

PMC208

## Service Bus Based Capabilities of SAP NetWeaver Process Integration



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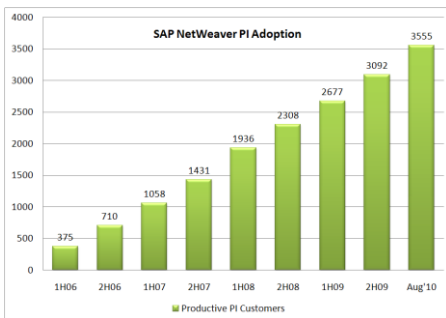
## Agenda



### 1. SAP NetWeaver PI 7.1 – Overview

2. What's new in EHP 1 for SAP NetWeaver PI 7.1 – With Demo
3. Near Zero Downtime
4. Connectivity
5. Where to find what information about SAP NetWeaver PI
6. Outlook to SAP NetWeaver PI 7.3
7. Summary

## SAP NetWeaver Process Integration – Adoption Today



### SAP NetWeaver PI Adoption

- 200 new **productive** customers / quarter
- 39 % of customers use SAP NetWeaver PI 7.1
- 300+ Customer References
- Scenarios: A2A, B2B, ESB, SOA
- SAP and non-SAP integration

**SAP is 2nd in market presence, tied with IBM & Oracle/BEA, and ahead of Tibco, SAG and others**

**DIE POST**

**1.2 million messages** processed overnight  
**Replacement of BEA web Logic with SAP NetWeaver PI**

**EnBW**

**Centralized and simplified governance processes** for SAP and non-SAP services

**eBay PayPal**

**Automate processes with SAP NetWeaver PI to save payment processing costs and improve vendor relationships**

**Opto Semiconductors**

**OSRAM**

**Leverage SAP NetWeaver PI as Enterprise wide ESB**

**DAIMLER**

**SAP NetWeaver PI as integration hub: B2B gateway, EAI and SOA middleware**

# SAP NetWeaver Process Integration

Key Customer Scenarios and SAP Solution Benefits

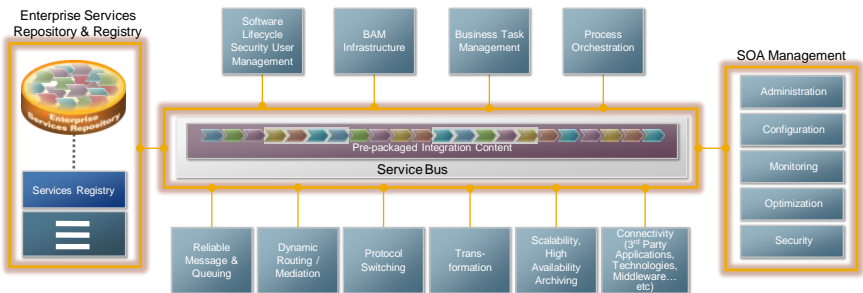


## Key Customer Scenarios

1. **Application to Application** integration (A2A)
2. Integration of **Business Partners** (B2B), often EDI
3. **Interoperability** with 3rd party middleware
4. **SOA Initiatives**: Service Provisioning and Service enabling

## Main SAP Solution Benefits

- Pre-packaged integration content to minimize integration costs
- ONE platform for high performance and reliable end-to-end transactions
- Central repository and registry for governance
- Open standards based for interoperability



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## Federation – Feedback from diverse customer workshops



### Reasons for Central SAP NetWeaver PI System:

- Reduced effort in regards to: operations, maintenance and monitoring
- One source of truth
- Economics of scale
- In companies which are mainly common and have already centrally organized processes

### Reasons for Federated SAP NetWeaver PI Systems:

- Network constraints
- Separated company divisions (more than 90% communication in the own division)
- Geographically distributed and organized organization (more than 90% communication in one area)
- Downtime constraints and no overlapping downtime period across whole company divisions (or impossible to organize)

### Mixed approaches and the reasons:

- One SAP NetWeaver PI system for central processes (HR, Financials, Master data) and non-central SAP NetWeaver PI systems for divisions
- One division starts to learn to share knowledge and experience with other divisions following later

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# Positioning of Extract, Transform and Load vs Enterprise Service Bus



## Extract, Transform & Load (ETL)

### Core Use Case

- Data Replication and Data Synchronization in batch and real-time
- Examples: Asynchronous bulk load of a data warehouse, Data Migration

### Data Characteristics

- Bulk Data

### Transformation Characteristics

- Lightweight to sophisticated transformations
- Embedded Data Quality Transforms (cleansing, matching)

### Integration Process Characteristics

- Single-step, stateless integration processes only
- Point-to-point or point to multi-point connectivity with clearly identified sources and targets

### SAP's Preferred Product

- **Business Objects Data Services**

## Enterprise Service Bus (ESB)

### Core Use Case

- Event-driven, message-based process integration in synch. & asynch. A2A/B2B/SOA scenarios
- Example: Asynchronous process automation across ERP, CRM systems and business partner

### Data Characteristics

- Single messages with small, medium, large payloads

### Transformation Characteristics

- Lightweight to sophisticated transformations
- Mappings of data structures as well as values

### Integration Process Characteristics

- Multi-step stateful and stateless integration processes,
- Bus architecture with publish& subscribe, and sophisticated routing rules

