



# End To End Process Integration

New features with SAP  
NetWeaver 2004s relevant for  
SAP XI customers

Product Management - SAP NetWeaver  
April 2006

This presentation gives an **overview** on enhancements and new features available with SAP NetWeaver 2004s.

It points out the **main deltas in the area of Software Life-Cycle Management** (e.g. Installation, System Copy) between the releases **SAP NetWeaver 04** and **SAP NetWeaver 2004s**. The deltas are generally described. Detailed information is available on the SAP Service Marketplace with [specific quick links](#).

Special attention is given to the question, whether these new aspects of SAP NetWeaver 2004s are interesting under Process Integration (PI) aspects.

It is not guaranteed that this presentation covers all relevant and known differences between the two SAP NetWeaver releases. It might change without notice.

**Both releases - SAP NetWeaver 04 and SAP NetWeaver 2004s –**

**Provide exactly the same**

**Functionality for**

**End-to-End Process Integration (PI).**

**Many enhancements for SAP NetWeaver 2004s are related to the area of Software Life-Cycle Management, which also affect the installation and use of SAP XI, and are therefore relevant for End-to-End Process Integration (PI).**

# SAP NetWeaver Technology Map

## IT Practices

## IT Scenarios

User Productivity Enablement	Running an Enterprise Portal	Enabling User Collaboration	Business Task Management	Mobilizing Business Processes	Enterprise Knowledge Management
Data Unification	Master-Data Harmonization	Master-Data Consolidation	Central Master-Data Management	Enterprise Data Warehousing	
Business Information Management	Enterprise Reporting, Query, and Analysis		Business Planning and Analytical Services	Enterprise Data Warehousing	
Business Event Management	Business Activity Monitoring			Business Task Management	
End-to-End Process Integration	Enabling Application-to-Application Processes	Enabling Business-to-Business Processes	Business Process Management	Enabling Platform Interoperability	Business Task Management
Custom Development	Developing, Configuring, and Adapting Applications			Enabling Platform Interoperability	
Unified Life-Cycle Management	Software Life-Cycle Management			SAP NetWeaver Operations	
Application Governance & Security	Authentication and Single Sign-On			Integrated User and Access Management	
Consolidation	Enabling Platform Interoperability	SAP NetWeaver Operations	Master-Data Consolidation	Enterprise Knowledge Management	
Enterprise Service Architecture – Design & Deployment	Enabling Enterprise Services				



# SAP NetWeaver Technology Map

## IT Practices

## IT Scenarios

User Productivity Enablement	Running an Enterprise Portal	Enabling User Collaboration	Business Task Management	Mobilizing Business Processes	Enterprise Knowledge Management
Data Unification	Master-Data Harmonization	Master-Data Consolidation	Central Master-Data Management	Enterprise Data Warehousing	
Business Information Management	Enterprise Reporting, Query, and Analysis	Business Planning and Analytical Services		Enterprise Data Warehousing	
Business Event Management	Business Activity Monitoring			Business Task Management	
End-to-End Process Integration	Enabling Application-to-Application Processes	Enabling Business-to-Business Processes	Business Process Management	Enabling Platform Interoperability	Business Task Management
Custom Development	Developing, Configuring, and Adapting Applications			Enabling Platform Interoperability	
Unified Life-Cycle Management	Software Life-Cycle Management			SAP NetWeaver Operations	
Application Governance & Security	Authentication and Single Sign-On			Integrated User and Access Management	
Consolidation	Enabling Platform Interoperability	SAP NetWeaver Operations	Master-Data Consolidation	Enterprise Knowledge Management	
Enterprise Service Architecture – Design & Deployment	Enabling Enterprise Services				



