支持

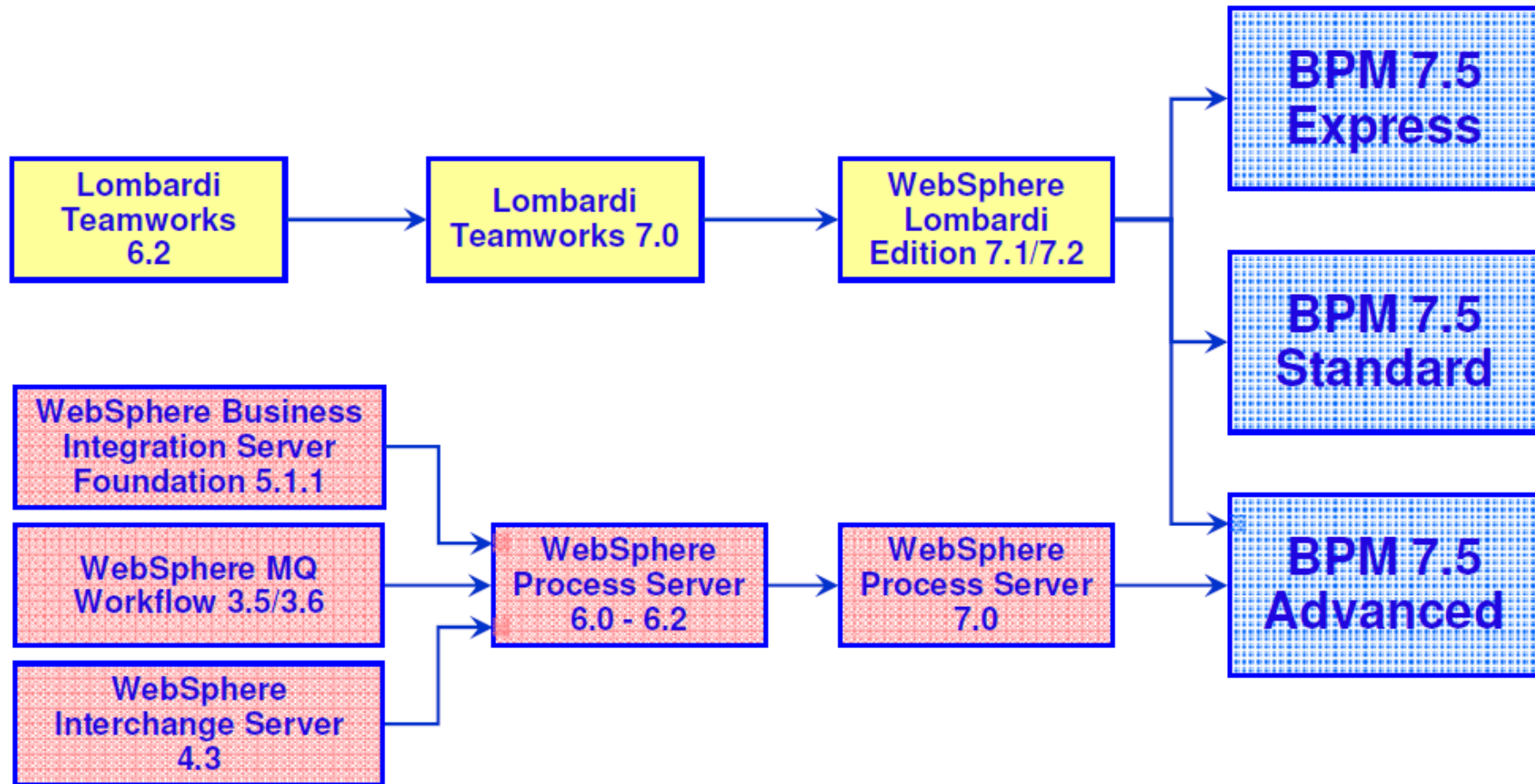
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- BPM 7.5 中 WPS 和 WLE 的集成开发
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- BPM 7.5 在中国的技术支持

BPM 7.5 产品概述

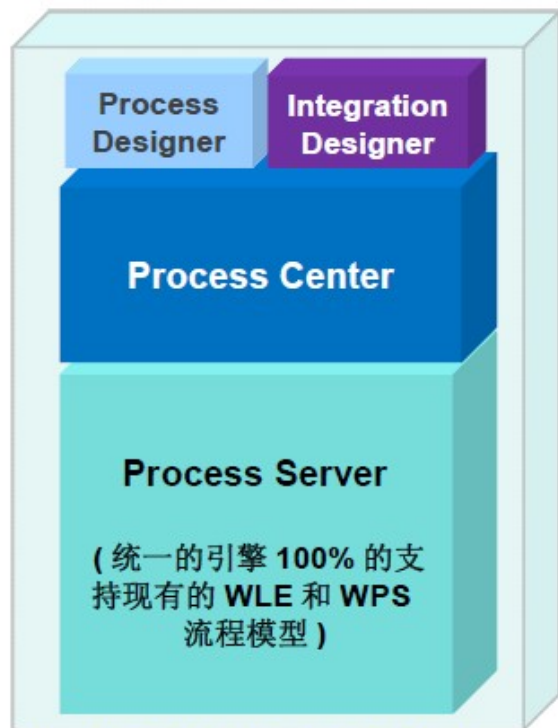


BPM 7.5 产品概述



BPM 7.5 产品概述

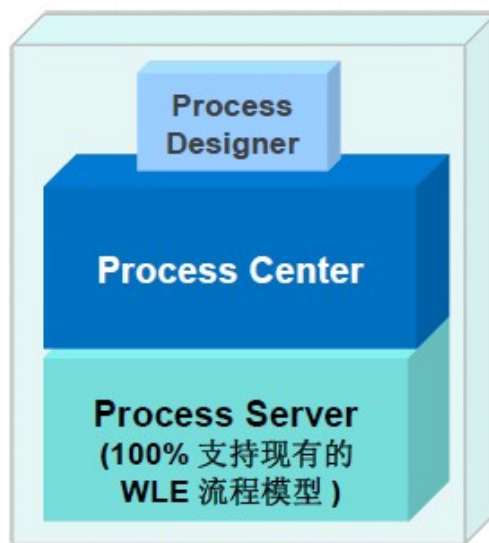
IBM BPM Advanced 高级版



包含所有高级 BPM 能力的完整版

- 包含大量流程并发，流程自动化，流程管控的更好的扩展支持
- 内置的 SOA 组件帮助企业更好的完成企业级服务的整合和编排

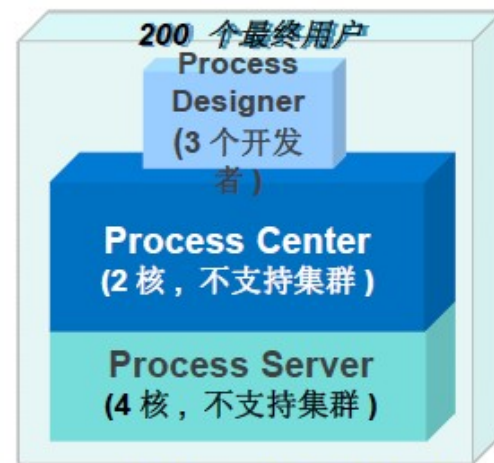
IBM BPM Standard 标准版



为实施典型 BPM 项目和项目组设计

- 支持多个 BPM 项目同时进行并通过业务人员的深入参与，持续提高业务流程
- 更好的流程效率和流程流转模式支持
- 基本系统整合功能的支持
- 快速的实现商业价值