### SAP's Preferred Product

- **SAP NetWeaver Process Integration**

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## Agenda

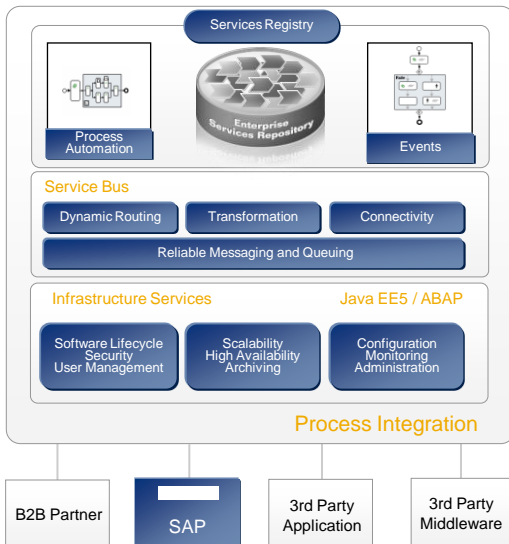


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# EHP 1 For SAP NetWeaver PI 7.1 Value Proposition



User Interaction (for example, Business Task Management)



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## Enterprise Services Repository (ESR) and Services Registry (SR)

- Superior SOA design governance
- Further access control measures
- Reduced TCD for service provisioning in the ESR

## Service Bus

- Enhanced flexibility for the integration developer in defining mediation flows
- Automated configuration support for A2A/B2B
- Leverage performance enhancements via additional connectivity options
- Increased interoperability

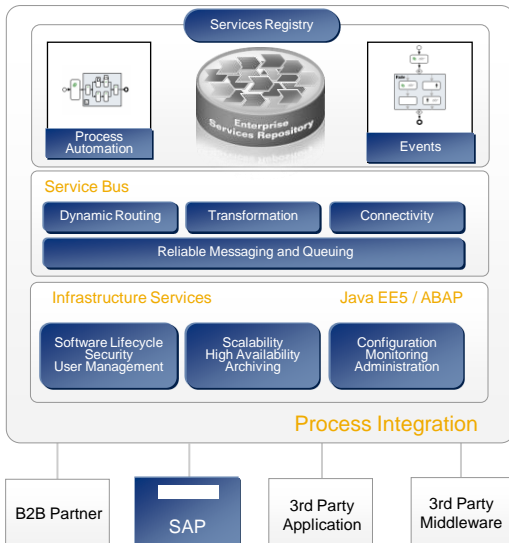
## SOA Management

- Enhanced support for end to end monitoring for non-technical users of SAP NetWeaver PI
- Automated configuration of services in the provider and consumer systems
- Enhanced migration support

# EHP 1 For SAP NetWeaver PI 7.1 Service Bus



User Interaction (for example, Business Task Management)



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## Enhanced flexibility for the integration developer in defining mediation flows

- Content based routing in AAE
- Receiver split in AAE
- Operation-dependent receiver determin.
- Directory API supports new objects types
- Enhanced search for comm. Channels
- Scenario view in Integration Directory
- Enhancements of Adapter Engine SE: Remote configuration, empty file handling, prevent overwriting files

## Automated A2A/B2B configuration support

- Configuration based on Process Component Interaction Models

## Leverage performance enhancements via additional connectivity options

- XI message protocol supported in AAE (\*)
- End to end IDoc packaging
- IDoc conversion adapter module

## Increased interoperability

- WS-Secure Conversation 1.3

(\*) Supported communication between AAE 7.11 and ABAP proxies, AAE, PCK, JSE, IS 7.11. Details in SAP note 1247043

## SAP NetWeaver PI 7.1 incl. EHP1 (\*)

Improved Fault Tolerance



- Optimization of cache refresh
  - Lower memory consumption and performance
  - Focus on Integration Directory (partial down port to SAP NetWeaver PI 7.1)
- Optimized message processing
  - Out of memory handling to avoid Java server restarts
- “Safe Mode” during startup
  - Blacklisting of messages to take messages in status DLNG out of processing
- Robust EOIO handling
  - Ensure EOIO message processing over same cluster node
- EO / EOIO backlog handling
  - Optimized EO / EOIO handling after server restarts to avoid startup timeouts
- Optimization of technical acknowledgements
  - Technical acknowledgements contain less overhead to increase performance
- Optimization of reorganizations
  - Faster data base switch with less memory consumption

**(\*) (Partial) Down port to SAP NetWeaver PI 7.1 SP11 & EHP 1 SP06**

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## DEMO

### EHP 1 for SAP NetWeaver PI 7.1 in Action



## Agenda



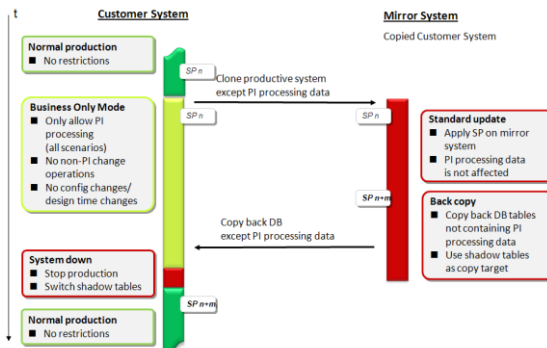
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## Near Zero Downtime Maintenance (NZDT) for SAP NetWeaver PI 7.1



### Business value

- Procedure for application of Support Package Stacks on PI system with business downtime reduced to one system restart.
  - This holds for updating the SAP software – OS or DB updates not included
  - Independent from number of to be applied packages/SP Stacks
  - Potential problems during SW Maintenance do not impact downtime
- Update is performed on mirror system while production system is still available until final switch to new SP level