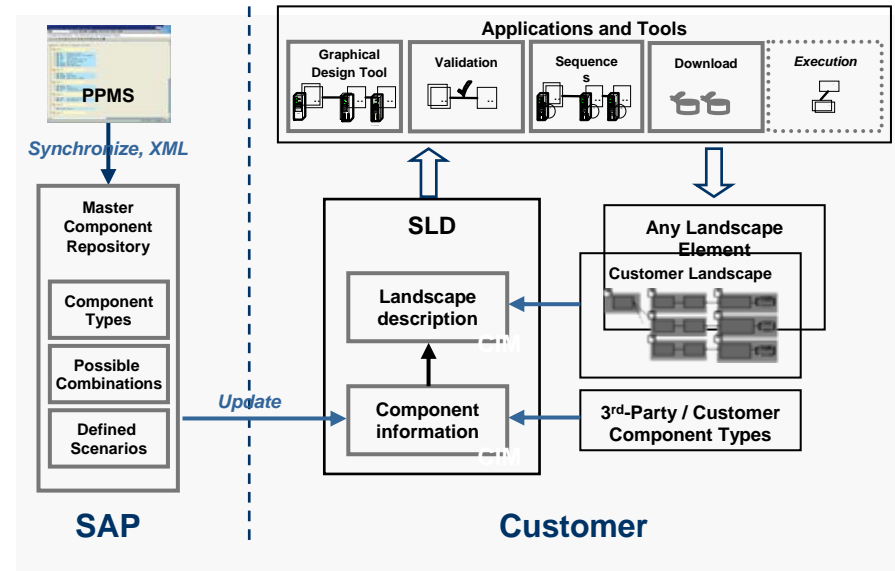
# What's new in Software Life-Cycle Management

- System Landscape Directory
- Software Lifecycle Manager
- SAP Installation Tool SAPinst
- Central Technical Configuration (Template Installer)
- SAP NetWeaver Rapid Installer
- Documentation
- Implementation and Configuration of Business Content
- System Copy and Migration
- Upgrade Technology
- Java Support Package Manager (JSPM)

## Description:

- **Central information provider about customer system landscapes**
  - Component information in software catalog
  - Landscape description
- **Foundation for many SAP tools and services, also next generation landscape design and management tools**
  - Software Lifecycle Manager
  - Web Dynpro runtime
  - Monitoring and Management (SAP Solution Manager, CCMS)
  - SAP NetWeaver Exchange Infrastructure / Process Integration
  - Adaptive Computing Controller
  - ...
- Part of SAP NetWeaver usage type AS Java

*Helpful for PI scenarios (especially group building for customers with big system landscapes)*



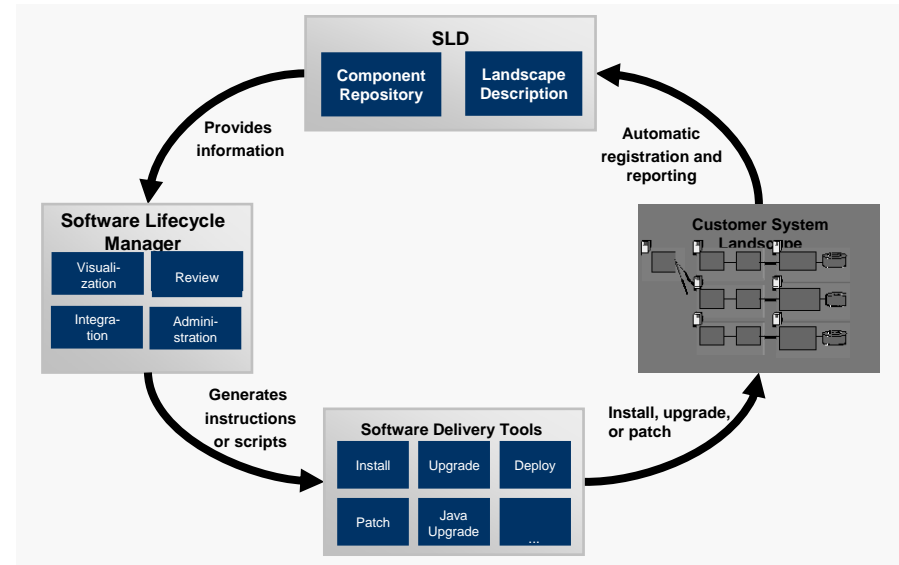
## New with SAP NetWeaver 2004s:

- New Web Dynpro UI
- New data supplier capability for auto-registration of complete landscape, including 3rd-party products and non-ABAP/non-Java components (such as TREX)
- Handling of system groups and sub-landscapes

