



| IBM Software Group

# IBM WebSphere Partner Gateway V6.1.1

## *AS2 and AS3 large file support*



@business on demand.

© 2008 IBM Corporation  
Converted to video August 8, 2014

This presentation covers the Applicability Statement 2 or AS2, and AS3 large file support that are new in WebSphere® Partner Gateway V6.1.1 release.

## Agenda

- Overview
- AS Packaging Support in WebSphere Partner Gateway
- Large File Support for AS2, AS3
- Administration/Configuration
- Summary and references.

Here is the agenda for today's session. Apart from providing an overview on Applicability Statement (AS), this session will cover the details on how AS protocol is supported in WebSphere Partner Gateway. You will also understand the large file support feature included in this release, along with the administration and configuration changes.

# Section

## *Overview*

The next slide provides an overview on Large File Support.

## Overview

- AS is a specification about how to transport data securely and reliably over the Internet. Security is achieved by using digital certificates and encryption
- Supported data are EDI, XML or any binary data over SMTP, HTTP, FTPS
- Security and reliable delivery:
  - ▶ Digital signatures
  - ▶ Encryption
  - ▶ Over SSL
  - ▶ Signed and unsigned receipts
- Large file transfer support :
  - ▶ Signing, encryption, and compression
  - ▶ Combinations of these



AS is a standard that allows applications to communicate Electronic Data Interchange (EDI) or Extensible Markup Language (XML) data, or any other binary data. The supported transport protocols are SMTP, HTTP and File Transfer Protocol (FTP.) This allows user to connect, deliver, and reply to data securely and reliably over the internet.

AS protocol provides security for the transport payload through digital signatures and data encryption and ensures reliable delivery through the use of Message Disposition Notification or MDN's. Originator sends a plain or secured AS request asking for a signed or plain receipt of acknowledgement. This receipt is called MDN.

The recipient processes the secured or plain document through parsing. In this process, the recipients are able to perform tasks such as decrypting the document if encrypted, verifying the signature if document is signed, and uncompress the document if it is compressed.

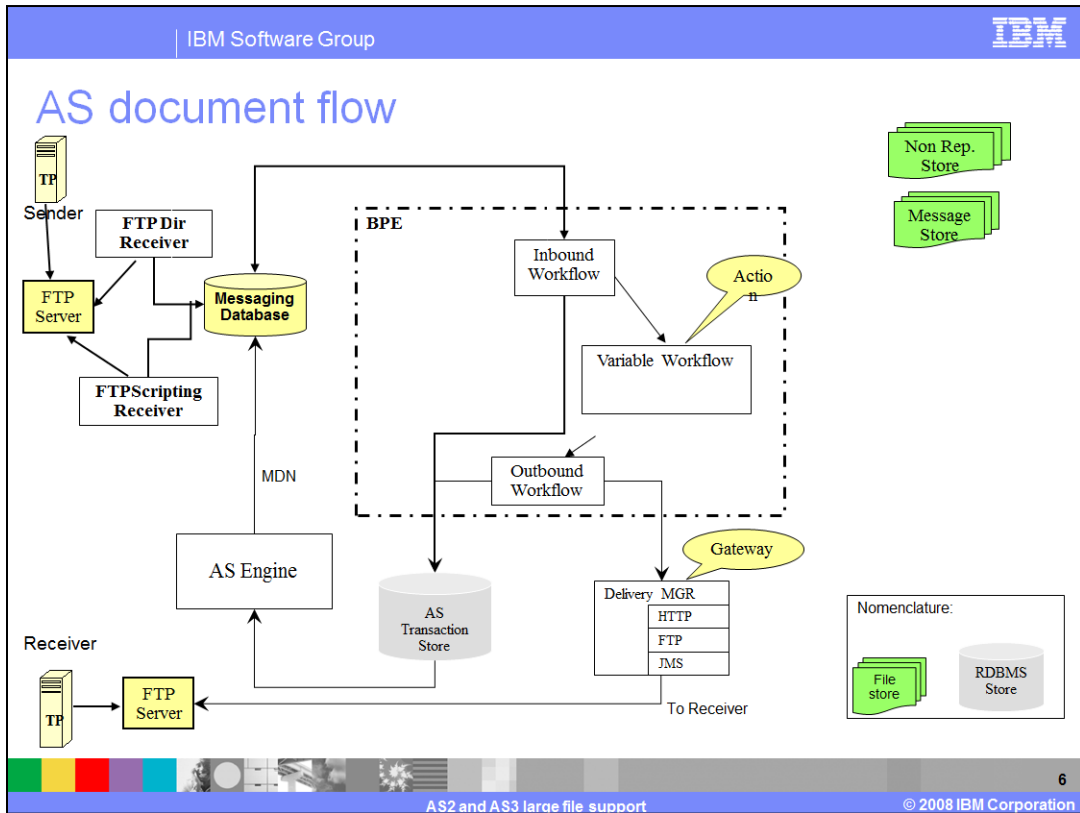
This release of WebSphere Partner Gateway 6.1.1 supports large file handling of the order of gigabytes.