## Restrictions during update



### Today: Productive Usage of NZDM / PI

- First customer in Utilities industry
- System: SAP NetWeaver PI 7.1 SP7 on Oracle DB
- SAP NetWeaver PI 7.1 SP9 was applied to the productive system **with ~ 30 min downtime without any issues (95% less downtime)**

### Plattform completion plans

- Currently available via SAP Consulting Service: **SAP NetWeaver PI 7.1 on Oracle, MaxDB**
- Planned to be ready by Q1/2011: MSSQL, DB2 for AIX/WIN, DB2 for z/OS
- Planned, but no date available yet: SAP NetWeaver PI 7.3

### How to get NZDM-Tools?

- SAP Consulting offers a service that comprises the delivery of NZDM-Tools and documentation as well as initial respective consulting services by end of 2010

### Widen scope to apply EHPs for SAP NetWeaver PI

- Conceptual work & evaluation in 2010, realization planned in 2011

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# EHP 1 for SAP NetWeaver PI 7.1

## Connectivity Developed by SAP



### Technical Connectivity for communication with SAP and non-SAP systems

- File/FTP(S) (File Systems / FTP Servers)
- JDBC (RDBMS systems)
- JMS (Messaging systems, e. g. MQSeries, SonicMQ)
- SOAP (Web Services based on SOAP)
- WS-RM (Web Services based on WS Reliable Messaging)
- Plain HTTP(S)
- Mail (Mail Servers via SMTP, IMAP4, POP3)
- SAP Business Connector (SAP BC)
- Marketplace (SAP Marketplaces)

### Application Connectivity

- RFC
- IDoc
- Proxy (ABAP and Java)

### All adapters available today on AAE except

- IDoc, HTTP: With SAP NetWeaver PI 7.3
- WS-Adapter: Beyond SAP NetWeaver PI 7.3

### SAP Industry Business Packages

- RNIF 2.0 (RosettaNet)
- RNIF 1.1 (RosettaNet)
- CIDX (RNIF 1.1)

## SAP NetWeaver PI 7.1 Connectivity

Big variety of adapters through the Partner Eco System



SAP relies on a system of partners to provide solutions for other applications and certain industry standards

### Connectivity Reseller Agreements with

- Seeburger AG
- iWay Software
- Informatica

3rd-Party solutions are sold and delivered through SAP

Technical support for partner solutions via the SAP Support Portal, 24x7

Tightly integrated into  
SAP NetWeaver PI

### Reseller Agreements with Crossgate

- SAP Information Interchange by Crossgate
  - Including pre-delivered business partner profiles
- Main contact for licensing and support is SAP

Loosely coupled with  
SAP NetWeaver PI

# Principles of SEEBURGER Adapter Solutions for EDI/B2B on SAP NetWeaver PI 7.1



## SAP NetWeaver Process Integration 7.1

### Monitoring and Alerting

Integrated with SAP NetWeaver PI monitoring, CCMS, SAP Solution Manager

### Enterprise Services Repository

#### Seeburger Business Content:

- XML-EDI <-> XML-IDOC Mappings
- Integration Processes
- Pre-defined Message Types
- Collection of ready-to-use Java functions

### Advanced Adapter Engine

Syntax  
conversion

EDI <->  
XML-EDI  
converter

Module  
Library  
compress,  
decompress,  
split, analyze,  
encryption

Protocols  
OFTP,  
AS2,  
VAN FTP,  
P7/X.400

### Integration Directory

Configuration of acknowledgements (CONTRL, APERACK), mass data handling, ...

The SEEBURGER Industry Adapters for SAP NetWeaver PI are industry specific business packages

## SAP NetWeaver PI 7.1 – Connectivity Developed by Seeburger\*, All Adapters Certified



### Technical EDI Adapters by SEEBURGER

- ◆ AS2 (EDIINT/HTTP(S))  
Protocol: AS2
- ◆ OFTP  
Protocol: OFTP/ISDN, OFTP/TCPIP
- ◆ VAN Access  
Protocol: P7 / X.400, VAN FTP

### Business EDI Adapters by SEEBURGER

- ◆ Generic EDI  
Protocol: OFTP/ISDN or P7 / X.400, VAN FTP  
EDI Converter: ANSI X.12, EDIFACT  
Mapping Templates: Purchase order, Order confirmation, Dispatch advice, Invoice
- ◆ Payment (Financial Service Providers)  
Protocol: OFTP/ISDN, P7 / X.400, VAN FTP  
EDI Converter: EDIFACT, SWIFT  
Mapping Templates: Payment orders, Debit advice, Credit advice, Account Statement

### Industry Specific EDI Adapters by SEEBURGER

- Aerospace & Defense
- Automotive
- Chemicals
- Consumer Products
- High-Tech
- Paper
- Pharmaceutical
- Retail

### Business Content

- Mapping Templates within Enterprise Services Repository
- Message Library for Enterprise Services Repository
- Huge message catalog with EDI XML schemas

### Communication Protocols

- OFTP/ISDN, P7 / X.400, VAN FTP

### EDI Converter (EDI <-> XML)

- AECMA/SPEC 2000, ANSI X.12, CHEM eStandards, EDIFACT, GALIA, ODETTE, TRADACOM, VDA

\* Details are published at SDN ([direct link](#))