IBM BPM Express 精简版



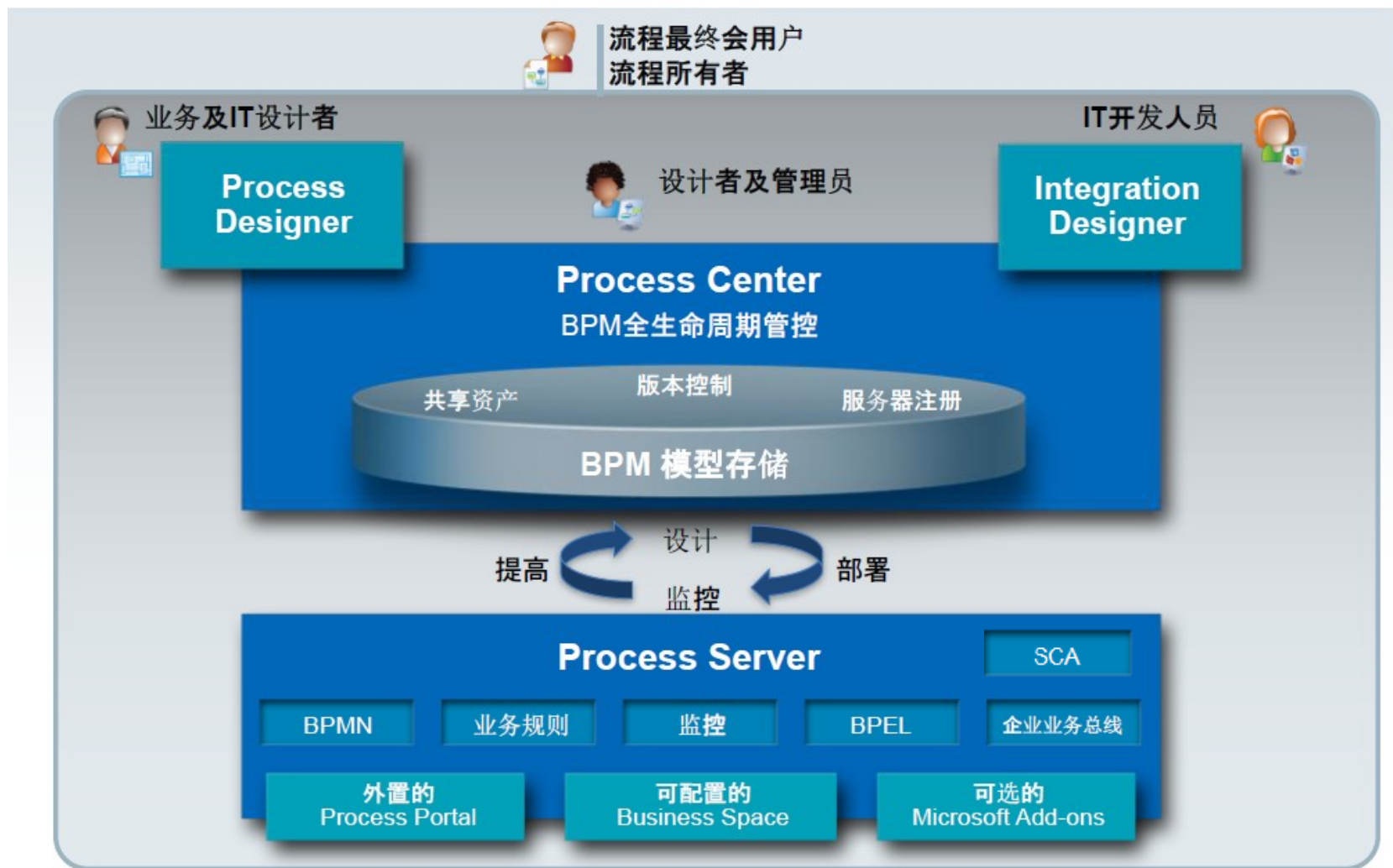
为第一个 BPM 项目实施设计

- 支持少量用户，不支持集群
- 更优惠的价格
- 更便捷的安装步骤和用户体验

BPM 7.5 产品概述

	高级配置	标准配置	精简配置
WLE兼容的流程能力	★	★	★
Process Designer (基于BPMN)	★	★	★
协作开发, 实时回放	★	★	★
交互的最终用户操作界面	★	★	★
基于ILOG的流程规则	★	★	★
实时的流程监控和流程报表	★	★	★
流程绩效分析和优化	★	★	★
流程历史数据仓库	★	★	★
Process Center / 共享资产存储	★	★	★
不限量的流程设计者和最终用户	★	★	200 用户 / 3 设计者
高有效性, 集群支持, 不受限制的CPU扩展	★	★	4 cores PS / 2 cores PC / 不支持集群
WPS兼容的流程能力	★		
Integration Designer (基于BPEL / SOA)	★		
内置的企业服务总线 (ESB)	★		
事务性支持	★		
整合适配器	★		
灵活的 Business Space用户界面	★		

BPM 7.5 产品概述



BPM 7.5 产品概述

IBM
Business
Process
Manager

简捷

Process Designer (以前的 Authoring Environment)

- 基于标准 BPMN 的简单易用的流程建模
- 即时回放帮助流程设计者快速协作 (只需一次鼠标)
- 并行的实时流程编辑
- 基于 ILOG 语言的流程规则编辑器
- 与 Integration Designer 实现资产共享

强大

Process Server, Integration Designer (以前的 WID)

- 基于行业标准 BPEL 的流程编排
- 支持 SCA
- 内置的企业服务总线 and 整合适配器
- 事务性, 业务异常处理以及业务补偿的支持
- 内嵌的 WebSphere 应用服务器

掌控

Process Center

- 所有流程模型和资产统一存储和管理
- 支持跨应用资产分享的工具箱
- 简单的基于快照的版本管理 (只需要点击一次鼠标)
- 历史快照恢复 (只需要点击一次鼠标)
- 集中的资产部署控制 (只需要点击一次鼠标)

