



GLOSSARY OF SAP PROCESS INTEGRATION/ PROCESS ORCHESTRATION

**A Quick Reference Guide to
SAP Terminologies**

Concept/Term	Definition
SAP PI (Process Integration)	A middleware platform used to connect SAP and non-SAP systems. Enables seamless data exchange via integration scenarios.
SAP PO (Process Orchestration)	Combines SAP PI, BPM, and BRM into one platform. Supports integration, business processes, and rule management.
Integration Engine	Core engine in PI for processing XML messages. Executes message mappings and routing logic.
Advanced Adapter Engine (AAE)	Handles message processing using Java-based adapters. Reduces dependency on ABAP stack.
Enterprise Service Repository (ESR)	Design-time environment in SAP PI/PO. Stores objects like data types, message mappings, and service interfaces.

Concept/Term	Definition
Integration Directory (ID)	Runtime configuration layer of PI/PO. Used to define channels, routing, and scenario-specific settings.
Adapter Framework	Enables communication with external systems. Includes adapters for protocols like HTTP, SFTP, IDoc, SOAP, REST, and JDBC.
Message Mapping	Defines how data is transformed between sender and receiver formats. Can be graphical, Java, or XSLT based.
Operation Mapping	Links message mappings to specific interface operations. Used in ESR during design time.
Interface Determination	Determines which inbound interface to use based on message content. Configured in Integration Directory.

Concept/Term	Definition
Receiver Determination	Specifies which systems will receive the message. Supports conditional and multiple receivers.
Sender Agreement	Links the sender system to its communication channel. Also defines the interface and security settings.
Receiver Agreement	Connects receiver systems to appropriate channels. Defines message protocol, QoS, and security settings.
Communication Channel	Contains adapter-specific configuration. Includes protocol, host, port, authentication, and QoS.
Quality of Service (QoS)	Defines message delivery behavior: Exactly Once (EO), Exactly Once In Order (EOIO), and Best Effort (BE).

Concept/Term	Definition
Graphical Mapping	User-friendly interface to define data transformation logic. Offers built-in functions and UDFs.
UDF (User Defined Function)	Custom Java functions in graphical mappings. Used for complex or reusable logic.
Message Monitoring	Tool to track the status of processed messages. Shows success, errors, or retry status.
Adapter Monitoring	Monitors adapter-specific logs and runtime errors. Helps troubleshoot communication issues.
Cache Refresh	Updates runtime metadata after changes in ESR or ID. Ensures the latest configuration is applied.

Concept/Term	Definition
Business System	Represents an application system in the SLD. Required for configuration in Integration Directory.
System Landscape Directory (SLD)	Stores technical landscape info like systems, products, and software components. Connects with ESR and ID.
Integration Scenario	A design template in ESR showing the end-to-end flow. Helps visualize sender-to-receiver mappings.
ICO (Integrated Configuration Object)	Used in single-stack PO systems. Combines all runtime config into one object, replacing classical ID objects.
BPM (Business Process Management)	Models and executes business processes involving multiple systems. Integrated in PO stack.

Concept/Term	Definition
Context Object	Metadata element used to identify fields in mappings. Simplifies routing and transformation.
Alert Framework	Generates alerts for message failures. Sends notifications via email, SMS, or SAP Solution Manager.
Exception Handling	Deals with errors during message processing. Includes retries, alerts, and escalation flows.
AS2 Adapter	Used for secure B2B messaging based on EDI standards. Supports encryption and digital signatures.
IDoc Adapter	Enables communication with SAP systems using IDoc format. Supports both sender and receiver functions.

Concept/Term	Definition
SOAP Adapter	Connects web services using SOAP protocol. Can be used for synchronous or asynchronous messaging.
REST Adapter	Supports integration using RESTful services. Useful for lightweight and modern API communication.
SFTP Adapter	Secure file transfer using SSH. Commonly used for sending or receiving flat files in integration.
JDBC Adapter	Integrates with relational databases. Can execute SQL queries or procedures.
Mail Adapter	Used to send or receive messages via email. Supports attachments and formatted content.

Concept/Term	Definition
XI 3.0 Compatibility Mode	Ensures backward compatibility with dual-stack (ABAP+Java) PI systems. Useful during migrations.
Namespace	A logical grouping for design objects in ESR. Helps avoid naming conflicts and manage versions.
Message Versioning	Maintains versions of message mappings or interfaces. Helps manage updates without breaking compatibility.
Payload Logging	Records the actual content of processed messages. Helps in debugging and auditing.
Cross Component BPM	BPM processes that involve multiple applications. Enables end-to-end orchestration with human steps.

Concept/Term	Definition
Transport Management System (TMS)	Manages movement of integration content across landscapes. Ensures quality and version control.
CTS+	Enhanced transport system to move PI/PO content using standard CTS. Supports ESR and ID content transport.
Security Certificate	Used for enabling SSL or AS2 communication. Ensures encryption, integrity, and non-repudiation.
Digital Signature	Signs the message payload to ensure authenticity. Often used in B2B integrations.
Correlation	Matches incoming asynchronous responses with requests. Used in BPM and asynchronous interfaces.

Concept/Term	Definition
Split and Join Patterns	Design patterns in BPM and mappings. Split divides data into chunks, Join merges multiple inputs.
Process Context	Holds data and variables in a BPM process. Shared across tasks and used in decision logic.
Audit Log	Records all actions in message or process execution. Helps trace issues and verify compliance.
Retry Mechanism	Automatically retries failed message delivery. Helps recover from transient errors.
PI/PO Versioning	Refers to different versions like PI 7.4, PO 7.5, etc. Important for understanding feature compatibility.