## Description:

- Integrates different software life-cycle tools, acts as single entry point for all kinds of software life-cycle tasks
- Offers overview of existing system landscape
- You can create **plans that reflect software life-cycle tasks** you want to plan or “simulate” in your system landscape, the planning wizard of Software Lifecycle Manager guides you through this landscape planning process
  - Realize new business scenarios
  - Deploy application components
  - Update support packages
- **Validates** your plan according to the data of your system landscape stored in System Landscape Directory, that is, checks whether planned changes conflict with system landscape and offers possible actions to handle conflicts
- **Generates a list of changes** you have to perform to realize a plan, can be used to track the status of your plans

***Helpful for PI scenarios (this first step only offers the planning of a system landscape; further enhancements are planned)***



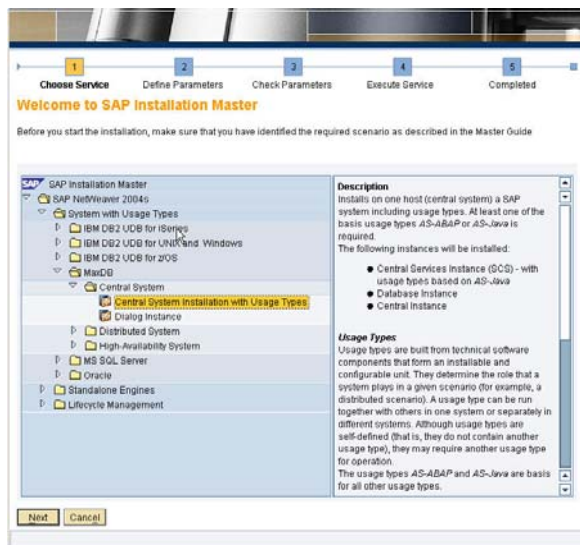
## New with SAP NetWeaver 2004s:

- SAP NetWeaver 2004s is first product version that includes Software Lifecycle Manager from start
- Software Lifecycle Manager is included in SAP NetWeaver usage type AS Java
- For SAP NetWeaver '04, SLM is included as of Support Package Stack 12
- Software life-cycle tasks simplified



## Description:

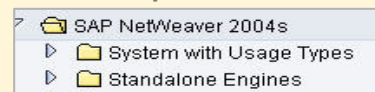
- Integrated installation framework builds basis for all kind of implementation services
- Installation services for installable units of SAP NetWeaver on all supported operating systems (IBM eServer iSeries, zSeries, Windows I386, IA64, AMD64, Linux x86, IA64, IBM AIX, SUN Solaris, HP-UX, HP IA64, ...) and databases (IBM DB2 UDB for iSeries, IBM DB2 UDB for UNIX and Windows, IBM DB2 UDB for zSeries, MaxDB, Microsoft SQL Server, Oracle)



**Helpful for PI scenarios (especially the configuration enhancements and the automatic prerequisite checker).**

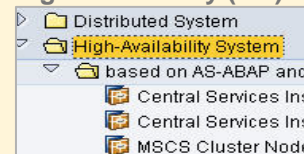
## New with SAP NetWeaver 2004s:

- Usage-type-specific installation with minimized manual steps



Install	Software Unit
<input checked="" type="checkbox"/>	AS-ABAP
<input checked="" type="checkbox"/>	AS-Java
<input type="checkbox"/>	BI-Java
<input type="checkbox"/>	DI
<input checked="" type="checkbox"/>	EP
<input type="checkbox"/>	MT

- High Availability (HA) options included



For additional information related to XI refer to [SAP Note 853510](#)

- Usage-type-specific configuration templates ease completion of implementation process for your landscape (see CTC below)
- Prerequisite checker (minimum technical prerequisites – RAM, swap space, kernel parameters, etc. – validated for installation host)