洞察

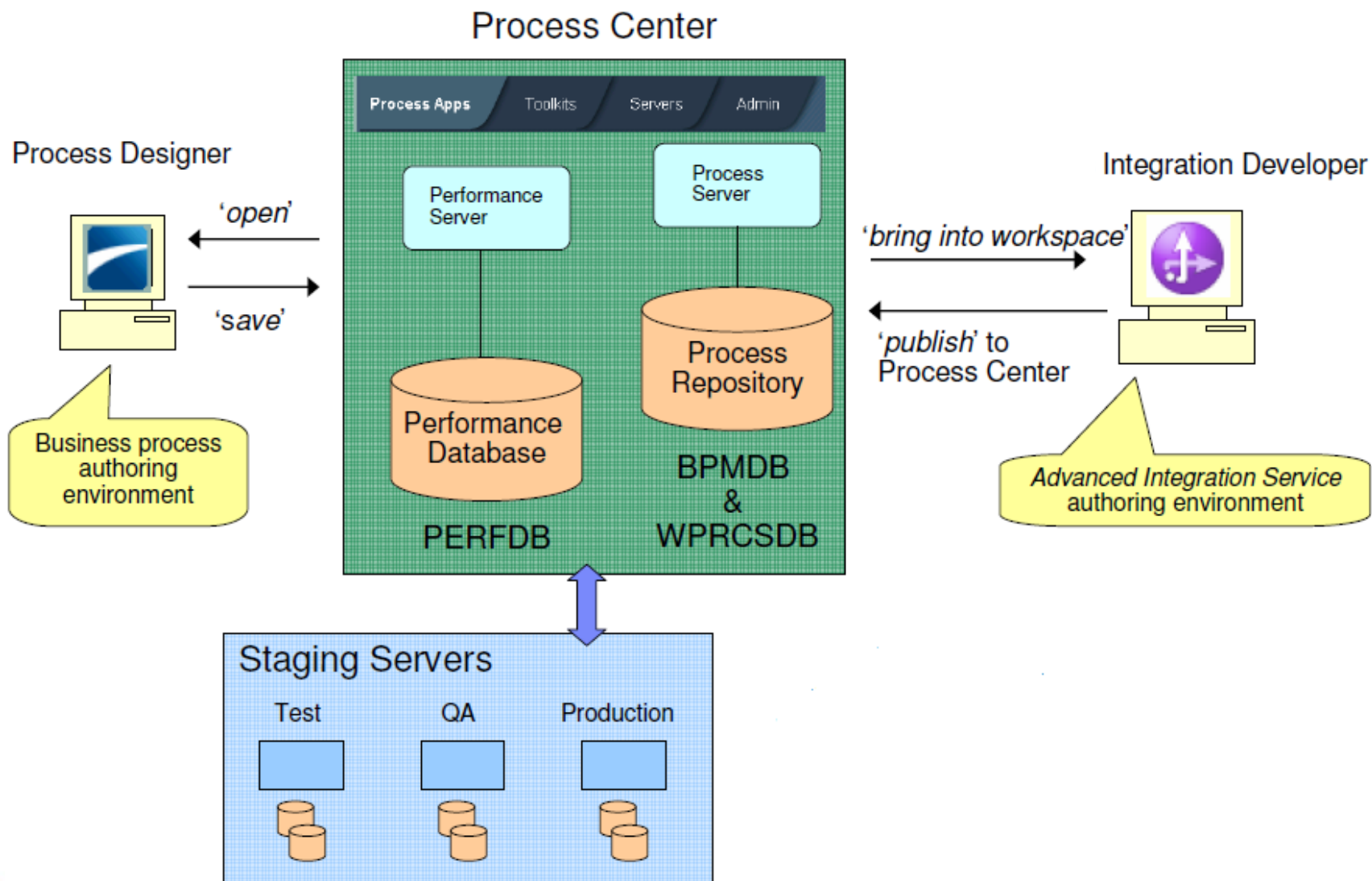
Performance Data Warehouse

- 实时的流程记分牌报表
- 流程状态的图形化控制
- 内置的反映流程模型瓶颈的热图
- 实时的页面流 (Coaches) 报表
- 部署控制台显示当前的运行版本

Agenda

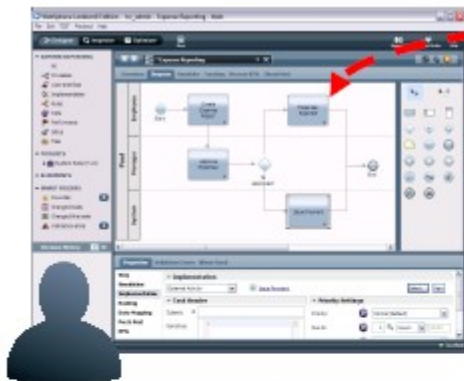
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BPM 7.5 中 WPS 和 WLE 的集成开发



BPM 7.5 中 WPS 和 WLE 的集成开发

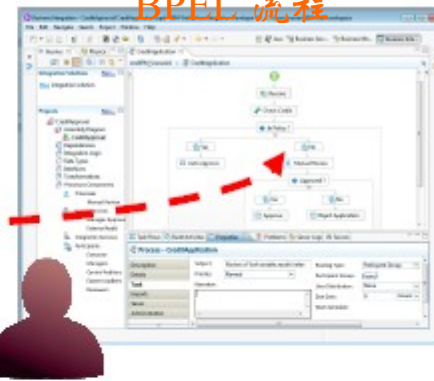
Business Author 在 process designer 中创建一个可以运行的 human-centric BPMN 流程



Use Advanced Integration Services created in Process Integration Designer

Use Human Services created in Process Designer

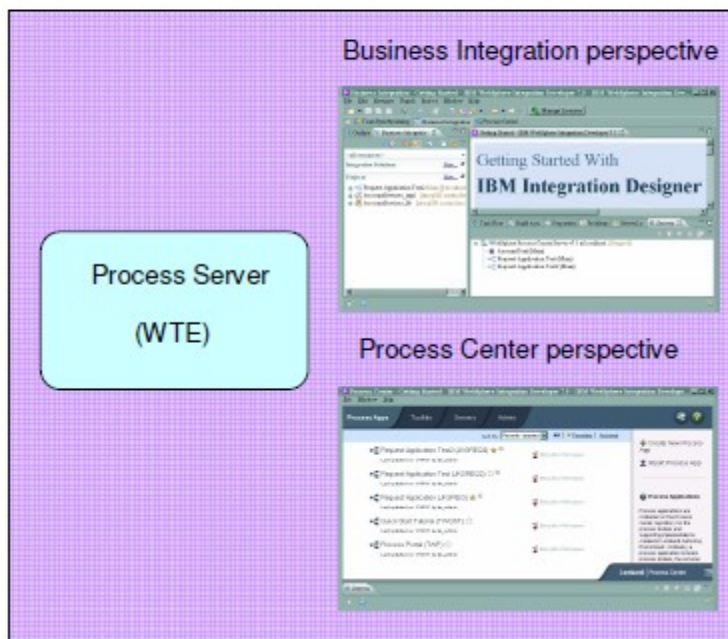
IT Developer 在 Integration Designer 中创建集成和 straight-through 的 BPEL 流程



