What’s New with SAP NetWeaver® 2004s
Detailed Delta Overview information

Data valid as of SAP NetWeaver 2004s URS
(SAP NetWeaver 2004s SP-Stack 7)

Please note that this document is subject to change and may be changed by SAP at any time without notice. The document is not intended to be binding upon SAP to any particular course of business, product strategy and/or development.
Assumptions

The following document covers only SAP NetWeaver 2004s. It is a short overview of the new features and delta functionality from the SAP NetWeaver ’04 release. Prior knowledge of the features and functions of SAP NetWeaver ’04 is assumed when reading this document.

The document contains a quick introduction to the delta information and should not be considered a comprehensive reference of all information.

For exhaustive detailed information please consult the SAP help portal:

What’s New with SAP NetWeaver® 2004s

SAP NetWeaver® 2004s Key Goals

Key changes with SAP NetWeaver® 2004s

SAP NetWeaver® 2004s Functional Deltas
SAP NetWeaver 2004s Key Goals

**Goal:** Deliver an integrated, robust, open, and adaptable Enterprise Service-oriented Architecture (Enterprise SOA) enabled platform for enterprise applications.

**Benefits:**

- **Enterprise SOA based platform for enterprise applications**
  - Solid infrastructure for Enterprise SOA application development and deployment
  - Seamlessly integrated cross-component technology scenarios
  - Robust integration platform for data and process integration

- **Openness and adaptability**
  - Open application development providing the capability to integrate SAP and non-SAP applications
  - Simplified model-driven development
  - Guaranteed Interoperability due to standards adherence

- **Sustainability**
  - Ability to leverage and extend existing IT systems
  - Simplified implementation in order to reduce TCO
SAP NetWeaver 2004s Key Goals: From Infrastructure to Applistructure

SAP NetWeaver becomes the business process platform

Productivity

Gen 1
Pre-SAP NetWeaver components

Gen 2
Integration Platform

Gen 3
Composition Platform

Gen 4
SAP NetWeaver 2004s

Business Innovation

- Core business objects
- Ready-to-run business processes
- Accessible through enterprise services

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- Delta highlights by IT Scenarios / SAP NetWeaver Product Management / 6
What’s New with SAP NetWeaver® 2004s

SAP NetWeaver® 2004s Key Goals

Key changes with SAP NetWeaver® 2004s

SAP NetWeaver® 2004s Functional Deltas
Key changes with SAP NetWeaver 2004s

Completion of Transition to the platform view of SAP NetWeaver

A new way of viewing, installing and implementing SAP NetWeaver in introduced

SAP NetWeaver Components are replaced:

Feature/Function view:
Platform view broken down by IT Practices & IT Scenarios. A new intuitive approach to navigating the rich features and functionalities of SAP NetWeaver

Implementation view:
IT Scenarios and their variants deliver a business oriented view of implementing IT solutions based on SAP NetWeaver

Installation and Deployment view:
New Installable units are introduced to simplify planning and to help focus systems on their roles in delivering IT Solutions
Significant Changes with SAP NetWeaver 2004s:
No individual Components

One platform – one release number

SAP NetWeaver 200x

* excludes SAP NetWeaver MDM

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- Delta highlights by IT Scenarios / SAP NetWeaver Product Management / 9
Key changes with SAP NetWeaver 2004s:
IT Practices - Alignment of IT and business processes

Fact: Business Processes are not aligned to technology components

To meet the changing business requirements, IT must also change:
- IT’s view of technology must adapt to the business requirements
- An End to End cross-component cross-organizational view is required
Key changes with SAP NetWeaver® 2004s: IT Practices - Alignment of IT and business processes

SAP NetWeaver capabilities are already “cross component”

“IT Practices” are introduced to help shift the focus from technology ‘components’ to solving specific business problems.

By slicing SAP NetWeaver to directly address key issues....

.... IT Practices help enterprises find the right starting point
Key changes with SAP NetWeaver® 2004s: IT Practices - Alignment of IT and business processes

IT Practices identify how to use SAP NetWeaver to solve specific business problems

These include goals familiar to almost any IT organization:

- The need to combine different integration technologies,
- To develop composite applications leveraging existing system investments,
- To build new business processes in a flexible way

User Productivity Enablement
- Improving productivity through happy business users

Data Unification
- Delivering a single version of the truth

Business Information Management
- Embedded, relevant and actionable information

Business Event Management
- Resolution and receipt of business critical events within process context

End to End Process Integration
- Process automation

Custom Development
- Dynamic composite application construction

Unified life-cycle management
- Management of IT applications while insuring minimal disruption

Application governance
- Ensuring quality of service and security while protecting corporate value

Consolidation
- Reduce IT cost through hardware and software consolidation

Enterprise Service Architecture
- Business Process Innovation with flexibility and productivity
What are IT Scenarios?

An IT Scenario supports a process-oriented implementation approach

- IT scenarios more quickly and easily help to:
  - Develop, compose, and run applications
  - Build, enhance, and operate an IT infrastructure
  - Integrate people, information, and processes
  - Implement a defined IT concept, such as evolving a company’s system landscape into a services-based architecture

- IT scenarios break down the IT practices, allowing an incremental approach to implementing SAP NetWeaver functionality
## IT Scenario: Business Process Management

### End-to-End Process Integration (IT Practice)

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<tbody>
<tr>
<td>Application-to-Application Integration</td>
<td>Business Partner Integration</td>
<td>Usage and Adaptation of Predefined Content</td>
<td>Ensuring Coexistence of Several Portals</td>
<td>Central Access to Tasks</td>
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<td>Combining Embedded and Unbounded Processes</td>
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<td>Providing Web Services Interoperability</td>
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<td>Interoperability of Heterogeneous Systems</td>
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<td>Developing Applications that are Compatible with SAP NetWeaver</td>
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</tbody>
</table>

An **IT Scenario Variant** is represented by an ordered sequence of processes, showing a specific end-to-end process flow of an **IT Scenario** that:

- Facilitates the implementation of an **IT Scenario** for a particular purpose
- Provides implementation guidance with the help of reference models
- Provide visualization of end-to-end processes
### Key changes with SAP NetWeaver 2004s:
The **IT Scenarios** concept – Aligned to ITs needs

IT Scenarios were introduced to deliver a set of IT processes, grouped to attain a defined business goal for IT…. Mapped to what IT does… Easily extensible…

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<td>Mobilizing Business Processes</td>
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<td>Central Master-Data Management</td>
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<td>Enterprise Data Warehousing</td>
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<td>Enterprise Reporting, Query, and Analysis</td>
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<td>Unified Life-Cycle Management</td>
<td>Software Life-Cycle Management</td>
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<td>SAP NetWeaver Operations</td>
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<td>Application Governance and Security Management</td>
<td>Authentication and Single Sign-On</td>
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<td>Integrated User and Access Management</td>
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<td>Enabling Enterprise Services</td>
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Key changes with SAP NetWeaver 2004s: Transition from component view to IT Scenarios

For your reference to aid in transition...

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<tr>
<th>IT Practice</th>
<th>IT Scenarios</th>
<th>Previous Components</th>
</tr>
</thead>
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<tr>
<td>Data Unification</td>
<td>Master-Data Harmonization, Master-Data Consolidation, Central Master-Data Management, Enterprise Data Warehousing</td>
<td>MDM BI</td>
</tr>
<tr>
<td>Business Information Management</td>
<td>Enterprise Reporting, Query, and Analysis, Business Planning and Analytical Services, Enterprise Data Warehousing, Enterprise Knowledge Management, Enterprise Search</td>
<td>BW KMC EP</td>
</tr>
<tr>
<td>Custom Development</td>
<td>Developing, Configuring, and Adapting Applications, Enabling Platform Interoperability</td>
<td>WebAS EP</td>
</tr>
<tr>
<td>Unified Life-Cycle Management</td>
<td>Software Life-Cycle Management, SAP NetWeaver Operations</td>
<td>All SAP NetWeaver</td>
</tr>
<tr>
<td>Consolidation</td>
<td>Enabling Platform Interoperability, SAP NetWeaver Operations, Master-Data Consolidation, Enterprise Knowledge Management, Enterprise Data Warehousing</td>
<td>All SAP NetWeaver</td>
</tr>
<tr>
<td>ESA Design and Deployment</td>
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<td>All SAP NetWeaver</td>
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Key changes with SAP NetWeaver 2004s: IT Scenarios Require Software...

