

# Adapters (Advanced Adapter Engine) ☆

## Use

Adapters enable the runtime engines of SAP NetWeaver PI to communicate with different applications.

You only require an adapter to communicate with SAP systems older than Release 6.20 and with external systems. A direct system connection using proxies and without additional adapters is supported for SAP systems that are based on Application Server 6.20 or higher.

## Adapter Types

- The IDoc adapter (AAE) integrates existing SAP components with the Advanced Adapter Engine. It converts XML and HTTP-based documents to IDocs, and the other way around. This enables you to integrate your existing SAP infrastructure with the SAP infrastructure based on system integration and the exchange of XML messages.
- The HTTP adapter (AAE) gives application systems the option of communicating with the Advanced Adapter Engine and exchanging business data in a simple format, using an HTTP connection.
- The Advanced Adapter Engine provides you with various adapters that you can use to connect external systems to your Advanced Adapter Engine. You can use these adapters to convert XML and HTTP-based messages to the specific protocols and formats of the respective external systems and the other way around.

It is also possible to configure a message exchange without the involvement of the Integration Engine for adapters of the Advanced Adapter Engine (apart from the RNIF and CIDX adapters).

- You can specify generic modules for adapters in the Adapter Engine in the module processor. These modules give the adapters additional functions. SAP provides modules for integrating in the adapters of the Adapter Engine.
- For notes on the development of adapters and modules, see: [Developing Adapters and Modules](#).
- In addition to the Adapter Engine, the Adapter Engine (Java SE) is still available.

The following tables list the available adapters provided by SAP and summarize key attributes.

### Adapters of the Advanced Adapter Engine

Adapter Type	Transport Protocol	Message Protocol	Quality of Service	Attachments	Attributes in Message Header	Acknowledgments
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Adapter Type	Transport Protocol	Message Protocol	Quality of Service	Attachments	Attributes in Message Header	Acknowledgments
<a href="#">IDoc (AAE)</a>	tRFC	IDoc XML	EO, EOIO	No	No	ALEAUDIT XI Acknowledgement
<a href="#">RFC</a>	RFC	RFC-XML	BE, EO, EOIO	No	Sender	<a href="#">Acknowledgments</a>
<a href="#">HTTP(AAE)</a>	HTTP(S) 1.1 <b>11.1</b>	POST GET	BE EO EOIO	Yes	Sender Receiver	System acknowledgments  System error acknowledgments
<a href="#">SAP Business Connector (BC)</a>	HTTP(S)	RFC XML with envelope IDoc-XML	BE, EO	No		<a href="#">Acknowledgments</a>
<a href="#">File/FTP</a> <b>11.1</b>	File system (NFS)  <a href="#">File transfer protocol/file transfer protocol using SSL/TLS</a> <b>11.1</b>	File  File with content conversion	BE, EO, EOIO	Yes  (Sender)	Sender  Receiver	
<a href="#">JDBC</a>	JDBC 2.0	Sender:  JDBC 2.0  Receiver:  XML SQL Format  Native SQL String	BE, EO, EOIO	No		
<a href="#">JMS</a> <b>11.1</b>	SonicMQ JMS Provider  WebSphereMQ (non-JMS)  Access JMS Provider with JNDI  (Read) JMS Provider Administered Objects from File  Access JMS Provider Generically	JMS 1.x	EO, EOIO	No	Sender  Receiver	

Adapter Type	Transport Protocol	Message Protocol	Quality of Service	Attachments	Attributes in Message Header	Acknowledgments
<a href="#">SOAP</a> <b>11.1</b>	Sender: HTTP Receiver: HTTP(S) SMTP(S)	SOAP 1.1	BE, EO, EOIO	Yes  (sender, receiver)	Sender  Receiver	
<a href="#">Web Service</a>	HTTP(S)	SOAP 1.1 and 1.2 WS-Reliable Messaging 1.0 and 1.1	Best Effort, Exactly Once, Exactly Once In Order	No	No	No
<a href="#">Marketplace</a>	HTTP(S)  JMS Sonic MQ 3.5	MML	BE, EO	Yes  (sender, receiver)		
<a href="#">Mail</a> <b>11.1</b>	Sender: IMAP4 <b>11.1</b> POP3 <b>11.1</b> Receiver: IMAP4 SMTP <b>11.1</b>	XIALL  XIPAYLOAD	BE, EO, EOIO	Yes, for XIPAYLOAD  (sender, receiver)	Sender  Receiver	
<a href="#">RNIF</a>	HTTP 1.1  HTTPS	RNIF 2.0	EO	Yes	Sender  Receiver (for two-action responder)	
<a href="#">RNIF11</a>	HTTP 1.1  HTTPS	RNIF 1.1	EO	No	Sender  Receiver (for two-action responder)	
<a href="#">CIDX</a>	HTTP 1.1  HTTPS	RNIF 1.1	EO	No	Sender	