## Section

# *AS implementation in WebSphere Partner Gateway*



The next section covers the AS implementation in WebSphere Partner Gateway.



This slide describes the sample workflow inside WebSphere Partner Gateway. Although the workflow is specific to AS3, AS1 and AS2 goes through the same steps, the difference is only in the transport protocol.

In case of an inbound AS flow, the Partner shown in the diagram places the AS3 document on the FTP server. The FTP receivers configured in WebSphere Partner Gateway, picks up the AS3 file and places it in the main inbound queue of BPE (Business Process Engine). BPE picks up the messages on the inbound queue and parses the document by unpacking it. The document information is logged to AS transaction store. This information is used to generate the MDN. The unpacked document goes through the outbound work flow where it is sent to destination through the Delivery Manager.

In case outbound AS flow, a *None* to AS sample outbound AS3 flow is shown. Here, Receiver picks the EDI document placed on a FTP server. The FTP receiver (can be either FTP Dir receiver or FTP scripting receiver ) picks up the document and places it on to Main\_InboundQ of the BPE application. The BPE process picks the messages from the main inbound queue and sends it through the Inbound workflow steps. If any variable flow is defined, then the configured action is performed on the document. Then the document proceeds through the outbound workflow. In this case, the EDI document is packaged with AS packaging and is sent to Delivery Manager. The delivery manager uses FTP transport to send the document to FTP server. The Partner can pick the document from the FTP server.

## What's supported in V6.1.1

- Receiving and Sending AS1/AS2/AS3 Messages
- Digital Signature
- Encryption
- CMS lib based Security.
- Signed , Unsigned MDN
- Content Transfer Encoding:
  - ▶ Base-64
  - ▶ Quotable-Printable
  - ▶ 7-bit, 8-bit.



This slide talks about what is supported in WebSphere Partner Gateway V6.1.1.

This release supports sending and receiving plain and secured documents over SMTP, HTTPS or FTPS. It also supports sending/receiving signed, encrypted and compressed documents. The library CMS and IBMPKCS are used for large and small files correspondingly. Along with these features, signed and unsigned MDNs, content transfer encodings like Base-64, Quotable-Printable, 7bit, and 8bit are also supported.

## What is new in V6.1.1

- V6.1.1 supports large file size, upto 2GB for AS2 and AS3 Documents.
- Supports CMS libraries, apart from current IBMPKCS
- Ability to switch between stream based and array based implementation:
  - ▶ Stream based is useful when file size is large and in cases where memory needs to be used conservatively.



New in WebSphere Partner Gateway V6.1.1 is the support for large files in the magnitude of 2GB for AS2 and AS3. Additionally, CMS library is used for large file support and IBMPKCS for small files.

There are separate implementations for large files and small files. Large files use stream based implementations and small files use an array based implementation. You can switch between these implementations by choosing a threshold value in the console system attributes, shown in the next section.



## Section

# ***Administration and configuration***

This section covers the administration or configuration steps needed for AS function.

## ASx configuration

- No special configuration is required for large file support:
  - ▶ Configurations remain same for AS2, AS1, and AS3.
  - ▶ Only AS2 and AS3 are supported. AS1 is not supported yet.
- New attribute *bcg.maximumFileSizeForByteArrays* has been added.
  - ▶ Default threshold value for this attribute is 15MB



There are no changes to the Configuration and it remains the same as the previous release for AS1, AS2, and AS3. A new attribute “bcg.maximumFileSizeForByteArrays” has been added. The default value for this attribute is 15MB.

If the documents routed through WebSphere Partner Gateway are greater than 15MB, then the stream based approach is used internally by the WebSphere Partner Gateway to route the documents. For smaller documents, *bcg.maximumFileSizeForByteArrays* < 15MB, the byte array based approach is used internally. The value for this attribute can be changed through the console under System Administration >> common properties.

## ASx configuration

- Configurations remain same for AS2 and AS3
- No special configuration is required for large file support
- New attribute *bcg.maximumFileSizeForByteArrays* has been added
  - ▶ Default threshold value for this attribute is 15MB
  - ▶ Attribute can be changed in the console
    - Under System Administration >> common properties

There are no changes to the configuration and it remains the same as the previous release for AS2, and AS3.

A new attribute “bcg.maximumFileSizeForByteArrays” has been added. The default value for this attribute is 15MB.

The value for this attribute can be changed through the console under System Administration >> common properties.

If the documents routed through WebSphere Partner Gateway are greater than 15MB, then the stream based approach is used internally by the WebSphere Partner Gateway to route the documents. For smaller documents, *bcg.maximumFileSizeForByteArrays* < 15MB, the byte array based approach is used internally. The value for this attribute can be changed through the console under System Administration >> common properties.