IT Scenarios

Functionality provided by SAP NetWeaver
Organized into
Installed units

Enterprise Reporting, Query, and Analysis
Enabling User Collaboration

Require

SAP GUI
Business Explorer
Web Browser
EP
Search and Classification (TREX)
BI Java
BI
Key changes with SAP NetWeaver 2004s: SAP NetWeaver Technology Baseline — Installable units

Installable units are the building blocks as of SAP NetWeaver 2004s and powered by applications based on SAP NetWeaver 2004s:

- Comprised of “Clients,” “Usage Types,” and “Standalone Engines”
- Determine the intended purpose of a system and the role which a system plays

**Clients**
- Web Browser

**Systems with Usage Types**
- BI
- AS ABAP

**Standalone Engines**
- Search and Classification (TREX)

**Usage Types**
- Allow to install, deploy, and configure SAP NetWeaver systems, enabling customers to run IT and business scenarios (building blocks for IT Scenarios)
- Determine the intended purpose of a system
- Determine the role which a system plays in a given (distributed) scenario
### Key changes with SAP NetWeaver 2004s: SAP NetWeaver Technology Baseline — Installable units

**Defined Usage Types with SAP NetWeaver 2004s**
- Reusable, installed, and pre-configured unit for use
- Built from technical software components that form an installable and configurable unit (into manageable units)
- Can be built upon other usage types
- Replace SAP NetWeaver components for installation and landscape planning purposes

<table>
<thead>
<tr>
<th>Usage Type Names</th>
<th>Abbreviation</th>
<th>Contains usage types</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Intelligence</td>
<td>BI</td>
<td>AS ABAP</td>
</tr>
<tr>
<td>BI Java Component</td>
<td>BI Java</td>
<td>AS Java (requires EP too)</td>
</tr>
<tr>
<td>Development Infrastructure</td>
<td>DI</td>
<td>AS Java</td>
</tr>
<tr>
<td>Mobile Infrastructure</td>
<td>MI</td>
<td>AS ABAP + AS Java</td>
</tr>
<tr>
<td>Enterprise Portal</td>
<td>EP</td>
<td>AS Java</td>
</tr>
<tr>
<td>Process Integration</td>
<td>PI</td>
<td>AS ABAP + AS Java</td>
</tr>
<tr>
<td>Application Server ABAP</td>
<td>AS ABAP</td>
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</tr>
<tr>
<td>Application Server Java</td>
<td>AS Java</td>
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</tbody>
</table>
## Key changes with SAP NetWeaver 2004s:
### SAP NetWeaver Technology Baseline — Installable units

**SAP NetWeaver 2004s Standalone Engines and Clients**

<table>
<thead>
<tr>
<th>Standalone Engines*</th>
<th>Clients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Search and Classification (TREX)</td>
<td>SAP NetWeaver Developer Studio</td>
</tr>
<tr>
<td>Job Scheduler</td>
<td>Visual Composer</td>
</tr>
<tr>
<td>liveCache</td>
<td>J2SE Adapter Engine (PI/XI)</td>
</tr>
<tr>
<td>Gateway</td>
<td>MI Client</td>
</tr>
<tr>
<td>Content Server</td>
<td>Adobe LiveCycle Designer</td>
</tr>
<tr>
<td>Web Dispatcher</td>
<td>Business Explorer (BI)</td>
</tr>
</tbody>
</table>

*Reduced number of Standalone Engines according to enhanced definition*
### Key changes with SAP NetWeaver 2004s:
#### SAP NetWeaver Technology Baseline — Installable units

**For your reference to aid in transition...**

<table>
<thead>
<tr>
<th>Previous SAP NetWeaver “components” providing certain capabilities</th>
<th>Usage Type with SAP NetWeaver 2004s</th>
<th>Short name</th>
<th>Required Stacks (usage types)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAP NetWeaver BI (SAP BW)</td>
<td>Business Intelligence</td>
<td>BI</td>
<td>ABAP (AS ABAP)</td>
</tr>
<tr>
<td>SAP BW + SAP Web AS (Java)</td>
<td>BI Java Components</td>
<td>BI Java</td>
<td>Java (AS JAVA + EP)</td>
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<tr>
<td>SAP NetWeaver AS (SAP Web AS) + certain Java comp.</td>
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<td>DI</td>
<td>Java (AS JAVA)</td>
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<td>SAP NetWeaver AS (SAP Web AS)</td>
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What’s New with SAP NetWeaver® 2004s

SAP NetWeaver® 2004s Key Goals

Key changes with SAP NetWeaver® 2004s

SAP NetWeaver® 2004s Functional Deltas
SAP NetWeaver in 2005: Key Deliverables

SAP NetWeaver 2004s key drivers for new functionality

- **Business Suite edition of SAP NetWeaver 2004**
  - SAP NetWeaver platform for mySAP business suite application 2005 releases (i.e. mySAP ERP 2005, mySAP CRM 2005, etc)
  - Platform for delivery of ‘productionized’ Enterprise Services for mySAP

- **Composite application platform of choice for SAP, Partners, and Customers**
  - The platform for development of xApps and composite applications

- **Extending on the core SAP NetWeaver platform – major highlights:**
  - **Business intelligence capabilities:**
    - Enhanced query, analysis, and reporting
    - Integrated business planning
    - Enhanced Enterprise Data Warehousing features
    - BI Accelerator for high performance Analytics
  - **Enterprise Portal capabilities:**
    - Federated portal networks
    - External facing portals
  - **Development capabilities:**
    - Web Dynpro for ABAP
    - Switch Framework supporting multiple industry solutions
**SAP NetWeaver: Technology Map:**

What’s New with SAP NetWeaver® 2004s based on the technology map?

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- SAP NetWeaver® 2004s new features and deltas

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- Delta highlights by IT Scenarios / SAP NetWeaver Product Management / 24
Detailed information on Deltas:

IT Scenario:
Running an Enterprise Portal
## IT Scenario: Running an Enterprise Portal

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<td>Enterprise Search</td>
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<td>Enterprise Data Warehousing</td>
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Overview: Running an Enterprise Portal

The IT scenario “Running an Enterprise Portal” provides end users a uniform **single point of access** to applications, services and information they need for their daily work.

The standard portal capabilities are covered in the IT scenario variant:

- Providing uniform content access

Further, the following IT scenario variants exist:

- Implementing a federated portal network
  (SAP NetWeaver 2004s)
- Implementing an external-facing portal
  (SAP NetWeaver 2004s and SAP NetWeaver ‘04 SPS14)
Implementing a Federated Portal Network

The Federated Portal Network creates a single network from separate portal installations allowing content sharing between portals.
Implementing an External-Facing Portal

With SAP NetWeaver Portal organizations can implement a public Web Portal - using the same platform for the company's Internet and intranet implementation.

Also available in '04 SPS

The following functionalities which ease the creation of a Web portal were introduced:

<table>
<thead>
<tr>
<th>Feature</th>
<th>Details</th>
<th>Benefits</th>
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</thead>
<tbody>
<tr>
<td>Light framework page</td>
<td>A one frame page built of HTML controls</td>
<td>Improved client performance&lt;br&gt;Support of Web-site like behavior (Browser functionality, Search engine indexing, etc.)</td>
</tr>
<tr>
<td>Navigation features</td>
<td>Server side caching, Quick links, Hashed URLs.</td>
<td>Improved client performance&lt;br&gt;improved Web-site like behavior</td>
</tr>
<tr>
<td>Tag Libraries</td>
<td>Navigation and iView Trays tag libraries</td>
<td>Easy customization of navigation iViews and iView trays.</td>
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</tbody>
</table>
Running an Enterprise Portal general functionality: Support Platform

Application server capabilities environment where plug-ins are executed to perform tasks like: Check system readiness for installation, fine-tune and system troubleshooting.