BPM 7.5 中 WPS 和 WLE 的集成开发

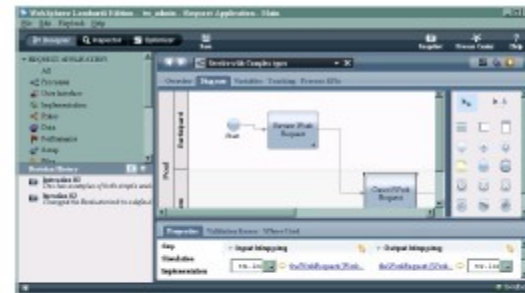
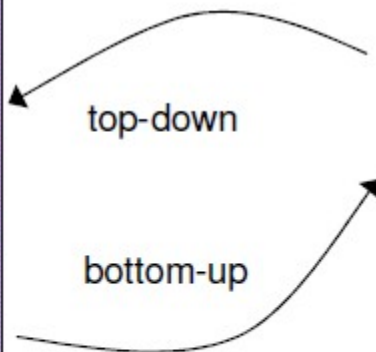


Integration Designer



• Top-Down

- ❖ 在 Process Designer 里设计 Advanced Integration Service 的接口
- ❖ 将接口导入 Integration Designer
- ❖ 开发服务的实现
- ❖ 通过 Process Center 返回 Process Designer



Process Designer

• Bottom-Up

- ❖ 在 Integration Designer 里设计，实现并测试 Advanced Integration Service
- ❖ 通过 Process Center 将接口和实现送至 Process Designer

BPM 7.5 中 WPS 和 WLE 的集成开发

- Sample 库

<http://publib.boulder.ibm.com/bpcsamp/v7r5/index.html>

WebSphere software *Business Process Management Samples & Tutorials*

- **BPM Samples Homepage**
- **What is new for v7.5 / v7.5.1**
- Business Process Design Samples
 - Business Process Design (BPD): Model your first BPD
 - Business Process Design (BPD): Monitor your first BPD
 - BPMN 20 - Ad Hoc Start Event
 - BPMN 20 - All Events sample
 - BPMN 20 - Event Gateway
 - BPMN 20 - Event Subprocess
 - BPMN 20 - Process Message End and Start events
 - BAL Rule - Using business rules
 - BAL Rule - Using business rules with exposed process variables
- Interaction Samples
 - Advanced hiring sample:

What is new?

February 29, 2012

New samples added:

- ACM calls BPM

February 21, 2012

New samples added:

- BAL Rule - Using business rules
- BAL Rule - Using business rules with exposed process variables

January 30, 2012

New samples added:

- BPMN 20 - Ad Hoc Start Event

December 13, 2011

New samples added:

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向 BPM 7.5 的迁移

- 了解迁移路线及服务（从 business 角度）
<http://www.webspherechina.net/?action-topic-id-18-p-studyplay-vid-19.html>

- 了解迁移路线（从 technical 角度）

- ❖ **WebSphere Process Server → IBM Business Process Manager V7.5**

- ✓ WebSphere Process Server version 7.5
- ✓ WebSphere Process Server version 7.0.0.x
- ✓ WebSphere Process Server version 6.2.0.x
- ✓ WebSphere Process Server version 6.1.x
- ✓ WebSphere Process Server version 6.1.0.x 之前版本必须首先通过手动迁移到以上版本，然后才可运行迁移到 V7.5

- ❖ **TeamWorks V7/ WebSphere Lombardi Edition → IBM Business Process Manager V7.5**

- ✓ Lombardi Teamworks 7.0.0 or 7.0.1
- ✓ WebSphere Lombardi Edition 7.1.0 or 7.2.0,

向 BPM 7.5 的迁移 (WPS)

- 迁移要求

- ❖ 生产数据；停机时间；长流程和人工任务；应用增强；目标环境配置；风险；阶段性应用迁移

- 迁移方法



Runtime Migration

- ✓ Artifact 未被迁移，现有的应用不予改变
- ✓ 旧的配置和应用数据仍在新运行时使用
- ✓ 旧的数据库被升级



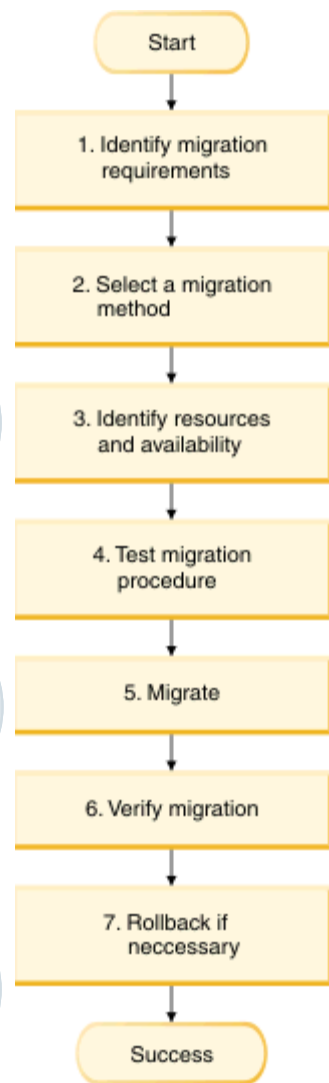
Manual Migration

- ✓ Artifact 未被迁移，现有的应用被重新部署
- ✓ 创建了新的 7.5 的环境和配置
- ✓ 使用新数据库



Artifact Migration

- ✓ Artifact 被迁移到 7.5 版本
- ✓ 创建了新的 V7.5 的环境和配置
- ✓ 使用新数据库



向 BPM 7.5 的迁移 (WPS)

- 迁移类型 (Runtime Migration)

Side-by-side

迁移前后在同一个系统上

Remote

迁移前后不在同一个系统上

OS upgrade

源系统的操作系统在迁移过程中升级到新版本

- 被迁移的

- ❖ 应用

- ✓ 用户开发的应用
- ✓ Support 应用
- ✓ 系统应用

- ❖ 概要文件配置

- ❖ JDBC providers 和数据源

- ❖ 长流程和人工任务

- ❖ Adapter

- ❖ 未被迁移的

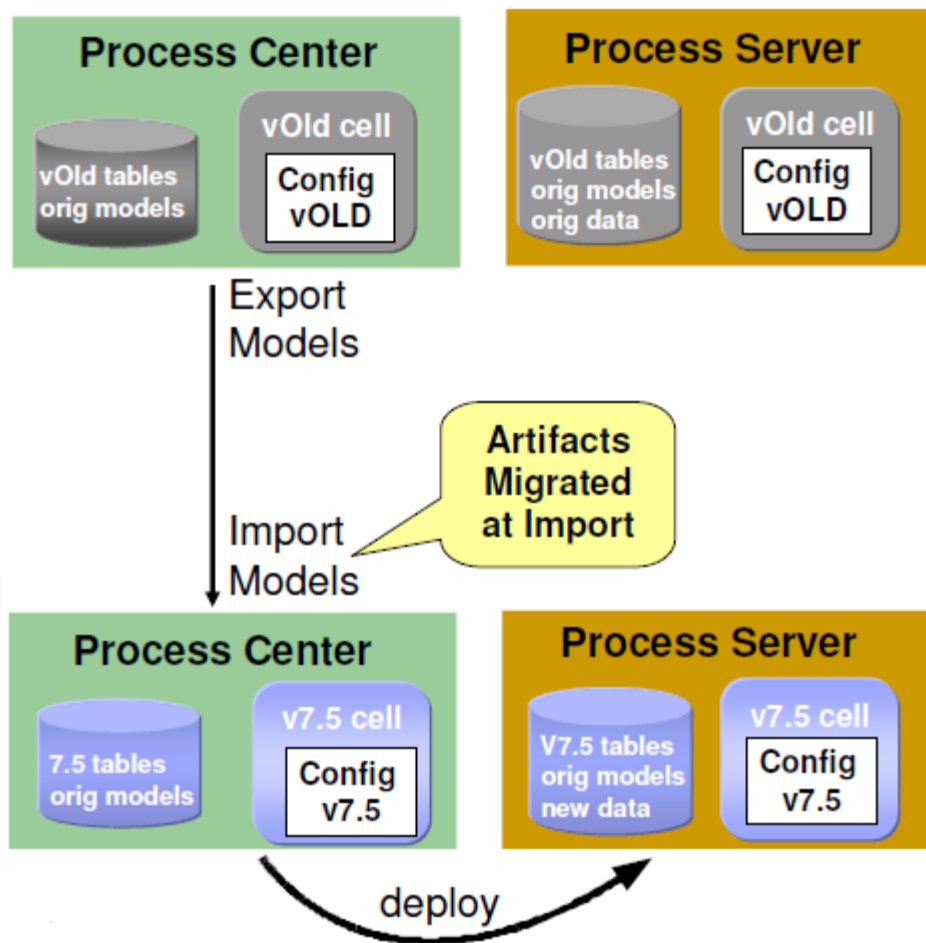
- ❖ Share-by-reference (shared library) artifacts