## SAP NetWeaver PI 7.1 – Connectivity Developed by iWay



### Application Adapters

- |               |                           |                  |
|---------------|---------------------------|------------------|
| ◆ Ariba       | ◆ Baan                    | ◆ Broadvision    |
| ◆ Clarify     | ◆ JDE One World XE (*)    | ◆ JDE World (*)  |
| ◆ i2          | ◆ Lawson                  | ◆ Microsoft CRM  |
| ◆ Manugistics | ◆ Oracle Applications (*) | ◆ Peoplesoft (*) |
| ◆ QAD MFG Pro | ◆ Siebel (*)              | ◆ Vantive        |

### Industry Standard Adapters

- |         |            |          |
|---------|------------|----------|
| ◆ Swift | ◆ Transora | ◆ UCCnet |
|---------|------------|----------|

### Technical Adapters

- |                     |                        |               |
|---------------------|------------------------|---------------|
| ◆ AS1 (EDIINT/SMTP) | ◆ AS2 (EDIINT/HTTP(S)) | ◆ BEA WLI     |
| ◆ COM+/DCOM         | ◆ Corba                | ◆ Lotus Notes |
| ◆ Tibco Rendezvous  |                        |               |

### Mainframe/transaction Adapters

- |                 |               |                 |
|-----------------|---------------|-----------------|
| ◆ CICS (*)      | ◆ TMS/IMS (*) | ◆ Telnet (3270) |
| ◆ Telnet (5250) | ◆ Tuxedo      |                 |

(\*) Certified for SAP NetWeaver Process Integration 7.1

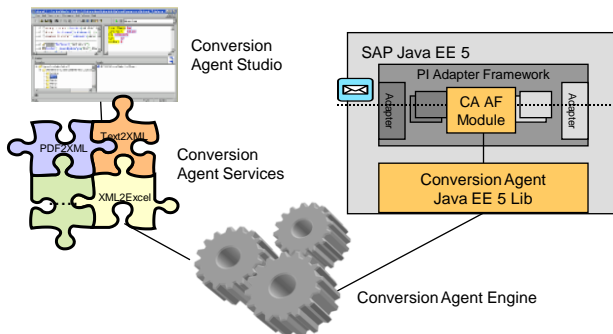
\* Details are published at SDN [direct link](#)

## SAP NetWeaver PI 7.1 – Connectivity Developed by Informatica



### Seamlessly integrated into SAP NetWeaver PI 7.1

- Bi-directional conversion of unstructured and semi structured data from / to XML
- Transformation on message payload
- Protocol support via SAP's technical adapter (Advanced Adapter Engine)
- Transformations integrated via PI AF module



# SAP Conversion Agent

Complex Data Transformation with Informatica



## UNSTRUCTURED

- Microsoft Word
- Microsoft Excel
- PowerPoint
- PDF
- Star Office
- Word Perfect
- ASCII reports
- HTML
- EBCDIC
- Undocumented binaries
- Flat files
- RPG
- ANSI

## PRINT STREAMS

- AFP
- Post Script
- DJDE



## SEMI-STRUCTURED

- HL7
- HIPAA
- ASTM
- ANSI-X12
- EDIFACT
- COBOL
- FIX
- Cargo IMP
- MVR
- SWIFT

## OTHER STANDARDS

- LegalXML
- IFX
- cXML
- ebXML
- HL7 V3.0
- ACORD (AL3, XML)

# Certification Programs for SAP NetWeaver Process Integration



## PI Based Certification Programs

### EXCHANGE INFRASTRUCTURE / PROCESS INTEGRATION

#### INTEGRATION & CERTIFICATION - INTEGRATION SCENARIOS

The following are pre-defined integration certifications offered by SAP. In addition to the standard scenarios listed here, SAP can also offer interface certification based on business scenarios from third-party vendors when:

- Vendors use the SAP-endorsed integration technologies described in [ICC Integration Guide - Technologies](#) (PDF 66 KB)
- Vendors successfully test the interface software through an SAP Integration and Certification Center (ICC).

The Integration and Certification Centers evaluate third-party scenarios either based on an Integration Assessment or on customer references.

Exchange Infrastructure / Process Integration Interface		SAP NetWeaver		
Interface	Name	6.40 (NW 2004)	7.0 (NW 2004s)	7.1
<a href="#">NW-XI-IF</a>	SAP NetWeaver XI Adapter Framework	New Scenario	Additional Features Re-Certification strongly recommended	New Scenario
<a href="#">NW-XI-CONT</a>	SAP NetWeaver XI Content	New Scenario	No change	Additional Features

<http://www.sdn.sap.com> → Partnership and Certification → Integration and Certification → Process Integration / Exchange Infrastructure

# Certified Adapters for SAP NetWeaver Process Integration



## Certified Adapters for SAP NetWeaver PI

Sl.	Adapter Name	Company	Country
11.	PLM Integrator 3.0 for Teamcenter	EC3 Engineering Consulting & Solutions Holzgertrasse 8 Neumarkt 92318	Germany
12.	REMIS B2B DACH HMRG Services Adapter 6	S&A Consultants Ltd Somerset Place P.O. BOX 1111 P.O. 4080	United Kingdom
13.	SAP NW EDI Adapter 1 Chemicals Industry 2.0	SEEBURGER AG Edkonstrade 1 D-75015	Germany
14.	SAP NW EDI Adapter 1 Automotive Industry 2.0	SEEBURGER AG Edkonstrade 1 D-75015	Germany
15.	SAP NW EDI Adapter for Aerospace/Defense 2.0	SEEBURGER AG Edkonstrade 1 D-75015	Germany
16.	SAP NW EDI Adapter for Consumer Products 2.0	SEEBURGER AG Edkonstrade 1 D-75015	Germany
17.	SAP NW EDI Adapter for High-Tech Industry 2.0	SEEBURGER AG Edkonstrade 1 D-75015	Germany