Example Reports for Portal:
- Broken delta links
- Unused objects
- Change tracking
- Unassigned roles

For more information, see Support Platform under Solution Life Cycle Management.
Running an Enterprise Portal general functionality: Activity Reports as Initial Content

Monitoring capabilities directly available to Administrators → offering statistics based on numbers and content

<table>
<thead>
<tr>
<th>Workset</th>
<th>Portal Content</th>
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</thead>
<tbody>
<tr>
<td>User Admin</td>
<td>Activity Reports</td>
</tr>
<tr>
<td>Content Admin</td>
<td>Monitoring → Activity Reports</td>
</tr>
<tr>
<td>System Admin</td>
<td>Activity Reports</td>
</tr>
</tbody>
</table>
Running an Enterprise Portal general functionality: 
Additional new functionality

- More comprehensive and user-friendly administration user interfaces (based on Web Dynpro):
  - User Management
  - Identity Management
  - iView Wizard
  - Page Wizard
  - Personalization

XML Content and Action Tool:

- Import and Export functionality for portal content based on XML-scripts
- Automate and simplify the creation of semantic portal objects
IT Scenario: Enterprise Knowledge Management
## IT Scenario: Enterprise Knowledge Management

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Overview: Enterprise Knowledge Management

- The IT scenario Enterprise Knowledge Management provides central and role-based access to the information and creates a connection between structured business data and unstructured documents.

- The IT scenario allows users to exchange documents and information across technical system boundaries.

- Enterprise Knowledge Management contains the tools to integrate different data sources and to create, administer, and distribute information.

  - Allows consolidation and integration of intranet platforms and makes available integrated search technology that takes into account all data stores in the system landscape.

- The IT scenario comprises the set-up and operation of an integrated authoring environment for information workers.
Enterprise Knowledge Management: What’s new in SAP NetWeaver 2004s

IT Scenario Enterprise Knowledge Management – What’s new in the following areas:

- User Experience
- Repository Integration
- Transport Capabilities
- Search and Classification
- Reporting
Enterprise Knowledge Management: User Experience

**Recent Notifications in the Universal Worklist**

- In the new release, all KM notifications are integrated in the Universal Worklist (UWL).

**Inheritance of the Versioning Settings When Creating New Folders**

- Previously, individual activation and versioning for each folder was required.
- When new folders are created, they adopt the versioning setting of the superordinate folder. This means that if versioning is active in the superordinate folder, it is also active in the new folders.

**iView for Setting Permissions**

- There is a new iView for content administrators for checking and setting permissions and service permissions. This iView is based on the KM Navigation iView and lists all repositories and their folders. Different icons illustrate whether a folder or document inherits the permissions of the superordinate folder, or whether it has been assigned its own different permissions.
Enterprise Knowledge Management: User Experience

**Portal Drive**

- The new Portal Drive WebDAV client for Windows makes KM folders available as mapped network drives. Users can then work with documents in KM repositories in the same way as they work on any other Windows network drives. Among other things the client supports versioning, locking, offline and online synchronization modes.

**UI Command Map Portal Drive**

- The UI command *Map Portal Drive* is available for the KM user interface.
  - For example, Integration of this command in the context menu for folders.
- Users can use this command to connect a KM folder as a network drive quickly and easily, in order to access the folder content in Windows Explorer.
GUID Repository Manager and Short IDs

Previously setting a link to an object in a KM repository in a document (e.g. an Office file) used the target URL. The target URL contains the complete path to the object in the repository and can be quite long, depending on the depth of the folder structure.

Now objects in KM repositories can also have a short ID.

- The short ID does not change if an object is moved from one KM folder to another.
- The GUID repository manager is used internally to manage short IDs that are delivered by the URI mapper service.

PCD Repository Manager

The PCD Repository Manager displays objects in the Portal Content Directory (PCD) in Knowledge Management.

The PCD Repository Manager is used in KM when searching for portal pages and iViews. The objects found using the portalRolesSearch index service in the PCD cache are converted to KM objects and can be displayed in the search results list.
Enterprise Knowledge Management: Transport Capabilities

Export and Import of Configuration Data

With the new release, the Export and Import functions are available in the Configuration iView. These functions move individual configuration objects or larger parts of the configuration, including all referenced configuration data, between portals.

- For example, transferring the configuration from a test system to a production system.

Export and Import of Configuration Data

Export and Import of Taxonomies

Export of a taxonomy to an XML file, or import a taxonomy system from an XML file.

- This function enables the addition of taxonomies from one SAP NetWeaver deployed Portal to another SAP NetWeaver deployed portal.
- The ability to import taxonomies from other systems as long as the XML file is valid as defined by the document type definition (DTD) for taxonomies that is delivered by SAP.
Export and Import of Properties

In the Configuration iView, import and export functions are used to transfer existing predefined properties between portals.

- For example, creation of a property in a test system and then transport this using an XML file to a production system.
Enterprise Knowledge Management: Search and Classification

■ Sponsored Links

- Sponsored links appear in the search results list in a special area above, beside, or below the regular search results. Authors and content managers can determine that certain links are displayed when users search using specific key terms. In this way, they can point users to important documents, portal pages, or other objects.

Searching For Portal Pages and iViews

- Indexes can be created for the search in the Portal Content Directory (PCD).
  - When using this index when searching, the results list contains portal pages and iViews that are contained in the roles of the logged-on user. This function allows users to access their portal pages and iViews through the search function.

Extend Search Queries

- User's search query can be linked with another search query that is defined in a Java class. The user's search query and the search query in the class are linked using AND.
  - For example, defining a search for a specific property value in the class (such as property targetgroup = “public”). The index returns only documents for which this value is set.
Filtering By Language in the Search Results List

- In the configuration of the search options, there are two new parameters for filtering the search results list by documents in a specific language. These are the parameters Enable Language Selection and Default Search Language Selection.

TREX Alert Server

- Administrators can use the TREX alert server to monitor system behavior and the configuration of TREX. The TREX alert server regularly checks central TREX functions and can notify the administrator by e-mail of the system status in the event of an error or incorrect configuration. The TREX alert server is part of the TREX admin tool (stand-alone). It can also be displayed in the SAP system using transaction TREXADMIN.

Indexing Monitor

- The indexing monitor provides the most important information on the status of running indexing processes. Various functions are available to intervene in indexing.

- Display of detailed information on an index is supported by launching a new iView that displays the crawler monitor together with the TREX monitor.
Enterprise Knowledge Management: Reporting

Also available in '04 SP-Stacks

Reports for Copying and Deleting Mass Data

- **Copy**: This report copies items from one KM repository to another. For example, copying mass data from a file-system repository to a CM repository.
- **Delete**: This report deletes mass data from KM repositories.

Subscriptions Report

- This report can delete the user’s subscriptions or transfer them to other users if a user now no longer exists in user management.

Report for Time-Based Publishing

- This report allows the creation of an overview of the current status of documents whose visibility is controlled by the service for time-based publishing. The results list displays the *Valid From* and *Valid To* dates for each document and the information about whether the system has switched the document to visible or invisible.
Enterprise Knowledge Management: Reporting

Permissions Report

This report displays which permissions users have for objects in KM repositories. Creation of lists of folders in a repository with their respective permissions.

Scheduler Tasks Report

This report lists all scheduler tasks that are entered in the Knowledge Management configuration. In a load balancing environment, the report can utilize the redistribute scheduler tasks to other system nodes.
IT Scenario: Enabling User Collaboration
### IT Scenario: Enabling User Collaboration

#### IT Practices

|------------------------------|------------------|---------------------------------|---------------------------|-------------------------------|-------------------|-----------------------------|----------------------------------------|--------------|--------------------------|


THE BEST-RUN BUSINESSES RUN SAP™
Enabling User Collaboration

- Help people collaborate more efficiently as they perform their business processes.
- SAP NetWeaver makes collaboration and knowledge sharing an integral, natural part of everyday work and enables efficient communication.