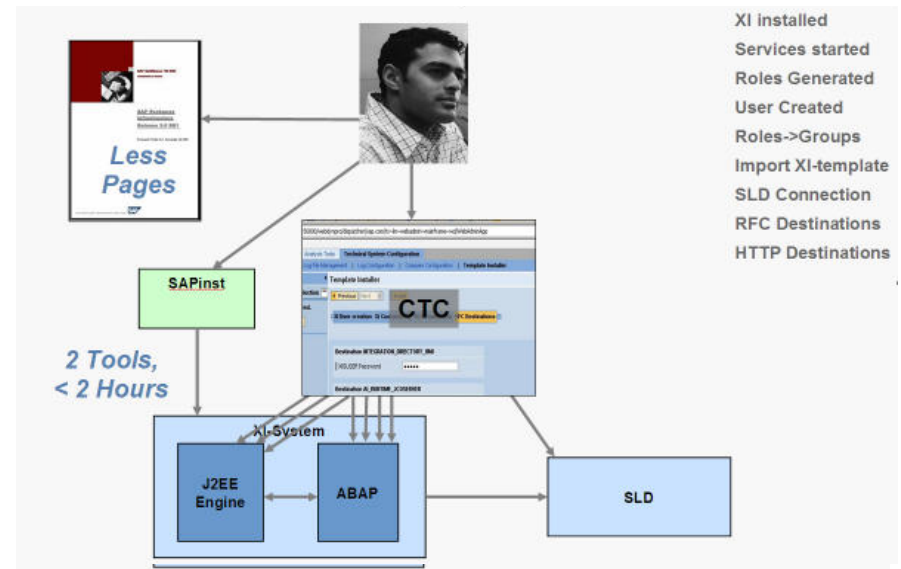
Condition	Result Code	Severity	Message
Swap Size	Condition not met	HIGH	For the selected services at least 400 MB swap space is required. Current value: 2973 MB. (Updated 2005-06-24)
RAM Size	Condition not met	HIGH	For the selected services at least 1023 MB RAM is required. Current value: 1023 MB. (Updated 2005-06-24)

- Help and handling enhanced (retry, enhanced summary dialog, start from one single installation master DVD ...)
- Altogether, implementation process simplified and manual steps for preparing and performing installation procedure further minimized

## Description:

- Central, uniform and simple configuration tool based on configuration templates for usage types
- Unified user experience to configure a newly installed system, configuration simplified, accelerated and less error-prone
- CTC Template Installer distributes configuration:
  - To multiple components in one local system (usage type template)
  - To multiple system in landscape (scenario template, only partly implemented)
- Configuration templates express technology independent configuration:
  - Procedures for automatic, cross-component configuration tasks
  - Computation of settings
  - Parameter entry UIs
  - Re-use of context information in multiple places
- CTC Template Installer offers possibility to perform either whole template or single configuration steps contained in a template
- Every step included in configuration templates can also be performed manually → see corresponding documentation (SAP Solution Manager and Technology Consultant's Guide in the SAP Library)

**Helpful for PI scenarios .**



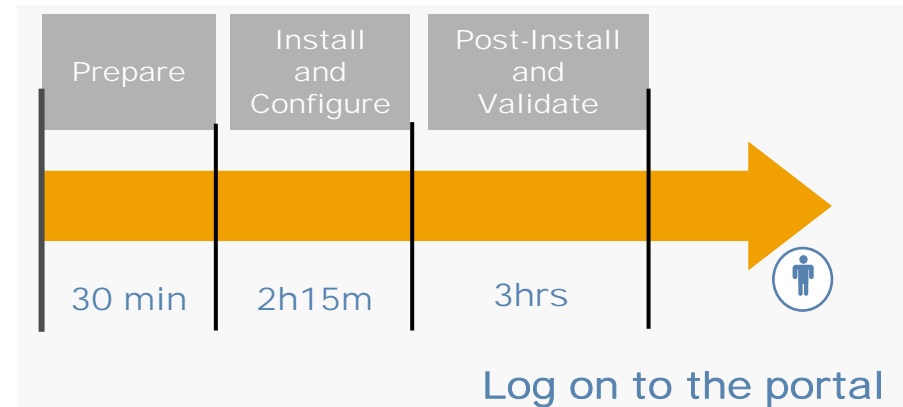
## New with SAP NetWeaver 2004s:

- CTC Template Installer new with SAP NetWeaver 2004s
- Part of SAP NetWeaver usage type AS Java
- Comprises configuration templates for SAP NetWeaver usage types Process Integration (PI), Development Infrastructure (DI), and Business Intelligence Java Components (BI Java) for ramp-up
- Usage-type-specific configuration templates ease completion of implementation process

## Description:

- An installation and configuration tool, complements SAPInst
- Installs and configures a defined system landscape based on SAP NetWeaver 2004s and mySAP ERP 2005
- Result is a standard SAP NetWeaver Portal with Knowledge Management and Collaboration capabilities and with running ESS/MSS business scenarios
- Also offers predefined configuration for dedicated ERP business scenarios
- Easy, wizard-based installation and configuration
- Minimized time for installation and configuration
- Current limitations:
  - Restricted platform availability
  - Restricted number of installation options
    - ◆ Only for certain usage types
    - ◆ Rapid Installer supports a single-node installation on one machine (if required, this installation can be scaled using dialog instances installed with SAPInst)

***Not relevant for PI scenarios , aims mainly at EP and BI scenarios.***

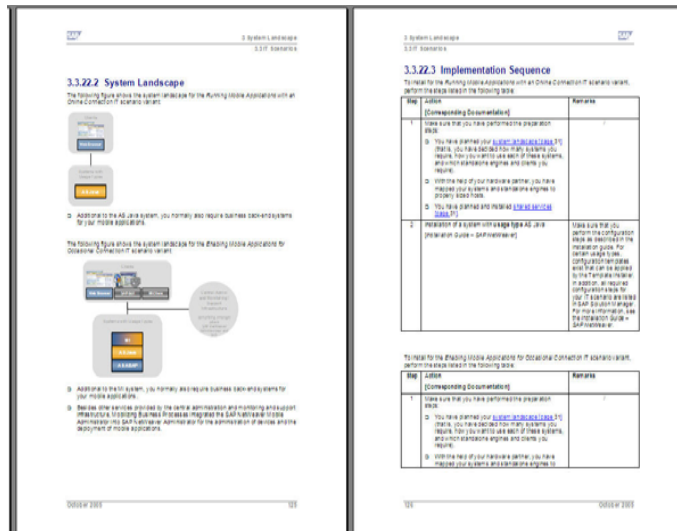


## New with SAP NetWeaver 2004s:

- Usage-type-specific installation (usage types EP, AS Java and BI Java)
- Installation of SAP XSS Self Service (necessary for ESS/MSS business scenarios)
- Scenario-oriented configuration of self-service scenarios for mySAP ERP 2005 and for scenarios for SAP Best Practices for Enterprise Portal
- Configuration is a separate step which can be performed after installation or at a later time
- Configuration of the UWL (Universal Worklist)

## Description:

- Documentation provides information required to understand and perform software life-cycle tasks
  - Planning Guides ([Upgrade] Master Guide, ...)
  - Installation Guides
  - Upgrade Guides
  - Support Package Stack Guide
  - SAP Library documentation
  - Tool documentation (F1 help, ...)
  - ...