- ❖ 大部分的 custom files or artifacts，例如定制的 jython 脚本，修改过的 wsadmin 脚本等。

向 BPM 7.5 的迁移 (WPS)

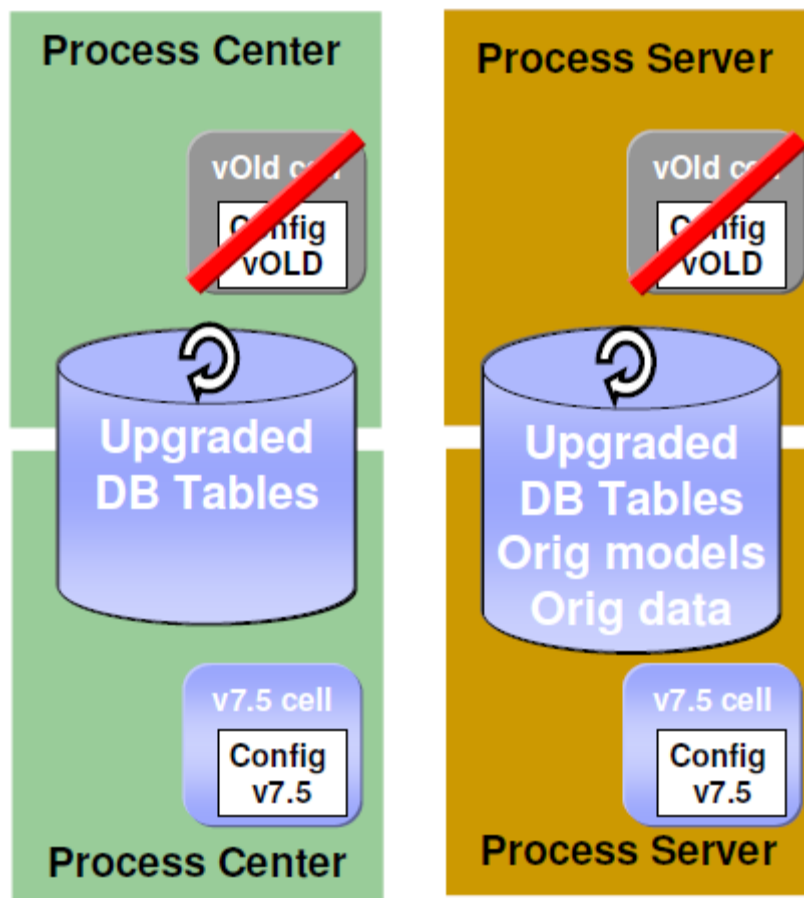
- 具体的迁移步骤
 - ❖ http://www.ibm.com/developerworks/cn/websphere/library/techarticles/1202_yuxl_bpmmigration/1202_yuxl_bpmmigration.html?ca=drs-
 - ❖ http://publib.boulder.ibm.com/infocenter/dmndhelp/v7r5m1/index.jsp?topic=%2Fcom.ibm.wbpm.imuc.doc%2Ftopics%2Fcmig_vtv_rtmigproc.html
- 完成 Postmigration 操作以及迁移的验证
 - ❖ http://publib.boulder.ibm.com/infocenter/dmndhelp/v7r5m1/index.jsp?topic=%2Fcom.ibm.wbpm.imuc.doc%2Ftopics%2Fscmig_vtv_postmig.html
 - ❖ http://publib.boulder.ibm.com/infocenter/dmndhelp/v7r5m1/index.jsp?topic=%2Fcom.ibm.wbpm.imuc.doc%2Ftopics%2Ftmig_vtv_verif_mig.html

向 BPM 7.5 的迁移 (WLE)



- 迁移步骤
 - ❖ 1. 从旧版本的 process center 中导出应用
 - ❖ 2. 安装 V7.5 产品，并配置环境
 - ❖ 3. 向 V7.5 的 process center 中导入应用
 - ❖ 4. 如果需要的话利用 V7.5 的 process designer 重构应用
 - ❖ 5. 从 process center 向 process server 部署应用。

向 BPM 7.5 的迁移 (WLE)



- 迁移步骤
 - ❖ 1. 安装 V7.5 产品
 - ❖ 2. 使用旧的数据库配置新 V7.5 环境
 - ❖ 3. 在 V7.5 环境上应用旧环境的定制化配置
 - ❖ 4. 使用脚本升级数据库。
- 具体步骤
 - ❖ http://publib.boulder.ibm.com/infocenter/dmndhelp/v7r5m1/index.jsp?topic=com.ibm.wbpm.imuc.doc%2Fupgrade%2Ftopic%2Fupgrading_to_751.html

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BPM 7.5 在中国的技术支持

- 检查 BPM 7.5 运行的首要条件
 - ❖ **Advanced**
<http://www-01.ibm.com/support/docview.wss?uid=swg27023027>
 - ❖ **Standard**
<http://www-01.ibm.com/support/docview.wss?uid=swg27023028>
 - ❖ **Express**
<http://www-01.ibm.com/support/docview.wss?uid=swg27023029>
- 检查当前 BPM 7.5 的版本信息 / 安装最新的补丁
 - ❖ IBM Business Process Manager 产品推荐补丁
<http://www-01.ibm.com/support/docview.wss?uid=swg27022299>
 - ❖ WebSphere Application Server 产品推荐补丁
<http://www-01.ibm.com/support/docview.wss?rs=180&uid=swg27004980>

BPM 7.5 在中国的技术支持

- 搜索知识库

- ❖ IBM Business Process Manager 的 Support Portal

[http://www-](http://www-947.ibm.com/support/entry/portal/Overview/Software/WebSphere/IBM_Business_Process_Manager_Advanced)

[947.ibm.com/support/entry/portal/Overview/Software/WebSphere/IBM_Business_Process_Manager_Advanced](http://www-947.ibm.com/support/entry/portal/Overview/Software/WebSphere/IBM_Business_Process_Manager_Advanced)

- ❖ IBM Business Process Manager 的 InfoCenter （信息中心）

<http://publib.boulder.ibm.com/infocenter/dmndhelp/v7r5m1/index.jsp>

← Go to quick start

Choose a product

Find a product

Quick find:

View content for product(s)

Allow multiple selections

All | Active

IBM Business Process Manager Advanced

IBM Business Process Manager Express

Support home

Support for my selected products

Your customized support experience

To modify the contents of this page, choose your products and a page.