Enabling User Collaboration

- Collaboration In Virtual Rooms
- Ad hoc Collaboration
Enabling User Collaboration:
What’s new in SAP NetWeaver 2004s?

User Experience

- Major Performance Improvements: Room Directory and Collaboration Launch Pad
- Revised Set of Standard Room Templates
- Displaying Room Page Permissions in the Room Maintenance
- Sending Room Documents as E-Mail Attachments
- Facilitating the Copy/Move Process of Room Documents (My Rooms Folder Entry Point)

Content Administration *

- Indexing Rooms Using TREX (High Performance Search)
- Export and Import of Templates
- New Room Extension Points
- Preventing Deletion of Parameters and Extensions in Use
- Switching off Automatic E-Mail Sending for Rooms
- Preventing Mass E-Mails From Being Sent
- Switch to E-Mail Invitations for Online Sessions

*User assigned to the content administration role
Enabling User Collaboration: User Experience—Details

Performance improvements: Room Directory

- The search for rooms in the room directory, in room administration, or in the room relations manager, has been set to use the SAP search engine Search and Classification (TREX) by default, allowing high-performance search.

Performance improvements: Collaboration Launch Pad

- The performance of the user display on the Collaboration Launch Pad (and the room member list) can be improved using an internal cache memory. The system writes all users displayed to the cache memory and reads them directly from there if the same user is displayed again.
Enabling User Collaboration: User Experience—Details

- Revised Set of Standard Room Templates
  - The standard templates delivered by SAP for rooms have been revised and unified. The existing room templates are not overwritten by the new templates.

- Displaying Room Page Permissions in the Room Maintenance
  - Room members who have permission to access the maintenance iView for the room can now display the page permissions defined in the room template and the templates of the room parts added to the room.

- Sending Room Documents as E-Mail Attachments
  - The system attaches a copy of the document to the e-mail to be sent.

- Facilitating the Copy/Move Process of Room Documents
  - When copying or moving documents and folders in Content Management inside and outside of rooms, the new entry point My Room Folders is available. If the entry point has been activated in the configuration, it offers all room folders in a user’s rooms as a target location for the copy or move process.
Enabling User Collaboration: Content Administration—Details

- Switching off Automatic E-Mail Sending for Rooms
  - In the configuration of the backend system properties for rooms, suppression of automatic sending of e-mails when a user is invited to, deleted from a room, and when a room is deleted is possible

- New Room Extensions Points
  - An extension can be executed on adding a user to the room, removing a user from the room or on changing an external parameter

- Preventing Deletion of Parameters and Extensions in Use
  - Before deleting an external parameter or an extension configuration in the definition of a template, the system will check whether the parameter is being used. The system will not allow a parameter to be deleted if it is currently used in a template

- Export and Import of Templates
  - Transporting of room templates and room part templates from one system to another by using the export and import function in the PCD

- Preventing Mass E-Mails From Being Sent
  - Prevention of certain Portal users (for example, external users) from using the e-mail function in the portal to send mass e-mails

- Indexing Rooms Using TREX
  - For a large number of rooms, it will be possible to use TREX for high performance searching of rooms
IT Scenario: Enterprise Reporting, Query, and Analysis
## IT Scenario: Enterprise Reporting, Query, and Analysis

### IT Practices

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<td>Enterprise Knowledge Management</td>
<td>Business Process Management</td>
<td>Master Data Consolidation</td>
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</table>

The table above outlines the IT practices and scenarios for enterprise reporting, query, and analysis. Each practice is mapped to relevant scenarios, showcasing how they align with business tasks and processes.
Overview: Enterprise Reporting, Query, and Analysis

- Enterprise Reporting, Query and Analysis provides processes and services to meet the needs of all business user with regards to information consumption. This covers reporting, ad-hoc query, interactive analysis, dashboards, and embedded BI, from both a design time and runtime perspective.

- The design-time processes are based on .NET tools and Web-based tools that are integrated into an overall strategy for SAP NetWeaver design time.
  - The runtime environment utilizes the Java and Portal platform and open-standards technologies to provide an infrastructure that is both flexible and extensible. It can be closely embedded into the operational context.

- All information that a user gets through reporting, query, or analysis is actionable:
  - Print it, attach it to a workflow, broadcast it, give feedback on it, etc.

- IT Scenario variants cover the different possibilities for designing, deploying and interacting with BI data by using the different tools and capabilities of the Business Explorer (BEx) suite as well as Visual Composer.
Extend the reach of BI by providing:

- An integrated and state-of-the art modeling environment
  - for all types of queries, reports, and analytics
  - for business users and IT
  - BI data & external data

- BI for the masses:
  - High Visual Appeal & Usability
  - High performance use of BI
  - Mass Distribution

- Seamless integration into
  - Portal
  - Knowledge Management
  - Collaboration
  - Excel
  - Visual Composer

Information Consumers
- Highly intuitive BEx Web
- KM & Collaboration Services

Business Users
- Ad-hoc, Excel Integration
- Visual Composer Integration

BI Experts
- for authoring & deployment

Any user type
Enterprise Reporting, Query, and Analysis: Designing a Query

Designing a Query

- State-of-the-art UI concept, providing for example:
  - Available tasks for a selected object presented via a task pane
  - Message panel shows warnings and error messages in context → helps to avoid or correct errors
  - Enhanced application menus, toolbars and context menus
  - Extended visualization of status and user actions

Query design takes place in the Business Explorer (BEx) Query Designer, a Visual Basic .NET-based Unicode-compliant tool.

- Support of multi-selected objects – drag&drop, properties
- Options for BI-integrated Planning
Designing a Report

- Standard formatting: Font styles (e.g. bold, italic) and colors, etc.
- Group level changes with individual formatting
- Layout options, for example
  - Height of rows, width of columns
  - Multi-line column headers
  - Flexible positioning of fields
  - Merger of cells
- Support of hierarchies
- Rules for the presentation of special characteristic values
- Integration of texts, pictures, and charts
- Header and footer for reports and pages

Report design takes place in the Business Explorer (BEx) Report Designer - a new, VB.Net-based tool that allows to create formatted, print-optimized reports.

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Designing a Web Application

Web application design takes place in the Business Explorer (BEx) Web Application Designer, a Visual Basic .NET-based, Unicode-compliant tool.

- Model-driven BI application building
  - Wizards for charts, maps, command editing
  - Wizard for layout elements (e.g. buttons)
  - “Syntax Auto-Complete” support for Web API developers
  - Easy integration of native HTML commands
- New layout elements (Tab strips etc.)
- New Web items
- New chart types, e.g. GANTT chart, MTA chart
- Design of ‘planning aware’ business applications
Web-based Ad-hoc Design Leveraging Drag & Drop

- Easy navigation, when dropping characteristics on top of rows or columns
- Easy filtering, when dropping characteristics into filter area
- Personalized Filters
- Saving of and distribution of analysis results through strong portal integration
- Close integration to Information Broadcasting and Knowledge Management
- Wizard-based definition of exceptions and conditions
- Query creation on top of SAP NetWeaver and 3rd party data (via XMLA Connectors)
Enterprise Reporting, Query, and Analysis: Excel Integration

Embedding Queries, Views & InfoProviders

- Direct Access to InfoProviders as well as queries & query views
- New workbook default layout
- Intuitive User Interaction via Drag & Drop and re-designed property dialogues
- Personalizable Filter Value Lists
- Full accessibility and unicode support
- Excel based data entry and planning. Manual Data entry into Planning Aggregation Levels and usage of planning functions

Country Sales and Distribution

<table>
<thead>
<tr>
<th>Country</th>
<th>Distribution channel</th>
<th>Number of documents</th>
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<tbody>
<tr>
<td>Australia</td>
<td>Direct Sales</td>
<td>380,000</td>
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<td>Final Customer Sales</td>
<td>366,000</td>
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<tr>
<td></td>
<td>Internet Sales</td>
<td>376,000</td>
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<td></td>
<td>Service</td>
<td>381,000</td>
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<td>Canada</td>
<td>Final Customer Sales</td>
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<td></td>
<td>Service</td>
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<td>USA</td>
<td>Final Customer Sales</td>
<td>36,652,000</td>
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<tr>
<td></td>
<td>Internet Sales</td>
<td>15,114,000</td>
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<tr>
<td>Overall Result</td>
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<td>146,199,000</td>
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</table>
Workbook Design