<http://www.sap.com/ecosystem/customers/directories/SearchSolution.epx> → Third-Party Defined Integration Scenarios → NW-XI-AF\*

**As of August 2010: 65 certified adapters for SAP NetWeaver PI**

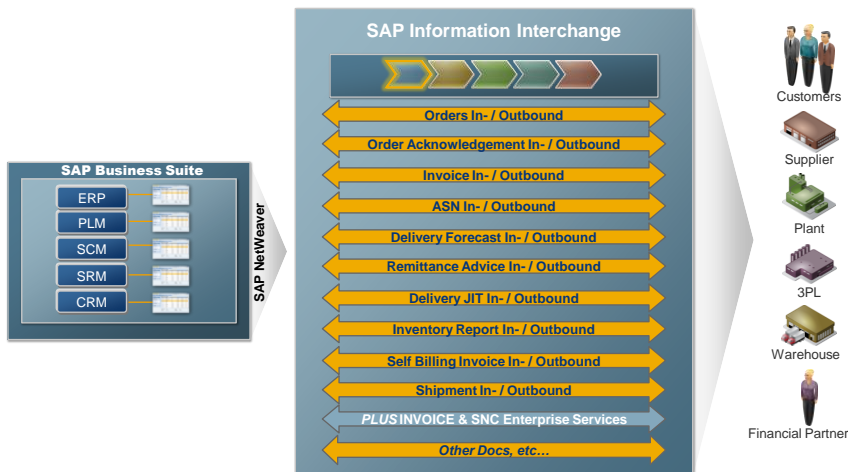
## The Solution

SAP Information Interchange by Crossgate



**SAP Information Interchange by Crossgate:**

- Delivers prebuilt business partner profiles
- Allows companies to exchange Purchase Orders, Forecasts, Invoices, Delivery Notes and other documents electronically

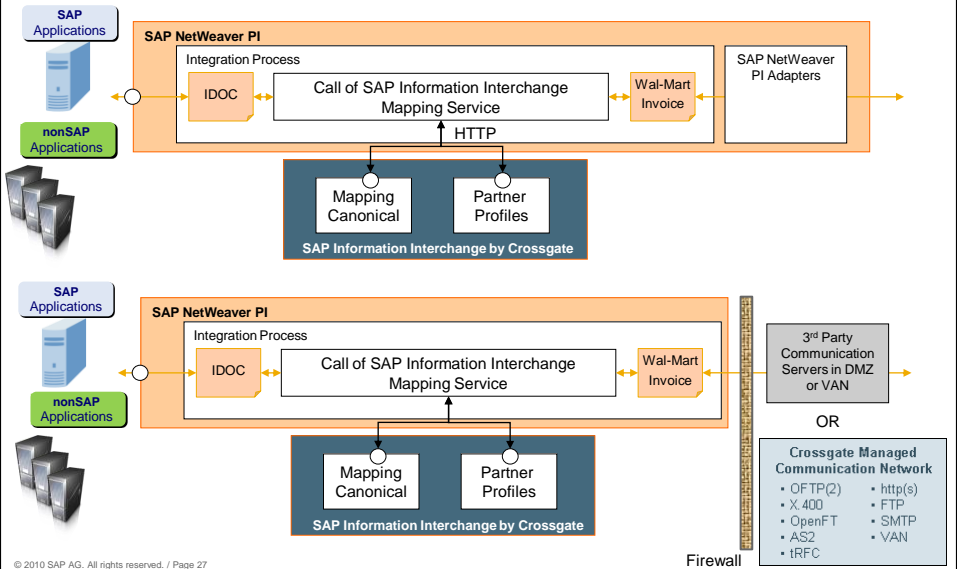


# SAP Information Interchange by Crossgate

Complex Landscape Deployments with SAP Process Integration



**SAP NetWeaver Process Integration is the preferred deployment model**



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# Entry Page on SAP Help Portal – Product Documentation, Release Notes, ...

SAP

## SAP NetWeaver Process Integration

SAP NetWeaver Process Integration 7.1 Including Enhancement Package 1  
SAP NetWeaver Process Integration 7.1

SAP NetWeaver Process Integration 7.1 Including Enhancement Package 1  
Knowledge Center  
Support Package 05, May 2010

SAP NetWeaver Process Integration Library (Including Enhancement Package 1)  
English | German

### What's New - Release Notes

#### Release Overview

SAP NetWeaver Process Integration at a Glance

System Configuration and Administration

Installation, Update, and Upgrade

Development

Functional View

Supplementary Information

### What's New in SAP enhancement package 1 for SAP NetWeaver PI 7.1 SP Stacks - Release Notes

English | German

Find out what is new and what has changed since the last release.  
Check SAP Note 1306458\* for the latest updates about documentation issues.

Short Overview of SAP enhancement package 1 for SAP NetWeaver Process Integration 7.1  
View an overview of the new features in SAP enhancement package 1 for SAP NetWeaver Process Integration 7.1.