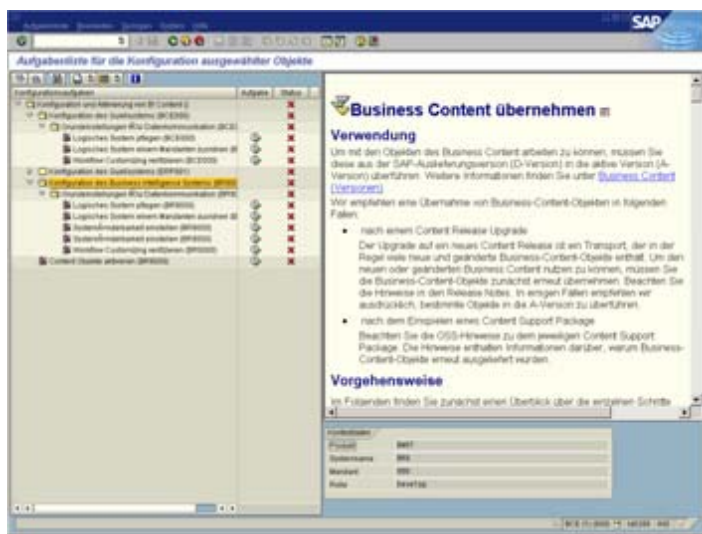
**Helpful for PI scenarios.**

## New with SAP NetWeaver 2004s:

- **Master Guides** reflect new concept:
  - General information provided (mapping to new building blocks – systems with usage types, standalone engines, clients) and planning information (landscape-related topics– SAP NetWeaver Administrator, SAP Solution Manager, SLD, SLM, ...)
  - One section for every IT scenario providing information of its system landscape and implementation/upgrade sequence
- For the installation of a system with usage types, only one *Installation Guide – SAP NetWeaver* required
  - Comprises the information for your platform/database and all usage types
  - No longer separate guides required for BI, EP, etc.
  - OS Dependencies included/no longer required due to Prerequisite Checker
- Profiling prepared – in the future, it is planned that more specific guides can be created on demand that only contain information for required usage types and operating systems

## Description:

- Automates cumbersome configuration steps
- Central point of access to required administration interfaces



***Not relevant for PI scenarios, because no XI content is included.***

## New with SAP NetWeaver 2004s:

- Business scenarios in SAP Solution Manager include relevant portal and BI content objects
- Automatic generation of task lists for configuration and activation of business content objects
- Context-sensitive documentation for each implementation step
- Altogether, the time for implementation of business scenarios that require business content is reduced
- mySAP ERP 2005 already created respective SAP Solution Manager content for all roles

## Description:

### ■ Use cases:

- Create duplicates for tests (for example, before patching or upgrading)
- Build up your system landscape
- Change the HW or DB vendor (such as migration away from Informix)
- Migrate to Unicode (increasingly for mySAP ERP 2005)

### ■ Types of system copy:

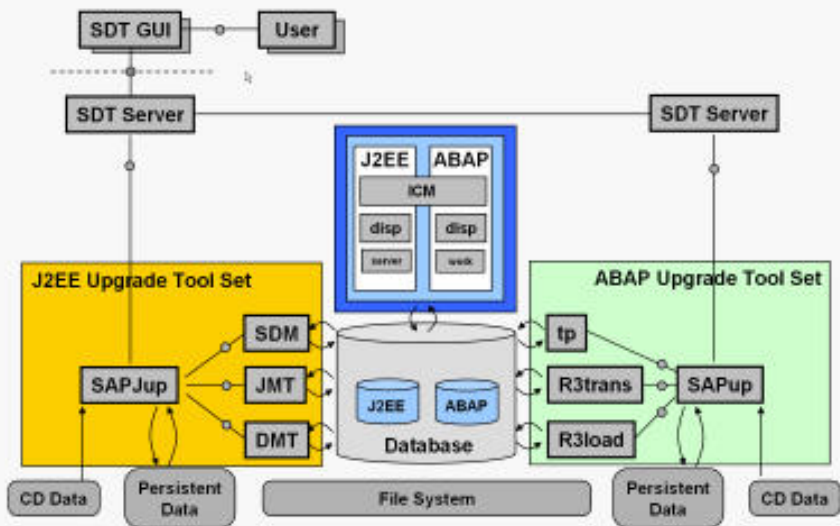
- Homogeneous system copy – operating system platform and database platform remain unchanged
- Heterogeneous system copy (migration) – during the system copy, the following is being changed:
  - Operating system (OS migration)
    - ◆ Database (DB migration) or
    - ◆ Operating system and database (OS/DB migration)
  - Unicode Conversion – during system copy, system is changed from non-Unicode to Unicode (as part of a homogeneous or a heterogeneous system copy)

**Helpful for PI scenarios.**



## New with SAP NetWeaver 2004s:

- Coverage of **Java system copy** enhanced, all usage types can now be copied
- **Copy with database-specific tools** integrated (such as Backup/Restore procedure for Oracle)
- Advanced options integrated in copy procedure
- Incremental migration offers reduced downtime for very large ABAP systems on project basis