- Application-building in Excel (similar to Web Application Designer)
- Excel Formulas allow access to any cell of the result set
- Excel Formatting options can be fully leveraged for BEx Workbooks (e.g. blank lines, fonts etc.)
- Combining Excel Formulas and Excel Formatting allows the design of High-End Formatted solution workbooks
- These features can be used on top of ANY type of query, query view or even directly on an InfoProvider

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Additional new broadcasting features include:

- **New Object Types**
  - Query Views
  - Formatted Reports

- **New Distribution Types**
  - Data Bursting → Broadcast to recipients derived from BI master data and optionally adapt the output format for each recipient
  - Exception broadcasting - Create Alert settings based on defined exceptions
  - Integration into SAP Alert Framework & UWL

- **New Output Options**
  - Printers
  - PDF Files
Enterprise Reporting, Query, and Analysis:
Modeling BI Data with Visual Composer

Modeling Embedded BI

- Allows Business Users to create Composite Applications that include BI data
- Integrate with SAP NetWeaver BI InfoProviders (InfoCubes, BEx Queries and Query Views)
- Integrate Third Party Data via Java Connectors (XMLA, ODBO, JDBC …)
- Business User Support via BI Integration Wizard

Note: Only the next version of SAP NetWeaver Visual Composer is planned to support SAP NetWeaver 2004s, and to support this scenario variant.
IT Scenario:
Enterprise Data Warehousing
### IT Scenario: Enterprise Data Warehousing

**IT Practices**

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Overview: Enterprise Data Warehousing

Enterprise Data Warehousing (EDW) enables customers to create and operate a data warehouse in an enterprise-wide environment.

- This methodology encompasses integration of heterogeneous systems, supports various system topologies and their development and describes a layering methodology for highly flexible information access. An EDW approach also facilitates both strategic analyses and operational reporting.

The IT scenario enterprise data warehousing structures into two scenario variants, which cover design time (modeling/implementation) and runtime aspects of a highly flexible, reliable, robust and scalable BI solution:

- Modeling the enterprise data warehouse: mainly addresses implementation and modeling issues. It spans from data modeling (creating InfoProviders), definition of sources, transformation to data distribution and also facilitates meta data management.

- Running the enterprise data warehouse: mainly addresses administration and monitoring issues. It spans from data flow control, administration & monitoring, performance optimization (using the highly innovative concept of BI accelerator) to data lifecycle management and also facilitates user management.
Data Modeling and Transformation

- Enhanced DataStore objects (formerly: ODS objects)
  - Benefit: Improved performance and flexibility
  - Performance optimization of activation process
  - New DataStore Type: Write-optimized DataStore (without change log, no activation, Partitioned on request ID)

- Transformation
  - Benefit: Improved performance, flexibility and usability, simplification by unifying transfer and update rules
  - Unification of transfer and update rules
  - New rule type: end routine
  - New rule type: expert routine (pure coding of transformations)
Enterprise Data Warehousing: Running the EDW - Main Processes

Data Flow Control

- **Data Transfer Process (DTP)**
  - Benefit: Data ‘Distribution’ within BI Capabilities (from PSA or InfoProviders to InfoProviders)
  - Improved transparency of staging processes across data warehouse layers (PSA, DWH layer, ODS layer, Architected Data Marts)
  - Improved performance and high scalability
  - Separation of delta mechanism for different data targets: delta capability is controlled by the DTP
  - Enhanced filtering in dataflow
  - Repair modus based on temporary buffers (buffers keep complete set of data)

- **Enhanced real-time data acquisition capabilities**
  - XML Web service
    - Direct push into PSA (removing Service API/ Delta Queue)
  - InfoPackage & DTP for real-time data acquisition
    - Daemon-based update from delta queue (Service API)
    - Daemon-based update of DataStore objects (ODS layer) – including lean staging (with minimized logging)
Administration & Monitoring

SAP NetWeaver 2004s provides a proactive monitoring framework and enhanced administration capabilities. TCO reduction is the guiding principle in this context.

- **Administration Cockpit**
  - Benefit: Centralized Monitoring
  - Proactive support of BI administrator in status tracking and performance optimization (Data Load, Reporting and Planning)
  - Focused on critical issues
  - Timelines and comparisons (with deviations)
  - Drill-down from overview view to details
  - Direct jump to facilitate solving problems
  - Based on new technical BI content objects
  - Based on BEx and Portal technology ➔ Enhancements easily possible

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Performance Optimization

SAP NetWeaver 2004s provides various tools to increase the data load and query performance significantly – among them the innovative BI accelerator. Thus, the implementation of large enterprise data warehouses is facilitated.

**BI Accelerator**

- **Benefit:** A new low administration appliance concept for high performance data access.
- **Query performance** is boosted by orders of magnitude
- Simultaneously, maintenance and the realignment processes roll-up and change run are improved significantly
- **BI Accelerator** is built using TREX technology (search and classification engine)
- Provides linear scalability and is ready to fully leverage grid and adaptive computing capabilities

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Information Lifecycle Management

- Near-line storage features
  - Supports data aging (together with data archiving capabilities) by delivering a robust, generic interface to near-line storage solutions of certified Complementary Software Partners
  - Data archiving processes implement near-line storage archiving capabilities for InfoCubes and DataStore objects
  - Near-line storage archives transparently accessible for SAP BI Queries
  - Reduction of administration costs (TCO) and improvement of high volume data warehouse

User Management

- New analysis authorization concept
  - New concept replaces authorization object concept for analysis users
  - Authorizations form a union (not an intersection) → ‘as expected’
  - High flexibility of authorizations (e.g. authorized only on the first 10 days of each month)
  - No restrictions in terms of number of InfoObjects
  - Supports rapid change
  - Navigation attributes individually selectable
  - Hierarchy authorizations at the same level as value/interval authorizations
  - Special dimensions for every authorization: InfoProvider, activity, validity
  - Simplified modeling
IT Scenario: Business Planning and Analytical Services
<table>
<thead>
<tr>
<th>IT Practices</th>
<th>IT Scenarios</th>
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<td>ESA Design and Deployment</td>
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Overview: IT Scenario Business Planning and Analytical Services

Business Planning and Analytical Services

This IT scenario covers processes which support decision-making by collecting data from InfoProviders, queries or other BI objects, transforming data in various ways, and writing back the generated information into BI objects.

- Main components of business planning and analytical services are the Analysis Process Designer and BI integrated planning.

This scenario includes the following variants:

- **Business Planning**
  - State-of-the-art planning methods and tools that allow organizations to predict and react flexibly and quickly to changing market conditions.
  - Build applications to perform strategic or operational planning

- **Analysis process design**
  - Organizations can create analysis processes, including data mining methods.
**Business Planning and Analytical Services:**

### Business Planning

- **Planning modeler**
  - Web based planning model tool for modeling of planning scenarios by business experts that do not have access to Data Warehousing Workbench (RSA1)
  - Administration of a planning process requires frequent changes of settings (variables, data slices, formulas)

- **Planning Wizard**
  - Guidance through all steps necessary to build a planning model on top of an InfoCube
  - Ad hoc creation of test environment for manual data entry and planning functions
  - On screen help for inexperienced users

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BEx Query Designer
Designing the input ready Query

New features:
- Drilldown
- Hierarchical data in rows and columns
- Calculated key figures
- Structures
- Unit conversion
- Alerts
- Conditions
- Graphics
- Ad-hoc currency
- Currency translation
Business Planning and Analytical Services: Business Planning

BEx Analyzer - Designing a workbook

Combine the power of the Excel rich client with a centrally managed planning model:

- Users can “enrich” their workbooks with “private” calculations
- Save workbooks locally while retaining the link to the central planning model
- Deploy highly customized, individual workbooks (comparable to BI Web applications)
- BEx Analyzer features available in planning applications
  - Drill down, filter, sort, etc..
  - Drag and drop
Business Planning and Analytical Services: Business Planning

Web Application Design – Example

Highlights of new features

- Drag and drop
- New exception wizard
- Include formatted reports & any web items into web based planning application
- Export to Excel & PDF
IT Scenario: Business Task Management
### IT Scenario: Business Task Management

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Overview Business Task Management

Automation and execution of tasks

- SAP NetWeaver helps people coordinate, monitor, and adapt their own tasks and the tasks they assign to coworkers, including forms-based tasks

Includes the variants

- Central Access to Tasks
- Support for Offline Processes

TASK MANAGEMENT User Interaction

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- Workflows
- Collaborative tasks
- Guided procedures
Business Task Management: Support for Offline Processes

Guided Procedures: Bridging the gap between Centralized and Decentralized process control

Individual: “I want to delegate some of my tasks to colleagues, and track their progress.”