### Useful Links

**SAP Notes\***  
Search the full SAP notes knowledge base

**Maintenance Optimizer**  
Download SAP NetWeaver software packages

**Sizing\***  
Guidelines and recommendations on hardware requirements for your implementation

**SAP Solutions Training\***  
Guide to the training courses offered for SAP NetWeaver

### More on SAP Community Network

Documentation & Guidelines Forum

Expert Forums

Technical Blogs

Code Samples and Downloads

Featured Events

Path to SAP Help Portal: [help.sap.com](http://help.sap.com)

-> SAP NetWeaver

-> SAP NetWeaver PI

Links from SAP Help Portal to SAP Service Marktplatz, PAM, Instguides, SDN, ...

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# Entry Page on SDN – Forums, Blogs, Pod casts, How to guides, ...

SAP

Path to SDN: <http://www.sdn.sap.com/irj/sdn/nw-soa>

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# Guides in detail

## Where to find which guide (1)

SAP

### Two categories of guides

- Implementation Guides: installation, update, upgrade -> SMP
- System Administration Guides: security, configuration, TOM -> Help Portal

### Service Marketplace

[/instguidesNWPI71](#)

or

<https://service.sap.com/instguides>

-> SAP NetWeaver

-> SAP NetWeaver PI 7.1

Use Guide Finder on SMP to easily find the guides you need.

[Short insight on Guide Finder.](#)

### Help Portal

[help.sap.com](http://help.sap.com)

[Details on available Categories and Guides.](#)

## Short insight on Guide Finder

SAP

### Guide Finder for Technical Documentation

This guide finder lets you easily find the required implementation guides - such as master, installation, and upgrade guides.

Your feedback about the GuideFinder is highly appreciated. Please send it to [sap.doc@sap.com](mailto:sap.doc@sap.com)

Selection Criteria

Product \*

SAP NetWeaver

Product Version \*

Process Integration 7.1 including EHP1

Operating System

☐ AIX  
☐ HP-UX  
☐ IBM i  
☒ Linux  
☐ Solaris  
☐ Windows  
☐ z/OS

Database

☐ IBM DB2 for Linux, UNIX, and Windows  
☐ IBM DB2 for i  
☐ IBM DB2 for z/OS  
☐ MS SQL Server  
☒ Oracle  
☐ SAP MaxDB

Task \*

Installation  
Please select  
Database Administration  
Enhancement Package Installation  
Installation  
Maintenance  
Monitoring  
Operations  
Planning

Search

Reset

Results - 20

Use the first line for entering a searchfilter term (\* for fuzzy search).

Info	Type	Title	File Size	Last Change Date	Operating System	Database	Technology
	PDF	Getting Started - SAP NetWeaver PI 7.1 including EHP1	898 KB	19.03.2009	Operating system independent	Database independent	Technology independent
	PDF	Technical Infrastructure Guide - SAP NetWeaver PI 7.1	1040 KB	10.03.2009	Operating system independent	Database independent	ABAP, ABAP+Java
	PDF	Planning Guide - System Landscape Directory	9 KB	10.03.2009	Operating system independent	Database independent	Java
	PDF	Master Guide - SAP NetWeaver PI 7.1	4892 KB	20.03.2009	Operating system independent	Database independent	Technology independent
	PDF	System Copy for SAP NetWeaver PI 7.1 EHP1	5402 KB	14.09.2009	Operating system independent	Database independent	ABAP+Java
	PDF	SAPNetWeaver Troubleshooting on Unix	913 KB	10.03.2009	AIX, HP-UX, Linux, Solaris	IBM DB2 for Linux, UNIX, and Windows, IBM DB2 for z/OS, SAP MaxDB, Oracle	ABAP+Java, Java
	PDF	SAPNetWeaver Troubleshooting and Administration on Unix	1447 KB	10.03.2009	AIX, HP-UX, Linux, Solaris	IBM DB2 for Linux, UNIX, and Windows, IBM DB2 for z/OS, SAP MaxDB, Oracle	ABAP, ABAP+Java
	PDF	SAPNetWeaver Java UML	1881 KB	10.03.2009	AIX, HP-UX, Linux, Solaris	IBM DB2 for Linux, UNIX, and Windows, IBM DB2 for z/OS, SAP MaxDB, Oracle	Java
	PDF	SAP End-to-End Installation for SAP NetWeaver PI 7.1 - PI Specific	738 KB	10.03.2009	AIX, HP-UX, IBM i Linux, Solaris, Windows, z/OS	IBM DB2 for i, IBM DB2 for Linux, UNIX, and Windows, IBM DB2 for z/OS, SAP MaxDB, MS SQL Server, Oracle	ABAP+Java, Java

[Start Guide finder](#)



## Important SAP Notes regarding SAP NetWeaver PI 7.1



### ■ SAP Notes:

<http://service.sap.com/notes>

### ■ Composite Note for SAP NetWeaver Process Integration 7.1:

[SAP Note 1135704](#)

### ■ Release Restrictions for SAP NetWeaver PI 7.1:

[SAP Note 1004107](#)

### ■ Release Restrictions for EHP 1 for SAP NetWeaver PI 7.1:

[SAP Note 1247043](#)

### ■ Product Availability Matrix (PAM) for Partner Adapters:

PAM for Seeburger adapters: [SAP Note 890721](#)

PAM for iWay adapters: [SAP Note 858366](#)

PAM for SAP Conversion Agent by Informatica: [SAP Note 894815](#)

## Online Knowledge Product



2 learning maps are available for SAP NetWeaver PI 7.1 including EHP 1:

[Integration Development Consultant](#)

[Technology Consultant](#)

The OKP also includes information about RKT Workshop offerings for new releases, live expert sessions and additional information Sources.