Sign in
To access your authorized content and to customize your pages.

Search support and downloads

Within my selected products

Translate this page

Customize this page

Support resources

Contact support

Buy support and services

Other IBM pages

Product and brand links

Featured links

- Support registrations
- ▼ IBM Business Process Manager Advanced
 - Support technical exchanges
 - Detailed system requirements

Flashes and alerts

Alerts: [Latest security bulletins](#)

- ▼ IBM Business Process Manager Advanced
 - 25 Apr 2012: Space management errors within Business Space...
 - 20 Apr 2012: Shipped version of the...

BPM 7.5 在中国的技术支持



- 查找并安装临时补丁
 - ❖ IBM FixCentral
<http://www-933.ibm.com/support/fixcentral/>
- 收集故障诊断数据
 - ❖ 一般 BPM 问题
<http://www-01.ibm.com/support/docview.wss?uid=swg21569731>
 - ❖ 安装及升级问题
<http://www-01.ibm.com/support/docview.wss?uid=swg21506937>
<http://www-01.ibm.com/support/docview.wss?uid=swg27024590>
 - ❖ 采用 ISA Lite 收集故障诊断数据
<http://www-01.ibm.com/support/docview.wss?uid=swg24030121>
 - ❖ WAS 的故障诊断数据收集指导
<http://www-01.ibm.com/support/docview.wss?rs=180&uid=swg21145599>

BPM 7.5 在中国的技术支持



- 其他资源

- ❖ IBM Business Process Manager 的 IBM Education Assistant (多媒体教学中心)

<http://publib.boulder.ibm.com/infocenter/ieduasst/v1r1m0/index.jsp?topic=/com.ibm.iea.bpm/bpm/bpm75main.html>

- ❖ WebSphereChina 中文论坛

<http://www.webspherechina.net/club/forum-40-1.html>

- ❖ Sina 微博 @ 迪墨 IBM 技术支持

- ❖ OpenMic / Webcast

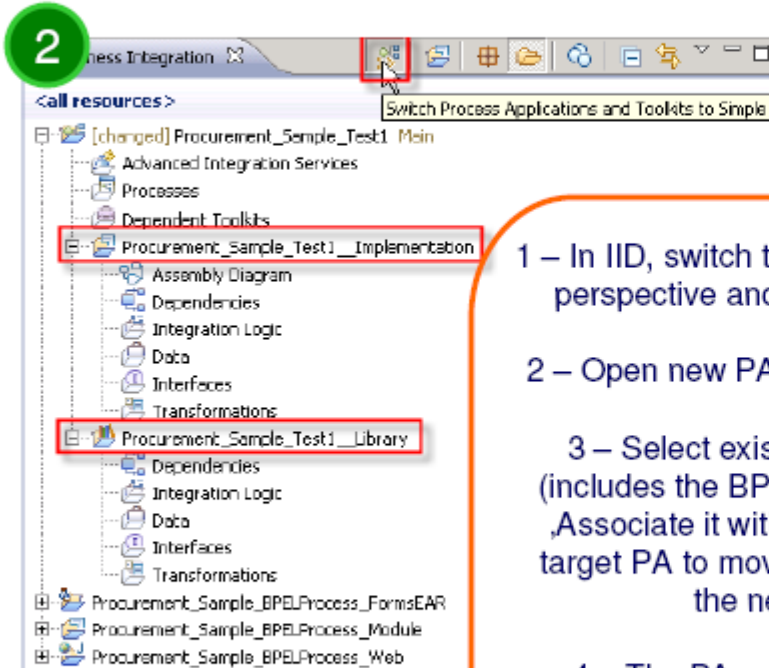
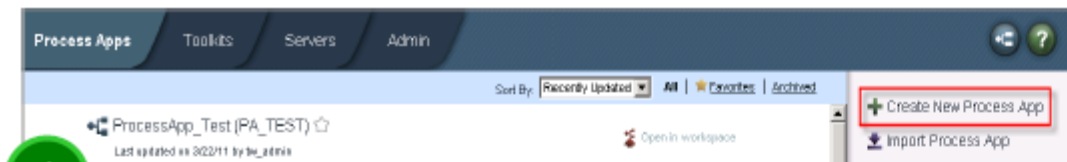
http://www-947.ibm.com/support/entry/portal/Previous_tech_exchanges/Software/WebSphere/IBM_Business_Process_Manager_Advanced

- ❖ RedBooks

[http://publib-b.boulder.ibm.com/Redbooks.nsf/searchdomain?SearchView&query=\[subjects\]=WebSphere+and+%22IBM%20Business%20Process%20Manager%22&SearchOrder=1&category=WebSphere](http://publib-b.boulder.ibm.com/Redbooks.nsf/searchdomain?SearchView&query=[subjects]=WebSphere+and+%22IBM%20Business%20Process%20Manager%22&SearchOrder=1&category=WebSphere)

Q&A

Backup



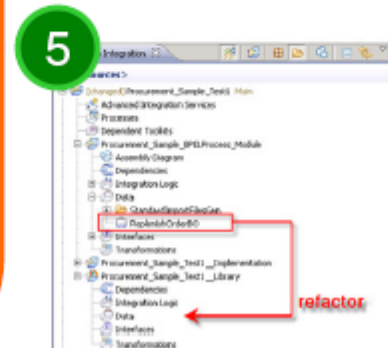
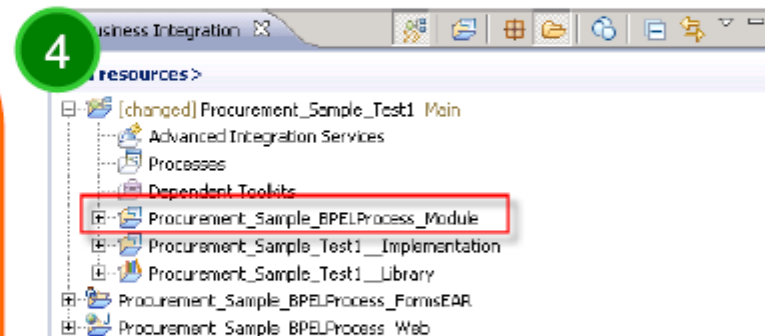
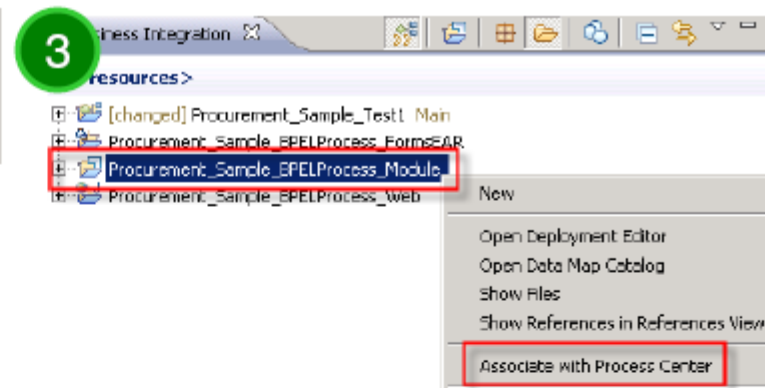
1 – In IID, switch the Process Center perspective and create new PA