## New with SAP NetWeaver 2004s:

### ■ ABAP:

- System switch upgrade technology (optimized)
- Synchronization of ABAP and Java upgrade for dual stack systems
- Tool enhancements:
  - New GUI
  - Improved usability for including additional packages into upgrade (wizard)
  - Reduced downtime through parallel import of software packages (shadow import and main import)
  - Improved fixpack concept
- Support for system conversion from Multi-Display, Multi-Processing Code Page (MDMP) to Unicode  
From releases 4.6C and higher
- Support for switch framework
- Installation/upgrade of Internet Graphics Server

## New with SAP NetWeaver 2004s (cont.):

### ■ Java:

- In-place upgrade without moving customer mass data
- Java upgrade is generic procedure that is applicable for all SAP products (mySAP Business Suite, ...)
- Upgrade of SAP NetWeaver systems with AS Java and applications
  - Standalone Java installation
  - Dual-stack installation
  - Detection of components to be upgraded and additional components to be installed
  - Available for upgrade from SAP NetWeaver '04 to 2004s
- Synchronization of ABAP and Java upgrade for dual stack systems
- Inclusion of Support Package Stack in the upgrade → up-to-date upgrade to the latest SP stack in one step
- Modifications and customer developments on start release
  - Customer developments remain unchanged after the upgrade
  - Modifications on SAP standard must be included in the upgrade after the migration to the target release with SAP NetWeaver Development Infrastructure (NWDI)
- Error and restart handling at any point

***Helpful for PI scenarios, especially because of synchronization of ABAP and Java upgrade for dual stack systems.***

## Description:

- **Standard tool for all SAP Java components (SAP NetWeaver, mySAP Business Suite, ...)**
- **Standardization of software logistics tools through use of a common user interface (unified GUI framework for installation, upgrade, support packages)**
- **Reduces runtime and downtime:**
  - Complete stack can be processed in one step:
    - ◆ Call only one tool, no intermediate manual actions
    - ◆ No need for post operations with other tools
  - SP patches:
    - ◆ Stack deployment can reach the patch level directly
    - ◆ No need to apply SP patches after stack deployment
- **Support Package Management prevents system damage:**
  - Checks release and SP level
  - Prevents deployment of packages for other releases or downgrades
- **Simplified handling:**
  - Support package stack deployment  
→ Entering only **one** level for the complete Java stack is sufficient!
  - Enhanced UI features:
    - ◆ Inbox viewer: display of downloaded archives
    - ◆ Integrated log viewer
  - Tool self patch included in SP stack
- **Modification Support for Java Software Components**
  - Cooperation with SAP NetWeaver Development Infrastructure (NWDI)



## New with SAP NetWeaver 2004s:

- JSPM new with SAP NetWeaver 2004s
- Part of SAP NetWeaver usage type AS Java

**Helpful for PI scenarios.**



# Summary: New Features per IT Process

[Back](#)

<u>Process</u>	<u>New/Improved with SAP NetWeaver 2004s</u>	<u>Relevant for End-to-End Process Integration</u>
<b>Implementation</b>	<ul style="list-style-type: none"> <li>■ <b>Master Guides reflect usage types</b></li> <li>■ Installation <b>support for HA setups</b> with ASCS instance and enqueue replication</li> <li>■ <b>Template-driven Initial Setup</b> for some usage types (for example, Process Integration)</li> </ul>	<p style="text-align: center;">Yes Yes (see SAP Note 853510) Yes</p>
<b>Implementation of Business Content</b>	<ul style="list-style-type: none"> <li>■ Business scenarios in SAP Solution Manager include relevant portal and BI content objects</li> <li>■ Automatic generation of task lists for configuration and activation of business content objects</li> <li>■ Context-sensitive documentation for each implementation step</li> </ul>	<p style="text-align: center;">No  No  No</p>
<b>Copy &amp; Migration</b>	<ul style="list-style-type: none"> <li>■ <b>Java system copy</b> for some usage types (to be completed via preload)</li> <li>■ Incremental Migration (IMIG) for ABAP-based systems</li> </ul>	<p style="text-align: center;">Yes  No</p>
<b>Upgrade</b>	<ul style="list-style-type: none"> <li>■ New UI</li> <li>■ <b>Java and dual application server upgrade</b> (deployment based)</li> <li>■ <b>Combined upgrade and Unicode conversion option</b></li> <li>■ Switch framework support</li> </ul>	<p style="text-align: center;">Yes Yes Yes Yes</p>
<b>Maintenance</b>	<ul style="list-style-type: none"> <li>■ Software Lifecycle Manager (Planning, Validation)</li> <li>■ Unified patch implementation tool and process with <b>Java Support Package Manager (JSPM)</b></li> <li>■ <b>HA support for patching</b></li> </ul>	<p style="text-align: center;">Yes Yes  (Yes, see SAP Note 853510)</p>