### SAP NETWEAVER PROCESS INTEGRATION 7.1 INCLUDING SAP ENHANCEMENT PACKAGE 1 FOR PI 7.1

#### GET UP-TO-DATE WITH SAP ONLINE KNOWLEDGE PRODUCTS

##### Check out the prerequisites

The SAP NetWeaver Process Integration 7.1 including SAP Enhancement Package 1 for PI 7.1 Learning Maps are designed for qualified project participants. You require:

- Good knowledge of SAP NetWeaver 7.0 Exchange Infrastructure or of SAP NetWeaver Process Integration 7.1
  - Basic knowledge of Web Services
- helpful, but not required:
- Knowledge of SAP NetWeaver architecture, security installation, etc.

##### Please note:

These learning maps are an update of the previously available learning map for SAP NetWeaver Process Integration 7.1.

If you are new to this release and want to learn about SAP NetWeaver Process Integration 7.1 and the updates coming with SAP Enhancement Package 1 for PI 7.1, all objects of the learning maps are relevant for you.

If you are already familiar with SAP NetWeaver Process Integration 7.1, you can select only those learning map objects that explicitly provide information about EHP1. You can identify these objects by the respective site (and/or description of the object): "... What's new with EHP1..." or "... including EHP1...".

If you don't fulfill the prerequisites

You can gain the required knowledge through the [SAP Online Knowledge Product SAP NetWeaver](#) or through [SAP training courses](#).

Get further information or provide feedback:

See the [Q&A](#) page that is also accessible from the Learning Maps.

#### Select Your Learning Map



Check technical requirements and install the latest release software  
[Download Release-Related Workshops](#) [Sandbox Systems](#) [Live Expert Sessions](#) [Step 2](#)

For a preview and buying the OKP:

[http://service.sap.com/~form/sapnet?\\_SHORTKEY=00200797470000045511&](http://service.sap.com/~form/sapnet?_SHORTKEY=00200797470000045511&)

## Details - Integration Development Consultant



### SAP ENHANCEMENT PACKAGE 1 FOR SAP NETWEAVER PI 7.1: LEARNING MAP FOR INTEGRATION DEVELOPMENT CONSULTANTS

Live since Dec. 5, 2007 | Last update: May 25, 2009

Save & Close

**RECENT UPDATES**

**VIEWER SOFTWARE**

**SEARCH**

**STEP 1: LEARN WHAT YOU NEED**

- Update your core competence - must know

**STEP 2: PREPARE FOR YOUR PROJECT**

- Learn which implementation tools, guides, and support are available
- Learn how to access the tools and content and how to get support

**RELATED WORKSHOPS**

**SANDBOX SYSTEMS**

**LIVE EXPERT SESSIONS**

**Q & A**

Open All / Close All

Back to Top

#### Update Your Core Competence - Must Know

Overview	<a href="#">Open/Close</a>	Download	Duration: 6:24 hours
Enterprise Services Repository	<a href="#">Open/Close</a>	Download	Duration: 7:57 hours
Providing and Consuming Web Services	<a href="#">Open/Close</a>	Download	Duration: 3:37 hours
Connectivity	<a href="#">Open/Close</a>	Download	Duration: 2:52 hours
BPB - Integration Processes and Event Infrastructure	<a href="#">Open/Close</a>	Download	Duration: 6:24 hours
Performance	<a href="#">Open/Close</a>	Download	Duration: 3:06 hours
Security	<a href="#">Open/Close</a>	Download	Duration: 1:20 hours
Standards	<a href="#">Open/Close</a>	Download	Duration: 4:29 hours
Central Administration, Configuration and Monitoring	<a href="#">Open/Close</a>	Download	Duration: 6:50 hours
XML Validation	<a href="#">Open/Close</a>	Download	Duration: 0:52 hours
Upgrade	<a href="#">Open/Close</a>	Download	Duration: 2:24 hours
Interworking	<a href="#">Open/Close</a>	Download	Duration: 3:32 hours
Summary	<a href="#">Open/Close</a>		

Save & Close

Please remember to save & close whenever you leave this learning map.

Back to Top

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## Training Courses regarding SOA Middleware



### Basis courses ([www.sap.com/education](http://www.sap.com/education))

BIT400      SAP NetWeaver Process Integration

### Additional Courses covering specific topics

BIT430      PI - Business Process Management  
BIT460      PI - Mapping  
BIT480      PI - Operations  
BIT420      PI - Proxy Development & Service Provisioning with ES Repository

### Delta Courses

DBIT71      PI - Delta Process Integration 7.1 with SAP NetWeaver

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## Training Courses for Consultants



**Consultant Academy** ([www.sap.com/education](http://www.sap.com/education) -> Certification)

**Development Consultant – certification as „Development Consultant PI Associate“**

TBIT40                      SAP NetWeaver Process Integration (identical to BIT400)  
TBIT44                      PI - Mapping and BPM (covers BIT430/BIT460)

BIT402 (e-learning)              PI - Adapter Concepts (File, JDBC, JMS, Mail)  
BIT403 (e-learning)              PI - Adapter Concepts (Plain HTTP, IDoc, RFC, SOAP, PCK)

**Technical Consultant certification as „Technical Consultant PI Associate“**

TBIT50 (e-learning)              PI - Technical Implementation I  
TBIT51                      PI - Technical Implementation II and Operations