Business Department: Collaboration Tasks

SAP NetWeaver
- Unbounded Processes
- Embedded Processes
- Programmed Processes

Central IT

SAP NetWeaver
- Guided Procedures
- Collaboration Room

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Business Task Management: Support for Offline Processes

Interactive Forms – Design

- **Wizard-based table design**
  - Create tables (in particular for output) easily with the assistance of a user-friendly wizard

- **Dynamic PDF forms**
  - Design and generate forms which can dynamically expand in Adobe Reader (to, for example, add a new order line item to an order form)

- **Integration into Web Dynpro for ABAP**
  - Create Web applications using interactive PDF forms in the ABAP Workbench

- **XML Forms Interface**
  - Generate forms context from XML schema

Interactive Forms – Security

- **Document certification and signing on the server**
  - Ensures that the form recipient can trust the identity of the form creator

- **Validation of certified documents on the server**
  - Ensures that the form template of incoming forms was not modified

- **Validation of digital signatures on the server**
  - Validates the identity of the person(s) who signed the form
  - Allows to discover changes to the form data after signing

- **Document permissions**
  (e.g. do not allow printing)
Business Task Management: Task-Related Enhancements

- Universal Worklist built on Web Dynpro technology

- Integration of third-party tasks into the universal worklist.

- Collaboration Tasks based on Business Suite objects
  Ability to inherit the BOR objects that are attached to a work item when a collaboration task is created based on this workflow task.

- Flexible BI task-based performance reporting.
  This is primarily aimed at process-based reporting but can also be used to report on tasks and trigger alerts when KPIs are not reached.

  This was delivered with the latest BI Content
  This makes the Workflow Information System redundant and obsolete. Recommendation to use the new BI integration instead.
IT Scenario: Enabling Application-to-Application Processes
## IT Scenario: Enabling Application-to-Application Processes

### IT Practices

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Enabling application-to-application processes is the message- and standard-based integration of intra-company processes by seamlessly connecting SAP and non-SAP applications.

- The shared collaboration knowledge is based on open standards, e.g., Web services, XSLT, Java, XPath, in order to ensure openness and interoperability.
- Pre-delivered content is provided to allow an out-of-the-box integration of SAP solutions with other SAP or non-SAP applications.
- This IT scenario includes one variant:
  - Application-to-application integration
Enabling Application-to-Application Processes

- Adapters (Enhanced)
  - File / FTP Adapter
    - FTP-SSL and FTP-TLS
  - JMS Adapter
    - Mapping of header correlation data and Header based sync / async bridge
  - Mail Adapter:
    - Message security based on S/MIME and Certificates for digital signature and encryption
  - IDoc Adapter
    - Advanced IDoc packaging and processing options

- Conversion Agent (New)
  - Generic Data Enrichment
  - Mapping Usability and new Standard Functions
  - Message Split Scenario without Integration Processes

- Configuration (Enhanced)
  - Enhanced Test & Simulation of Message Processing
  - Improved Conditional Mapping

Also available in ‘04 SPS11-13

Also available in ‘04 SPS12/13
Enabling Application-to-Application Processes

- **Operations (Enhanced)**
  - Embedded Process Integration capabilities with ‘powered by’ Applications
  - Enhanced monitoring options
    - CCMS Alert Monitor per Adapter Engine
    - Payload search based on TREX
  - Archiving
    - Enable single version archiving to reduce data volume
- **Security**
  - Enhanced Runtime Authorizations (Sender Business Service & System, message execution, adapter level)

Also available in '04 SPS12/13
IT Scenario:
Enabling Business-to-Business Processes
## IT Scenario: Enabling Business-to-Business Processes

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THE BEST-RUN BUSINESSES RUN SAP™

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Overview: Enabling Business-to-Business Processes

B2B integration is the message- and standard-based integration of inter-company processes by seamlessly connecting SAP and non-SAP applications and orchestrating the process flow between them.

For B2B integration, SAP NetWeaver provides one platform to centrally manage the design, configuration, and execution of business processes running within and beyond the enterprise.
Enabling Business-to-Business Processes: What’s new in SAP NetWeaver 2004s?

Business partner integration using industry standards

- Adapters
  - Integrating high-tech business partners using the RosettaNet standard
    - Support of RNIF 1.1 specification
    - Wizard: Configuration of RNIF 1.1 & RNIF 2.0 adapter based on channel templates
  - Integrating chemical business partners using the CIDX standard

Small business partner and subsidiary integration

- Integrating small business partners using the Partner Connectivity Kit
  - Via SAP NetWeaver’s Partner Connectivity Kit (PCK) to enable a reliable low effort data exchange with other businesses.
  - Message Mapping possible in PCK
Enabling Business-to-Business Processes - General:

- Adapters (Enhanced)
  - File / FTP Adapter
    - FTP-SSL and FTP-TLS
  - JMS Adapter
    - Mapping of header correlation data and Header based sync / async bridge
  - Mail Adapter:
    - Message security based on S/MIME and Certificates for digital signature and encryption
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- Conversion Agent (New)
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  - Message Split Scenario without Integration Processes

- Configuration (Enhanced)
  - Enhanced Test & Simulation of Message Processing
  - Improved Conditional Mapping
Enabling Business-to-Business Processes - General:

- **Operations (Enhanced)**
  - Embedded Process Integration capabilities with ‘powered by ‘ Applications
  - Enhanced monitoring options
    - CCMS Alert Monitor per Adapter Engine
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IT Scenario:
Developing, Configuring, and Adapting Applications
## IT Scenario: Enabling Platform Interoperability

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Overview:
Developing, Configuring, and Adapting Applications

This IT Scenario consists of eight variants:

**Leveraging Java 2 Platform, Enterprise Edition (J2EE) standards for porting and adopting applications**
- Port applications easily to SAP NetWeaver that conform to the Java 2 Platform, Enterprise Edition (J2EE) standard

**Creating composite applications**
- Build and deploy composite applications on top of the service operations
- Combine these service operations with new application logic, user interfaces, and business process orchestration.
- Loosely coupled to the components on which they are based

**Developing Java applications using Web Dynpro**
- A model-driven and code-driven environment to easily and flexibly configure and adapt J2EE-based SAP-delivered applications
- Develop, model, and configure custom J2EE-based applications from scratch

**Developing ABAP applications using Web Dynpro**
- A model-driven and code-driven environment for developing Web applications using Web Dynpro in the ABAP environment
Overview: Developing, Configuring, and Adapting Applications

Creating applications using SAP NetWeaver Visual Composer
- A model-driven environment for developing, configuring, and adapting custom applications

Creating portal applications using the portal development kit for .NET
- A model-driven and code-driven environment for developing, configuring, and adapting .NET-based applications

Developing mobile applications for occasional connection
-Disconnected mobile applications using the mobile development kit within the SAP NetWeaver Developer Studio tool.
- A code-driven environment for developing custom applications.
- Also development of connected mobile applications using a model-driven and code-driven environment

Creating business applications using ABAP
- Create business applications using ABAP and the ABAP workbench
Developing ABAP applications using Web Dynpro

Benefits:

- **UI Development directly in the ABAP application server capabilities**
  - Web enabling of existing business functionality (similar to J2EE solution)
  - Full integration into the ABAP development environment