2 – Open new PA in IID workspace

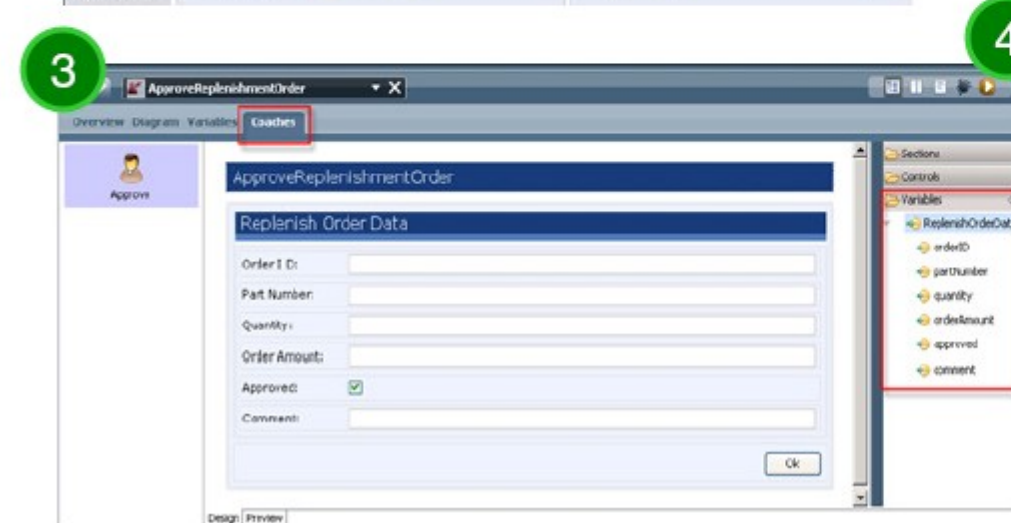
3 – Select existing IID project (includes the BPEL process), and 'Associate it with PC', select the target PA to move IID project into the new PA

4 – The PA now includes the existing project (which contains the BPEL process)

5 – Move BO to be used by the future human task to the PA library



Backup



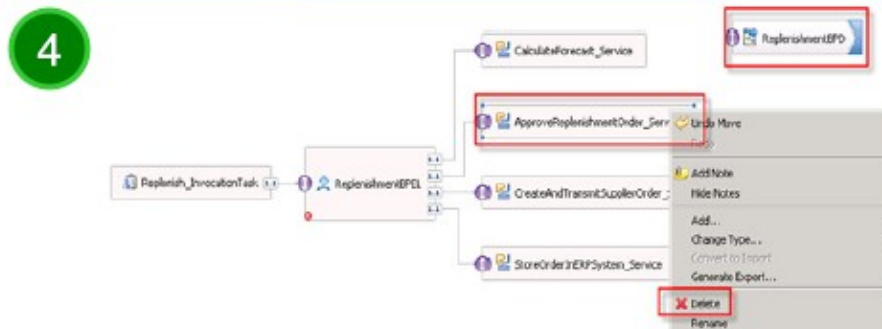
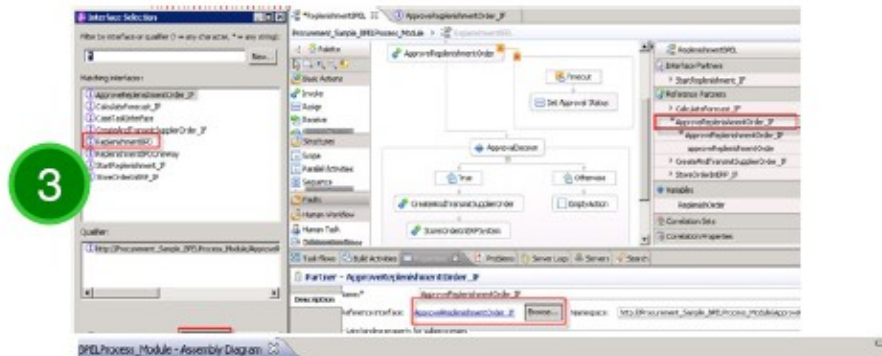
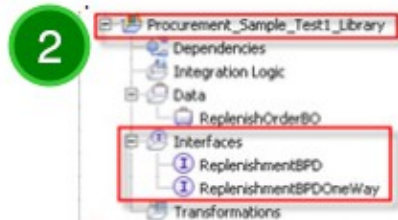
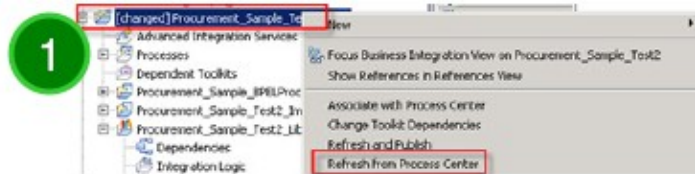
1 – Open IPD, select the PA listed in PC, and open the PA in Designer

2 – Create a new (very simple) BPD from scratch, which includes the manual task, that will later be shown to a user to perform the required approval

3 – Define a coach for the human task, and use the BO to connect it to the GUI controls

