

Sending an Image File Through XI in a File-to-Mail Scenario

Summary

This article depicts the usage of the “Additional files” parameter in a File adapter to send a binary file(image) through Exchange Infrastructure, and receive it as an attachment in a mail. The scenario has been designed to make sure that both the XI Payload, as well as the image attachment is received in the mail (using a receiver mail adapter).

Created on: 18th April 2006

Author Bio



Prashanth Azharuddin is an SAP XI Consultant with Wipro Technologies.

Table of Contents.

Introduction	3
Configuring the sender FILE adapter	3
Configuring the receiver MAIL adapter	4
Module configuration and related parameter settings	5
Conclusion: -	7

Introduction

The idea to implement this scenario came up when we had a requirement to transfer some images from one Business System to another via the middleware. Initially, we considered using SOAP over XML to achieve this, but then we came up with this idea of sending the images as attachments. This scenario could also be extended to transfer all forms of binary files from master data sources for articles to MDM.

The image file used in this scenario will be in JPEG format. The version of Exchange Infrastructure used is XI 3.0 with SP16. The filename of the XML payload as well as the image attachment used here will be the same since the 'namepart' substitution parameter was used when configuring the file adapter.

The major plus in this scenario is that **all binary file types** can be sent as attachments through XI. This includes various types of file extensions such as **.wav, .bmp, .pdf** etc.

The receiving of the attachment by the mail adapter is handled using two standard mail modules, the MessageTransformBean and the PayloadSwapBean. Further detail on them is given under module configuration below.

This is a fast and easy method to send and receive attachments in XI and does not contain any lines of code

Configuring the sender FILE adapter

The sender file adapter is configured to pick the normal payload (file1.xml), which is specified in the File access parameters, and the additional image file (file1.jpg) that is to be sent as an attachment is configured under the Additional File(s) as shown in the screenshot below. The file type would still remain binary.

Additional parameters are specified for the extra file, as shown.

Name	Value
<file1.jpg>.namePart	".xml"=".jpg"
<file1.jpg>.optional	YES
<file1.jpg>.type	BIN

