SAP NetWeaver
Process Integration

Brief Overview

Platform Solution Marketing
SAP
Why Process Integration?
- Communications Complexity
- Cost Drivers

SAP NetWeaver Process Integration
- Advantages
- Scenarios
- Architecture
- Relation to other components
- Return of investment

References
Process Integration Cost Drivers

Prohibitive interface costs
Prohibitive operations costs
Prohibitive management costs

Interface Management
- Point to point
- Various technologies
- Redundant metadata

Message Management
- Many places
- Many formats
- Many meanings

Process Management
- Partly manual
- Partly in applications
- Partly via interfaces

Party Management
- Security
- Protocols
- Formats
Integration Consolidation with SAP NetWeaver

<table>
<thead>
<tr>
<th>Part of SAP NetWeaver</th>
</tr>
</thead>
<tbody>
<tr>
<td>More than 1,600 installations end of ‘05</td>
</tr>
<tr>
<td>More than 40 adapters available</td>
</tr>
<tr>
<td>Packaged integration content available</td>
</tr>
<tr>
<td>Coverage of all major integration tasks</td>
</tr>
</tbody>
</table>

### SAP NetWeaver

- **People Integration**
- **Information Integration**
- **Process Integration**
- **Application Platform**

### Analytics
- Strategic Enterprise Management
- Financial Analytics
- Customer Service Analytics
- Workforce Analytics

### Financials
- Electronic Payment
- Financial Accounting
- Management Accounting
- Corporate Services

### Human Capital Management
- Talent Management
- Payroll and Legal Reporting

### Procurement and Logistics Execution
- Procurement
- Supplier Collaboration
- Inventory Management
- Outbound Processing
- Transportation Management

### Product Development and Manufacturing
- Production Planning
- Manufacturing Execution
- Enterprise Asset Management
- Product Development

### Sales and Service
- Sales Order Management
- Aftermarket Sales and Service
- Project Execution
- Project Portfolio Management
- Global Trade Services
- Investor and Compliance Management

### Corporate Services
- Real Estate Management
- Project Portfolio Management
- Travel and Expense Management
- Environment, Health and Safety
- Quality Engineering

### Integration
- A2A
- B2B
- BPM
- BTM

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Process Integration Scenarios

**Application-to-Application Integration (A2A)**
- Message brokering, adaptation

**Business-to-Business Integration (B2B)**
- Message brokering, connectivity
- Industry standard partner integration

**Business Task Management (BTM)**
- Automate collaborative tasks and workflows across the enterprise

**Business Process Management (BPM)**
- All levels from business modeling down to execution

**Service-oriented Architecture (SOA)**
- Service repository, enablement and orchestration for Enterprise Services Architecture
Process Integration Components

- Partner Connectivity Kit
- Process Integration Components
  - Auto-ID Infrastructure
  - Trading Communities
    - Packaged Applications
    - Legacy Applications
  - Message Broker
    - Adapter Engine
      - Technical
      - A2A
      - B2B
  - Business Task Management
  - Business Process Management
  - mySAP Solutions
  - Business Process Modeling
# Integration Product Checklist

**Categories Courtesy Jess Thomson, Research Director, Gartner Research**

<table>
<thead>
<tr>
<th>Functionality</th>
<th>Coverage in SAP NetWeaver</th>
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<tbody>
<tr>
<td>Transformation</td>
<td>✔ Java &amp; XSLT, graphical mapping editor</td>
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<tr>
<td>Flow Management</td>
<td>✔ Integration scenarios, graphical flow editor</td>
</tr>
<tr>
<td>Business process management</td>
<td>✔ Business, configuration and execution models (BPEL)</td>
</tr>
<tr>
<td>Adapters and PIPs</td>
<td>✔ Adapter framework (JCA), &gt;40 adapters, certified content</td>
</tr>
<tr>
<td>B2B capabilities</td>
<td>✔ Partner configuration, adapters, business packages</td>
</tr>
<tr>
<td>BAM</td>
<td>✔ Monitoring &amp; business reporting integrated with SAP BI</td>
</tr>
<tr>
<td>Openness</td>
<td>✔ Standards-based, Web services, XML, Java</td>
</tr>
<tr>
<td>Quality of service</td>
<td>✔ Various QoS levels for messaging</td>
</tr>
<tr>
<td>Data navigation</td>
<td>✔ Metadata repository, common format XSD</td>
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</table>
Tight integration with other NetWeaver Capabilities