4 – You can always test your BPD in IPD

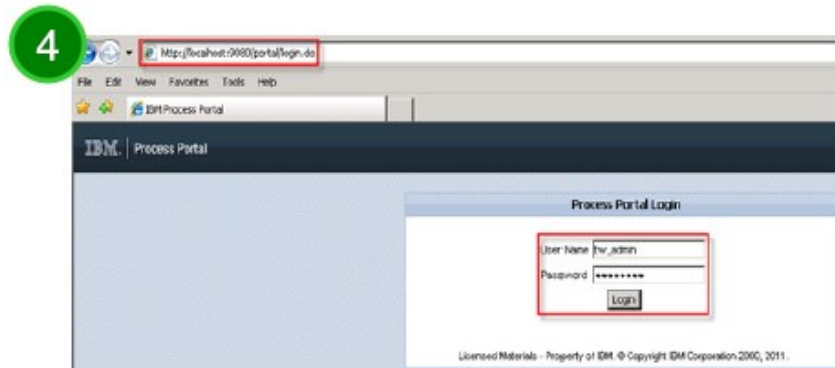
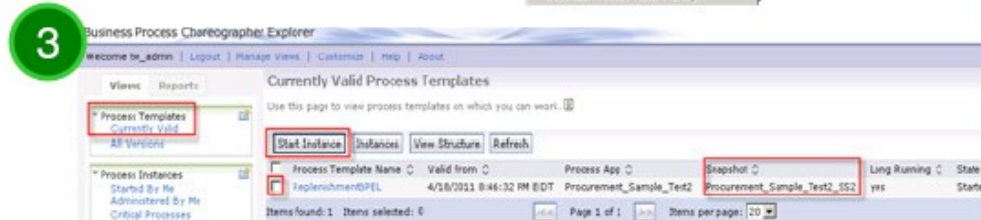
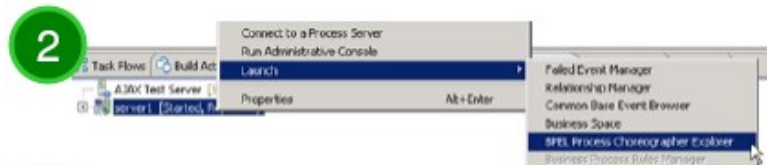
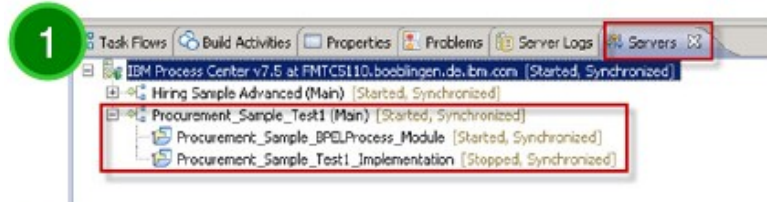
Backup



- 1 – Back in IPD, 'Refresh from Process Center' to see in IID what you've done in IPD
- 2 – New interfaces had been created to call the BPD created in IPD
- 3 – Now perform the changes required to use the new manual tasks from the BPD as implementation for the BPEL approval task
- 4 – In the assembly diagram, use the new service implementation instead of the existing Java implementation
- 5 – When done, save your work, and 'Refresh and Publish' the PA to update the changes in PC



Backup



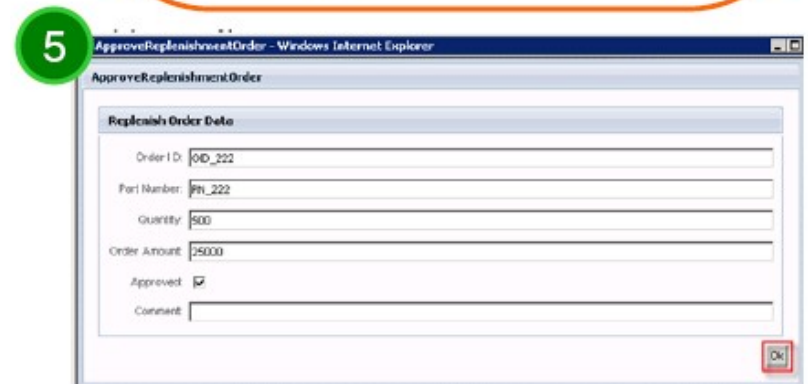
1 – In IID, look if the PA is completely started (if not, publish the parts that are not yet started)

2 – To run the PA, open BPEL Process Choreographer Explorer

3 – Start a process instance from the available process template, and enter the process input data. The process engine runs thru the process model until it comes to the manual task, waiting for manual approval

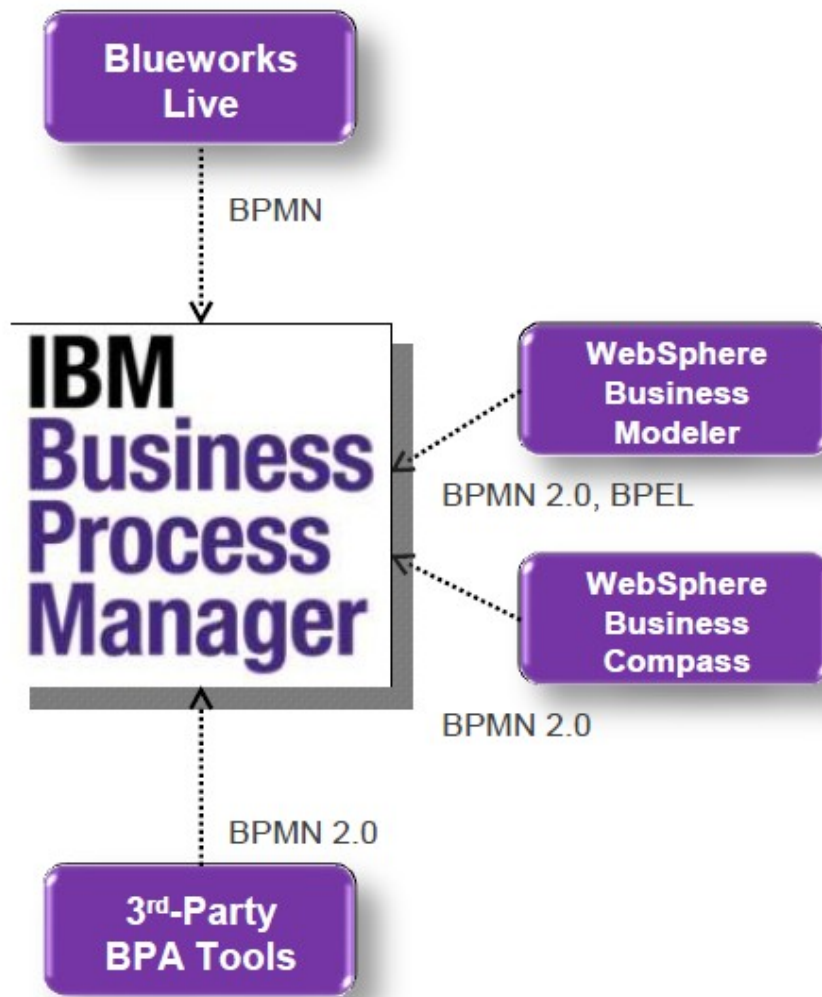
4 – Open Process Portal, to access the manual tasks. From the list of tasks available, select the one create to perform the approval

5 – Complete the approval in the coach presented to you. When done, the BPEL process navigates to the end and completes



Backup

- Process Designer and Integration Designer 直接提供模型的执行
- 可以从 Blueworks Live 中直接导入 BPMN 模型到 Process Center 中
- 可以从 WebSphere Business Modeler 和 Compass 7.0.0.4 中导入使用了 BPMN 2.0 的模型到 Process Center 中
- 支持使用 BPMN 2.0 的第三方建模和分析工具导入模型到 Process Center 当中
- 继续支持从 Modeler 中导入 BPEL 模型到 Integration Designer



Backup

- 监控由 IBM Business Monitor 导出的模型
- 增加新的 IBM BPM 基本资产包到 IBM BPM Industry Packs
- 内置用于 WebSphere Service Registry & Repository 的浏览器
- 内置了 FileNet ECM 或者 IBM Content Mgr 的连接器
- 内置了用于流程应用外部执行规则的 WebSphere ILOG JRules 连接器
- 流程“触发器”可以被 WebSphere Business Events 启动