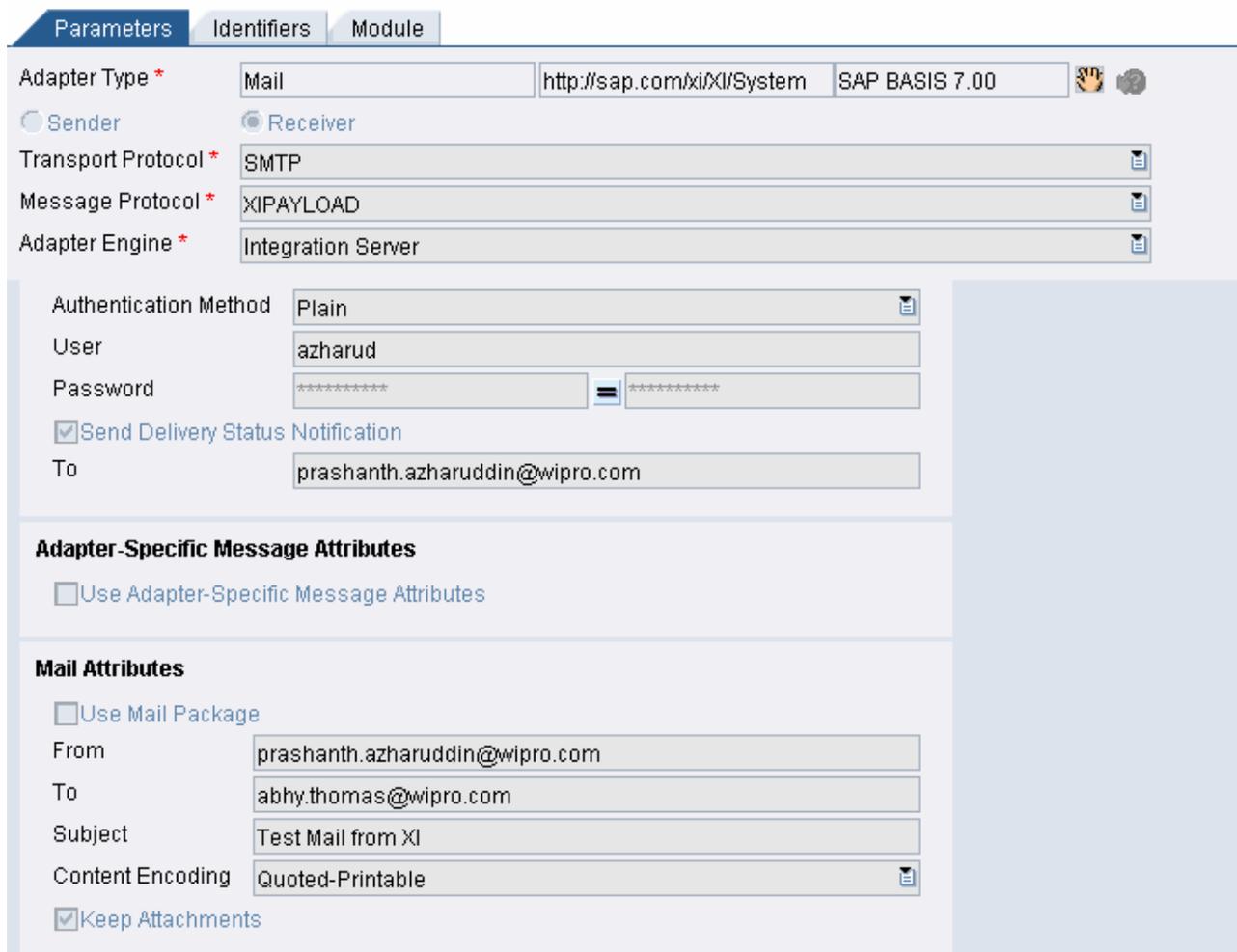
Configuring the receiver MAIL adapter

The receiver mail adapter parameter configuration is simple enough. I have given the transport protocol as **SMTP** since my official mailbox resides on an SMTP server.

The message protocol would be **XIPAYLOAD** and we would not be using mail package here.

The mailbox URL is entered, and user authentication is configured.

The most important thing to be kept in mind here, is to **check** the **Keep Attachments** tab under mail attributes



The screenshot shows the configuration interface for a Mail Adapter in SAP. It is divided into three tabs: Parameters, Identifiers, and Module. The Parameters tab is active, showing the following settings:

- Adapter Type ***: Mail
- Transport Protocol ***: SMTP
- Message Protocol ***: XIPAYLOAD
- Adapter Engine ***: Integration Server
- Authentication Method**: Plain
- User**: azharud
- Password**: (masked with asterisks)
- Send Delivery Status Notification**
- To**: prashanth.azharuddin@wipro.com

Below the main configuration, there are two sections:

- Adapter-Specific Message Attributes**: Use Adapter-Specific Message Attributes
- Mail Attributes**:
 - Use Mail Package
 - From**: prashanth.azharuddin@wipro.com
 - To**: abhy.thomas@wipro.com
 - Subject**: Test Mail from XI
 - Content Encoding**: Quoted-Printable
 - Keep Attachments**

Module configuration and related parameter settings

Since, by default, XI sends payload and attachments in XML format, we need to call two beans, namely the **MessageTransformBean** and the **PayloadSwapBean** to help us in transforming the content to jpeg format and also change the file extension.

For our scenario, the processing sequence and module configuration are done as shown in the scenario below.

The screenshot displays the configuration interface for SAP XI modules, divided into two sections: Processing Sequence and Module Configuration.

Processing Sequence

Number	Module Name	Type	Module Key
1	localejbs/AF_Modules/MessageTra...	Local Enterprise Bean	trans1
2	localejbs/AF_Modules/PayloadSwa...	Local Enterprise Bean	swap
3	localejbs/AF_Modules/MessageTra...	Local Enterprise Bean	trans2
4	localejbs/sap.com/com.sap.aii.ada...	Local Enterprise Bean	mail

Module Configuration

Module Key	Parameter Name	Parameter Value
trans1	Transform.ContentDescription	file1
trans1	Transform.ContentDisposition	inline
swap	swap.keyName	payload-name
swap	swap.keyValue	file1
trans2	Transform.ContentDescription	file1
trans2	Transform.ContentDisposition	attachment
trans2	Transform.ContentType	image/jpeg;name="file1.jpg"

The PayloadSwapBean module is used to replace the application payload of the XI message that holds the data with another payload which is appended to the message as an attachment. In our case, the payload would be **file1.xml** whereas the attachment would be **file1.jpg**

The swap module is denoted in our scenario with the module key 'swap'. It has two parameters from the MIME header. They are

Swap.keyName where the attribute of the payload is entered

Swap.keyValue which holds the value of the attribute

The MessageTransformBean module is used to describe the payload. The various MIME content fields used to describe the payload are