## Detailed information about new features:

- [Release Notes for Software Life-Cycle Management](#)

## Implementation Support:

- **Implementation**  
Quick Link /instguides
- **Copy and migration**  
Quick Link /systemcopy
- **Software change management**  
Quick Link /JDI
- **Software Lifecycle Manager**  
Quick Link /SLM
- **System Landscape Directory**  
Quick Link /SLD

## Software Maintenance

- **Maintenance**
  - ◆ /spmanager (SPAM)
  - ◆ /noteassistant (Note Assistant)
  - ◆ /patches (Support Packages)
- **Release Upgrade**
  - ◆ /upgrade
  - ◆ /upgradetech

- No part of this publication may be reproduced or transmitted in any form or for any purpose without the express permission of SAP AG. The information contained herein may be changed without prior notice.
- Some software products marketed by SAP AG and its distributors contain proprietary software components of other software vendors.
- Microsoft, Windows, Outlook, and PowerPoint are registered trademarks of Microsoft Corporation.
- IBM, DB2, DB2 Universal Database, OS/2, Parallel Sysplex, MVS/ESA, AIX, S/390, AS/400, OS/390, OS/400, iSeries, pSeries, xSeries, zSeries, z/OS, AFP, Intelligent Miner, WebSphere, Netfinity, Tivoli, and Informix are trademarks or registered trademarks of IBM Corporation.
- Oracle is a registered trademark of Oracle Corporation.
- UNIX, X/Open, OSF/1, and Motif are registered trademarks of the Open Group.
- Citrix, ICA, Program Neighborhood, MetaFrame, WinFrame, VideoFrame, and MultiWin are trademarks or registered trademarks of Citrix Systems, Inc.
- HTML, XML, XHTML and W3C are trademarks or registered trademarks of W3C®, World Wide Web Consortium, Massachusetts Institute of Technology.
- Java is a registered trademark of Sun Microsystems, Inc.
- JavaScript is a registered trademark of Sun Microsystems, Inc., used under license for technology invented and implemented by Netscape.
- MaxDB is a trademark of MySQL AB, Sweden.
- SAP, R/3, mySAP, mySAP.com, xApps, xApp, SAP NetWeaver, and other SAP products and services mentioned herein as well as their respective logos are trademarks or registered trademarks of SAP AG in Germany and in several other countries all over the world. All other product and service names mentioned are the trademarks of their respective companies. Data contained in this document serves informational purposes only. National product specifications may vary.
- The information in this document is proprietary to SAP. No part of this document may be reproduced, copied, or transmitted in any form or for any purpose without the express prior written permission of SAP AG.
- This document is a preliminary version and not subject to your license agreement or any other agreement with SAP. This document contains only intended strategies, developments, and functionalities of the SAP® product and is not intended to be binding upon SAP to any particular course of business, product strategy, and/or development. Please note that this document is subject to change and may be changed by SAP at any time without notice.
- SAP assumes no responsibility for errors or omissions in this document. SAP does not warrant the accuracy or completeness of the information, text, graphics, links, or other items contained within this material. This document is provided without a warranty of any kind, either express or implied, including but not limited to the implied warranties of merchantability, fitness for a particular purpose, or non-infringement.
- SAP shall have no liability for damages of any kind including without limitation direct, special, indirect, or consequential damages that may result from the use of these materials. This limitation shall not apply in cases of intent or gross negligence.
- The statutory liability for personal injury and defective products is not affected. SAP has no control over the information that you may access through the use of hot links contained in these materials and does not endorse your use of third-party Web pages nor provide any warranty whatsoever relating to third-party Web pages.