Business Intelligence
- Real-time external data feed
- Source for analytical events

Enterprise Portal
- User interface for BTM, integrated tasks, forms, objects

Master Data Management
- Real-time external data access
- Global data synchronization through B2B standards (e.g. 1SYNC)

Application Server
- Use of deployment infrastructure (scalability, load-balancing, failover)

Development Infrastructure
- Code lifecycle and distribution management

Solution Manager
- System landscaping, process documentation and configuration
It Pays for Itself – If You Move Quickly!

- 130+ interfaces
- Dramatic cost reduction
  - >70% interface maintenance
  - >30% interface development
- No business benefits taken into account

Study by SAP Business Consulting, 2005

- Utilities industry
- Before:
  - Custom point-to-point interfaces
  - No integration technology
- SAP & non-SAP systems

Return of Investment [Years]

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<th>Project Duration [Years]</th>
<th>Rate</th>
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NPV [EUR]

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<th>NPV [EUR]</th>
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<td>4.35%</td>
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<td>5</td>
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</tbody>
</table>
The Dilemma with Pure-Play Integration Technology

Insight? Monitoring? Event Resolution?

Best-of-breed integration suite

- Context? Criticality? What next?
- Re-gather Information
- To ERP for Processing
- Missing out on SCM Process...
- Can't do More Than Reformat...

Partner

Customer

Model Monitor

CRM

Mysterious Business Process

Model Monitor

ERP

Mysterious Business Process

Model Monitor

SCM

Mysterious Business Process

Model Monitor

PO

PO

PO

PO

PO

PO
The Solution with SAP NetWeaver Process Integration

Insight! Monitoring! Event Resolution!

- Purchase Order Processing
- Sales Order Management
- Quotation & Order Management

- Central modeling, configuration and execution
- Common model for embedded and unbounded processes
Cognis Deutschland GmbH & Co. KG

Globally, Cognis is a leading specialty chemicals company. Cognis develops innovative products and solutions for personal care, home care and modern nutrition.

Business challenge

- Connectivity to external partners through a single global platform
- Ordering through Elemica, the chemical industry's electronic marketplace

Solution provided

- SAP NetWeaver Exchange Infrastructure (integration platform)
- SAP Business Package for CIDX (process and mapping templates, adapters)

Benefits achieved

- Reduced order management cost through concentration and standardization
- Single, global platform for e-business connectivity
**Reference**

**ATI Technologies**

A world leader in the design and manufacture of innovative 3D graphics and digital media silicon solutions, ATI Technologies Inc. is a fabless company requiring premier electronic integration with fabrication partners.

**Business challenge**

- Connectivity to external partners through a single global platform
- Decrease latency between Asia-Pacific and North America

**Solution provided**

- SAP NetWeaver Exchange Infrastructure (integration platform)
- SAP Business Package for RosettaNet (process/mapping templates, adapter)

**Benefits achieved**

- Reduced cost of supplier management through improved visibility
- Single, global platform for e-business connectivity
Summary – SAP NetWeaver Process Integration

Solid adoption

- 70% year-to-year installation growth
- >180 customer references
- >40 customer success stories
- >50 SAP solution scenarios (content – ERP, CRM, SRM, …)
- Partners use it and certify for it (adapters, content, …)

Solid roadmap

- Synchronized service packs, back-ports of NW04s
- New features like BAM, event management, guided procedures, …
- Foundation for ESA – services repository, orchestration and composition

SAP NetWeaver Process Integration paves the way today towards an Enterprise Services Architecture