Transform.ContentDisposition with parameters attachment | inline refers to how the payload shows up in the mail

Transform.ContentDescription which gives the file description

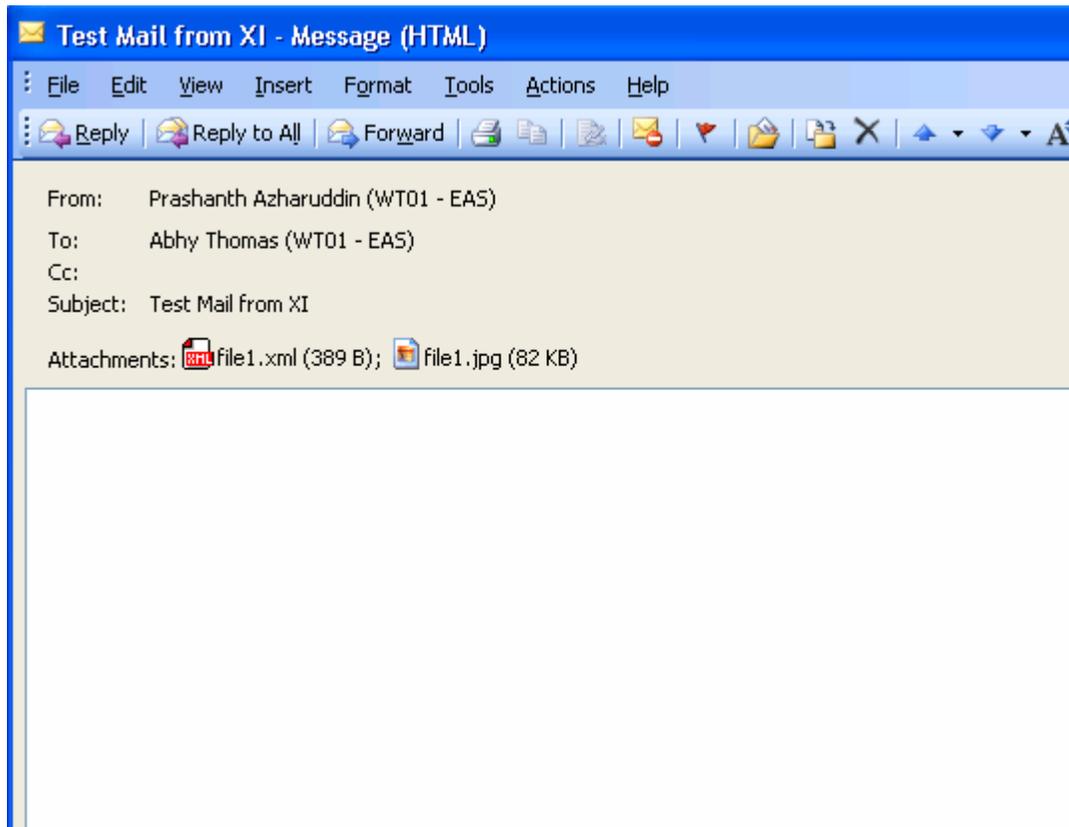
Transform.ContentType which specifies the type of the payload

The MessageTransformBean and PayloadSwapBean are standard modules provided by SAP and their functionality is explained clearly in the below supporting documents.

Reference pages:-

1. http://help.sap.com/saphelp_nw2004s/helpdata/en/2e/bf37423cf7ab04e10000000a1550b0/frameset.htm
2. http://help.sap.com/saphelp_nw2004s/helpdata/en/57/0b2c4142aef623e10000000a155106/frameset.htm
3. <https://weblogs.sdn.sap.com/pub/wlg/2849>

Once all the objects are saved and activated, the files are picked up by the File Adapter, sent through XI to be received by the receiver mail adapter. The file with attachment is received as shown in the snapshot below.



Conclusion: -

This scenario could be used to send **all types of binary files** as attachments through XI. These include **PDF documents, sound files, bitmaps** amongst others

Disclaimer and Liability Notice

This document may discuss sample coding or other information that does not include SAP official interfaces and therefore is not supported by SAP. Changes made based on this information are not supported and can be overwritten during an upgrade.

SAP will not be held liable for any damages caused by using or misusing the information, code or methods suggested in this document, and anyone using these methods does so at his/her own risk.

SAP offers no guarantees and assumes no responsibility or liability of any type with respect to the content of this technical article or code sample, including any liability resulting from incompatibility between the content within this document and the materials and services offered by SAP. You agree that you will not hold, or seek to hold, SAP responsible or liable with respect to the content of this document.