**RKT Material: Preview and Buy OKPs**

<http://service.sap.com/~form/sapnet? SHORTKEY=00200797470000045511&>

## Further information on SAP NetWeaver PI



### General Information on SAP NetWeaver Process Integration

- **Roadmap for SAP NetWeaver PI (Recording)**
- Ramp-Up SAP NetWeaver PI 7.3
  - Customers: <http://service.sap.com/rampup>; Partners: <https://service.sap.com/partnerportal/rampup>
  - [Early Nomination](#)
- [SDN home page of EHP 1 for SAP NetWeaver PI 7.1](#)
- [SAP Help Portal Release Notes of EHP 1 for SAP NetWeaver PI 7.1](#)
- [Process Integration \(PI\) Handbook \(incl. EHP 1 for SAP NetWeaver PI 7.1\)](#)
- **[Release Recommendation for SAP NetWeaver PI \(incl. Roadmap\)](#)**
- [Online Knowledge Product \(incl. EHP 1 for SAP NetWeaver PI 7.1\)](#)
- SAP Training and Learning Offerings: [SAP Training Catalog](#) -> SAP NetWeaver -> PI
- [SAP Note 1247043 for EHP 1 Release Restrictions](#)

### Selection of dedicated topics about SAP NetWeaver Process Integration

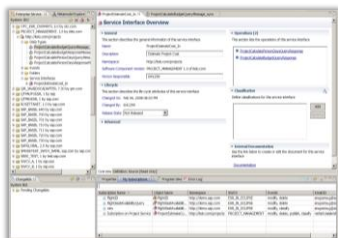
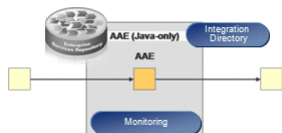
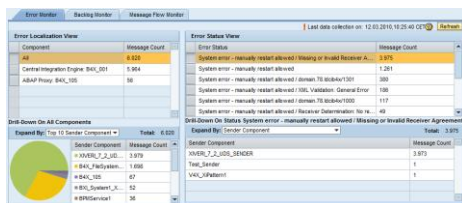
- [Performance Tests with EHP 1 for SAP NetWeaver PI 7.1](#)
- [Going Productive with SAP NetWeaver PI 7.1](#)
- **[Customer Scenarios with SAP NetWeaver PI 7.1 \(cont'd. incl. Roadmap\)](#)**



1. SAP NetWeaver PI 7.1 – Overview
2. What's new in EHP 1 for SAP NetWeaver PI 7.1 – With Demo
3. Near Zero Downtime
4. Connectivity
5. Where to find what information about SAP NetWeaver PI
6. **Outlook to SAP NetWeaver PI 7.3**
7. Summary



## Centralized Monitoring, Single Stack ESB, Reduced TCO



- ➔ Centralized monitoring via SAP Solution Manager 7.1
  - Good morning page
  - Monitor multiple PI domains
  - Reduced time for root cause analysis
  
- ➔ Single stack ESB capabilities through Advanced Adapter Engine
  - Up to 60% less energy consumption
  - Lower footprint, easy maintenance:  
1h installation\*, ½ HW requirements\*  
comp. to double stack, 90 sec restart\*

## Major Improvements for

- ➔ Reduced cost of operations via increased fault tolerance
- ➔ Design governance
- ➔ Standards based interoperability and connectivity

## Agenda



1. SAP NetWeaver PI 7.1 – Overview
2. What's new in EHP 1 for SAP NetWeaver PI 7.1 – With Demo
3. Near Zero Downtime
4. Connectivity
5. Where to find what information about SAP NetWeaver PI
6. Outlook to SAP NetWeaver PI 7.3
- 7. Summary**

## SAP NetWeaver PI 7.1 – Summary



- Leverage SAP NetWeaver PI 7.1 for mission critical scenarios
  - Around 3500 productive customers, 1/3 on SAP NetWeaver PI 7.1
  - Key uses cases include SAP NetWeaver PI as central ESB
- Key enhancements in EHP 1 for SAP NetWeaver PI 7.1 for
  - ES Repository & Services Registry, Service Bus, SOA Management
- Near Zero Downtime
  - Supported for SAP NetWeaver PI 7.1, downtime ~ 30 minutes
- Connectivity
  - Broad variety of connectivity options for A2A, B2B, interoperability, SOA
- Where to find what information about SAP NetWeaver PI
  - SAP Help Portal, SDN, SAP notes, OKP, training courses
- Outlook to SAP NetWeaver PI 7.3
  - Centralized monitoring, Java stand alone installation option, reduced TCO

## Further Information



### SAP Public Web:

SAP Developer Network (SDN): [www.sdn.sap.com/irj/sdn/nw-soa](http://www.sdn.sap.com/irj/sdn/nw-soa)

### Related SAP Education and Certification Opportunities

<http://www.sap.com/education/> → Training Catalog →

SAP NetWeaver → PI & Business Integration

<http://www.sdn.sap.com> → Partnership and Certification →  
Integration and Certification → Process Integration

### Related Workshops/Lectures at SAP TechEd 2010

PMC210	Improved Fault Tolerance and TCO Reduction	1h Lecture
PMC211	Improved Update and Upgrade Procedure	1h Lecture
PMC212	Federated PI - Robust and Scaling PI Landscapes	2h Lecture
PMC262	Using the Advanced Adapter Extended	2h Hands-on
ALM300	Near-Zero Downtime Software Maintenance	2h Lecture



## Feedback

**Please complete your session evaluation.**

Be courteous — deposit your trash,  
and do not take the handouts for the following session.

**THANK YOU !**



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