- **Design as much as possible, program as little as necessary**
  - Higher productivity through declarative approach to modeling instead of programming layout, screen usage, navigation and data binding
  - Future safe UI definitions (layout and behavior), which are independent of the currently used rendering and display technology

- **Reduced development efforts**
  - Reusable components
  - Predefined UI elements

- **Flexibility**
  - Highly adaptable and configuration capabilities
  - Dynamic programming of generic UIs

- **Tight integration into the Portal Capabilities of SAP NetWeaver**
SAP NetWeaver 2004s makes it possible to develop Web Dynpro applications in ABAP. Web Dynpro for UIs can now be developed directly in the application's ABAP development system. This includes for example:

- Access to business logic via clearly defined APIs based on Web Services, BAPIs, ABAP Objects, RFCs or function modules.
- Structuring large software projects into clear-cut packages and Web Dynpro Components
- Including special client technology to address small devices, interactive forms, and offline scenarios
- Using integrated tools development environment
- Publishing into the Portal capabilities with minimal effort by adding it as an iView to Portal roles and pages
- Managing the complete software life-cycle by the help of the SAP NetWeaver Development Infrastructure
Creating composite applications

Benefits:

- Composite applications leverage services and data from existing applications to initiate new business practices
- They provide a holistic view on processes, data and information, facilitating user interaction and collaboration
- The SAP Composite Application Framework (SAP CAF) allows to follow a model-driven, pattern-based approach to all layers relevant for the composite application development

New Features:

- Special support of the three layers of a composite application, the services, the user interfaces, and the processes.
- Provision of patterns and templates at all three levels to increase development efficiency and the homogeneity of the application.
- Model- and code-generation based methods using tools that place the models in their own meta models of a repository
Developing business logic with ABAP – enhancement framework

Benefits:

- Enhancements simplify locating where to extend the SAP solution in a predefined way.
- Enhancements are fully integrated in the Object Navigator of the ABAP Workbench.
- Different types of enhancements are managed in a generic way.
- Enhancements reduce the need for modifications.

New Features:

- Search and identify places for enhancement in the application
- Implement the enhancement with the ABAP Workbench
- Use ABAP Objects technology to validate the contract between application and enhancement
- Test and upgrade the enhancement
Developing Java applications using Web Dynpro

Benefits:
- Design as much as possible, program as little as necessary
  - Higher productivity through declarative approach to modeling instead of programming layout, screen usage, navigation and data binding
- Reduced development efforts thanks to reusable components
- Cutting-edge efficiency for Java development through full integration into the NWDI
- Tight integration into the Portal capabilities of SAP NetWeaver
- Customers can be sure they create a future-proof set of applications because of Web Dynpro’s mandatory separation between UI logics and business logic, which is completely in line with SAP’s Enterprise Service-Oriented Architecture (Enterprise SOA) concept.

Enhanced Features:
- Role-based UI personalization for end user
- Client independency
- Single client accessing both Web-Dynpro-based applications and ABAP Dynpros
- Mobile Web Dynpro support
  - e.g., BlackBerry wireless handheld, Pocket PC and the Nokia 80-series
- Interoperability
- Web Dynpro can navigate to an application based on different technology (such as JSF) and return afterwards
Developing, Configuring, and Adapting Applications: Creating applications using SAP NetWeaver Visual Composer

Creating applications using SAP NetWeaver Visual Composer

Benefits:

- Reduced total cost of ownership (TCO)
  - minimizing the effort to create applications
  - allowing reuse of already existing applications
  - reducing costs for maintenance

- Rapid application development and prototyping

- Enabling business process experts to easily build applications

- Powerful design tool
  - facilitates the creation of content for Portal deployment, using modeling capabilities and a visual user interface rather than manually writing code

- Provides sophisticated, yet simple-to-use tools for creating portal iViews that process data from back-end systems, including SAP and third-party enterprise systems

- Fully Web-based application allowing (virtual) teams to easily build or customize pages and iViews as needed, accessing the software from virtually any machine worldwide
Enhanced Features:

- **Support for SAP Analytics:**
  - Visual Composer is the main tool for modeling analytic applications.

- **Support for Flex UI and Web Dynpro:**
  - Visual Composer now supports Adobe Flex/Flash and Web Dynpro runtimes.

- **Connectivity to Non-SAP applications:**
  - By means of connectors provided by our partner iWay Visual Composer can now access the first Non-SAP systems (PeopleSoft, Siebel).

- **Completely running on the Java Stack:**
  - Visual Composer now runs completely on the AS JAVA usage type of the Application Server capabilities of SAP NetWeaver.

- **Support for Web services:**
  - It is now possible to connect to Web service repositories, in order to discover and incorporate Web services into the Visual Composer models.
IT Scenario: Enabling Platform Interoperability
## IT Scenario: Enabling Platform Interoperability

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Interoperability is the ability of two or more systems or components to exchange information and to use the information that has been exchanged.

- SAP NetWeaver offers interoperability, openness, and extensibility in the areas of people-, information-, process- and application integration.

This IT scenario covers the most important standards and technologies that are relevant in the interoperability context and includes 4 variants for SAP NetWeaver 2004s.

Enabling Platform Interoperability

- Enabling Coexistence of Several Portals
- Ensuring Application-to-Application and Business-to-Business Integration
- Providing Web Services Interoperability
- Managing Heterogeneous System Landscapes
Enabling coexistence of several portals

- Leveraging two portals to combine content between Portal capabilities of SAP NetWeaver and a non-SAP portal technology.

- Combine portal assets:
  - e.g. when customers already have an up and running portal and this needs to be interoperable with the Portal capabilities of SAP NetWeaver.

- One of the portal needs to take the role of the leading portal and in any case interoperability on several areas needs to be ensured:
  - SSO, user management, appropriate granularity of access in combination with central concepts for navigation and look & feel.

Support of Web Services for Remote Portlets (WSRP)

- WSRP could be leveraged to primarily consume non-SAP portal content within the portal capabilities of SAP NetWeaver.
- Custom developments or third-party developments based on WSRP can easily be integrated.

SSO between SAP NetWeaver and IBM WebSphere enabled

- Seamless access to content no matter which portal it resides on.

Ensuring A2A and B2B integration


- Interoperability on the messaging and process integration level is enabled by supporting several standards (e.g. SOAP, JMS)
  - enables collaborate with other solutions in the market (Microsoft Biztalk and IBM WebSphere) which can play an important role in our customers’ landscape.
Providing Web Services Interoperability

- Providing Enterprise / Web Services interoperability with third party components to enable service oriented solutions.
- Web Services and the respective support in application server technologies are prerequisite to ensure interoperability for providing and consuming Web Service enabled interfaces across different application platforms.

Managing heterogeneous system landscapes

- Complement SAP NetWeaver's capabilities with market leading System Management tools in the areas like Identity and Access Management, Monitoring, Provisioning and Orchestration, Scheduling etc.
- Leverage and integrate SAP applications in IT system landscapes incl. solutions from 3rd party vendors, and combine these assets together with SAP NetWeaver for holistic planning and administration.
IT Scenario: Software Life-Cycle Management
## IT Scenario: Software Life-Cycle Management

### IT Practices

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Overview: Software Life-Cycle Management

Software Life-Cycle Management provides the abilities to:

- Manage SAP software in production system landscapes by performing implementation tasks such as planning changes, implementing new systems, copying existing systems, or enabling the creation and propagation of changes in the landscape.
- Maintain software by applying support packages and corrections or by upgrading to new software versions.