## ASx configuration

### Sample outbound connection

The screenshot displays the ASx configuration interface. At the top, there is a blue header with 'IBM Software Group' and the 'IBM' logo. Below the header, the title 'ASx configuration' is followed by the subtitle 'Sample outbound connection'. The main area contains a 'Source' dropdown menu set to 'Manager', a 'Search' button, a 'Reset' button, and a 'Target' dropdown menu set to 'Partner'. Below this, there are two 'B2B Capabilities' buttons, one of which is 'Enabled'. A 'Deactivate' link is also visible. The central part of the interface shows a table of connections with columns for 'Attributes', 'Actions', and 'Destinations'. Two connection entries are shown: one with a green checkmark and one with a red 'X'. Both entries have 'Package: None (N/A)' or 'Package: AS (N/A)', 'Protocol: EDI-X12 (ALL)', and 'Document Type: ISA (ALL)'. At the bottom, there is a footer with a colorful bar, the text 'AS2 and AS3 large file support', the page number '12', and the copyright notice '© 2008 IBM Corporation'.

This page shows the sample AS outbound connection.

Create a sample outbound connection as shown for sending the AS documents out to a Partner. Configuring this connection is the same as in the previous release.

Creating the connection involves creating partners, enabling business-to-business capabilities, creating destinations, FTP, SMTP or HTTP, creating connections, and enabling connections. The document is routed using this connection.

## ASx configuration

### Sample inbound connection

Source		Target					
Partner	Search	Reset	Manager				
Enabled		Deactivate					
B2B Capabilities	Connection Details		B2B Capabilities				
✓	Package: AS (N/A) Protocol: EDI-X12 (ALL) Document Type: ISA (ALL)	Attributes	Actions	Destinations	Attributes	Package: None (N/A) Protocol: EDI-X12 (ALL) Document Type: ISA (ALL)	✗

AS2 and AS3 large file support

© 2008 IBM Corporation 13

This page shows the sample AS inbound connection

Create a sample inbound connection as shown for receiving the documents from Partner. Configuring this connection is same as in the previous release. For example, from AS to None has to be created.

## Section

# ***Summary and references***



This section covers the summary and references.

## Summary

- WebSphere Partner Gateway V6.1.1 supports large files for AS2 and AS3
- AS1 large file is not supported in this release
- A new configuration attribute has been added



To summarize, WebSphere Partner Gateway V6.1.1 supports large files for AS2, AS3 and AS1. New configuration attribute is added and defaulted to 15MB. You can change this value through the console.

## References

- AS3 Specification  
<http://www.imc.org/draft-ietf-ediint-as3>
- AS2 Specification  
<http://www.ietf.org/rfc/rfc4130.txt>
- AS1 Specification  
<http://www.ietf.org/rfc/rfc3335.txt>



The AS1, AS2 and AS3 specs are used as references for this presentation.



## Trademarks, copyrights, and disclaimers

The following terms are trademarks or registered trademarks of International Business Machines Corporation in the United States, other countries, or both:

IBM                      WebSphere

A current list of other IBM trademarks is available on the Web at <http://www.ibm.com/legal/copytrade.shtml>

Product data has been reviewed for accuracy as of the date of initial publication. Product data is subject to change without notice. This document could include technical inaccuracies or typographical errors. IBM may make improvements or changes in the products or programs described herein at any time without notice. Any statements regarding IBM's future direction and intent are subject to change or withdrawal without notice, and represent goals and objectives only. References in this document to IBM products, programs, or services does not imply that IBM intends to make such products, programs or services available in all countries in which IBM operates or does business. Any reference to an IBM Program Product in this document is not intended to state or imply that only that program product may be used. Any functionally equivalent program, that does not infringe IBM's intellectual property rights, may be used instead.

Information is provided "AS IS" without warranty of any kind. THE INFORMATION PROVIDED IN THIS DOCUMENT IS DISTRIBUTED "AS IS" WITHOUT ANY WARRANTY, EITHER EXPRESS OR IMPLIED. IBM EXPRESSLY DISCLAIMS ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT. IBM shall have no responsibility to update this information. IBM products are warranted, if at all, according to the terms and conditions of the agreements (for example, IBM Customer Agreement, Statement of Limited Warranty, International Program License Agreement, etc.) under which they are provided. Information concerning non-IBM products was obtained from the suppliers of those products, their published announcements or other publicly available sources. IBM has not tested those products in connection with this publication and cannot confirm the accuracy of performance, compatibility or any other claims related to non-IBM products.

IBM makes no representations or warranties, express or implied, regarding non-IBM products and services.

The provision of the information contained herein is not intended to, and does not, grant any right or license under any IBM patents or copyrights. Inquiries regarding patent or copyright licenses should be made, in writing, to:

IBM Director of Licensing  
IBM Corporation  
North Castle Drive  
Armonk, NY 10504-1785  
U.S.A.

Performance is based on measurements and projections using standard IBM benchmarks in a controlled environment. All customer examples described are presented as illustrations of how those customers have used IBM products and the results they may have achieved. The actual throughput or performance that any user will experience will vary depending upon considerations such as the amount of multiprogramming in the user's job stream, the I/O configuration, the storage configuration, and the workload processed. Therefore, no assurance can be given that an individual user will achieve throughput or performance improvements equivalent to the ratios stated here.

© Copyright International Business Machines Corporation 2008. All rights reserved.

Note to U.S. Government Users - Documentation related to restricted rights-Use, duplication or disclosure is subject to restrictions set forth in GSA ADP Schedule Contract and IBM Corp.