The IT Scenario Software Life-Cycle Management has 2 variants:

- Implementation Support
- Software Maintenance

Software Life-Cycle Management

- Implementation Support
- Software Maintenance
Software Life-Cycle Management: Implementation Support

Comprehensive Guidance

Best Practices and Pre-Configured Scenarios:
- Best Practices provided in form of documentation and pre-configured scenarios that make setup and maintenance of SAP system landscapes easier
- New functions for the implementation and configuration of Business Content
  - Automate cumbersome configuration steps
  - Result in accelerated implementation of business scenarios
- Improved Documentation and guides
  - Information required to understand and perform software life-cycle tasks (Master Guides, installation/upgrade guides, SP Stack Guide, target group/role-specific documentation, tool documentation, …)

Tool Support for Landscape Planning and Visualization:
- Thorough planning is the basis for every software life-cycle task
  - Usually complex due to all the system interdependencies
  - Software Lifecycle Manager to support for planning and validation of software life-cycle tasks for Systems landscapes
Simplified Implementation

New Rapid Installer

- Simplified Installation wizard-based installation and configuration Process with Reduced Number of Manual Preparation and Installation Steps:
  - Automatic validation of minimum technical installation prerequisites
  - Standard installation mode with default values
  - Enhanced help and handling

Simplified, Accelerated and Less Error-Prone Configuration:

- Central Technical Configuration (Template Installer) is a central, uniform and simple configuration tool
- Provides automated configuration based on templates for SAP NetWeaver usage types

Faster and Easier Upgrade Procedure:

- Continuous improvement to SAP’s upgrade technology to deliver more robust and fast upgrade routines minimizing the production system outages
- Reliable and easy to use upgrade process lowers the overall risk of upgrade projects

Enhanced Coverage + Improved Procedure for System Copy and Migration:

- Systems with any SAP NetWeaver usage type can now be copied
- Database-specific procedures and advanced options integrated in copy procedure
- Incremental migration offers reduced downtime for very large ABAP systems
Central Administration

- **Single Point of Control**
  - SAP NetWeaver Development Infrastructure for central software change management covering the whole software lifecycle
  - Centrally managing & guiding each single developer
  - Consistent deployment and propagation

- System Landscape Directory of SAP NetWeaver as central information provider
- Software Lifecycle Manager of SAP NetWeaver for central planning and validation of software life-cycle tasks

- **SAP Recommended HA Setups Supported by SAP Installation Tool**

> **SAP AG 2006, What's New with SAP NetWeaver® 2004s**
> Delta highlights by IT Scenarios / SAP NetWeaver Product Management / 119
Software Life-Cycle Management: Software Maintenance

Up to date Processes

- Ongoing Improvements to Adjust Business and IT Processes:
  - SAP NetWeaver Development Infrastructure empowering Enterprise SOA-based application development. Enables fast adaptation and creation of applications.
  - Guarantees processes from product definition to delivery and maintenance
  - Ongoing improvements (in terms of usability, stability, performance, ...)
  - Simplified installation procedure

- Maintain SAP Software simply and reliably:
  - Apply fixes and software optimizations to keep it running smoothly
  - Software Lifecycle Manager helps to plan and validate patch processes
  - Provision of Unified patch implementation tool and process with Java Support Package Manager (JSPM):
    - Standard tool for the patching of all SAP Java components
    - Reduces runtime and downtime, prevents system damage and simplifies handling
  - Note Assistant provides enhanced functions
  - High availability support for patching

Also available in '04 SP-Stacks

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- Delta highlights by IT Scenarios / SAP NetWeaver Product Management / 120
IT Scenario:
SAP NetWeaver Operations
## IT Scenario: SAP NetWeaver Operations

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THE BEST-RUN BUSINESSES RUN SAP™
Overview: SAP NetWeaver Operations

SAP NetWeaver Operations provide the abilities to:

- Efficiently run an SAP NetWeaver system landscape and ensure reliability by optimizing performance, increasing system availability, support business application, legal compliance and security issues, ensure flexibility, and speed up administration and problem solving tasks

- SAP NetWeaver Operations covers tools, tasks, and methods that focus on: Monitoring, Administration, Data Archiving, and Adaptive Computing

The IT Scenario SAP NetWeaver Operations has 4 variants:

- Monitoring SAP NetWeaver
- Administering SAP NetWeaver
- Adaptive Computing
- Data Archiving
SAP NetWeaver Administrator tool

- Centrally administer and monitor SAP NetWeaver components of the system landscape

SAP NetWeaver Administrator functionality covers
- Administration, Monitoring, Reporting, Job Scheduling and Central Print Management for single instances or complete landscapes
SAP NetWeaver Operations: Data Archiving

Data Archiving provide functionality to effectively manage data along its entire life cycle, achieve system load reduction, and support the implemented legal compliance strategy.

- **Enhanced and new Data Archiving methods offer**
  - **Enhanced legal compliance support**
    - Archive Routing - a new function to route archived data to separate content repositories; supports end-of-life of data
    - XML-based archiving – new standards-based archiving technology for ABAP and JAVA applications
  - **Enhanced Analysis and Monitoring Tools**
    - New more optimized table analysis functions offered in transaction TAANA
    - New more sophisticated and user-friendly logs and statistics functions
  - **Enhanced Data Archiving and Access Functions**
    - Cross-Archiving-Object Check/Delete function
    - New function module for archive access
  - **Enhanced Near-Line Storage support for BI Capabilities of SAP NetWeaver – Enterprise Data Warehousing**
    - Integrated near-line storage support for infrequently read large volume data stores
    - Implemented via open API, so customers can choose their near-line storage vendor
IT Scenario: Authentication and Single Sign-On
## IT Scenario: Authentication and Single Sign-On

### IT Practices

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Overview: Integrated User and Access Management

- The IT Scenario Integrated User and Access Management is part of the IT Practice Application Governance and IT Security.

- As system landscapes become more diverse and expansive—customers depend on SSO to help streamline administrative efforts and drive the most value out of the powerful technology already at work in their enterprise.

- Integrated User and Access Management contains 2 Variants:

  Authentication and Single Sign-On
  - Authentication Using a Directory with SSO Integration Using SAP Logon Tickets
  - Single Sign-On Based on Security Assertion Markup Language (SAML)

Available with SAP NetWeaver 2004s and ‘04
Available with SAP NetWeaver 2004s only
Future Focus
Integrated User and Access Management

Authentication Using a Directory with SSO Integration
Using SAP Logon Tickets

- Stronger password control in ABAP-based applications
  - Password length up to 40 digits
  - Lower and upper case passwords
  - Password history with up to 1,000 entries

Single Sign-On Based on Security Assertion Markup Language (SAML)

- Only SAML client for authentication available at destination site (AS Java based applications)
  - Support limited in SAP NetWeaver 2004s
    - Browser artifact scenario supported
    - The received assertion may only contain one authentication statement
    - The authentication statement must contain the NameIdentifier
    - AuthorizationDesicionStatement and AttributeStatement are ignored
    - Digital signatures for SOAP documents are ignored
    - No support for additional “Condition” elements
  - SAML will be further developed and delivered on an ongoing basis
IT Scenario: Integrated User and Access Management
## IT Scenario: Integrated User and Access Management

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Overview: Integrated User and Access Management

- This IT Scenario covers managing the entire lifecycle of a user
  - This begins with creating the user account and moves on to provisioning the user to different backend systems, including giving the user the corresponding access rights.
  - The user and access management lifecycle ends when a user no longer works with the company and thus all of his accounts must be locked or de-provisioned.

- Integrated User and Access Management contains 2 variants:
  - Integrated User and Access Management that Includes a Third-Party Directory Server
  - Integrating User Management and Access Management
Integrated User and Access Management

Integrating User Management and Access Management

- New User Interface for User Management Engine (UME)
  - Web Dynpro-based
  - More intuitive user interface and administration

- New authorization concept for BI capabilities of SAP NetWeaver
  - Fine granular security concept
  - Increased ease of use and administration for complex security
Further Information at SAP NetWeaver® 2004s

Information Sources for SAP NetWeaver 2004s

→ SAP NetWeaver
  http://service.sap.com/netweaver

→ New Release Strategy
  http://service.sap.com/releasestrategy

→ SAP Developers Network
  http://sdn.sap.com

→ Release Notes
  http://service.sap.com/releasenotes

→ Upgrade Technology Tools
  http://service.sap.com/upgradetech

→ Online Help
  http://help.sap.com

→ SAP NetWeaver 2004s Release documentation

→ SAP NetWeaver 2004s Master Planning guides
  http://service.sap.com/instguides