



EDI over AS2: Powered Aidant & Microsoft BizTalk

Context

Regardless of the size, revenue or operations of our customers, the most common EDI overhead and hassle is dealing with VAN and their complicated setup and fees. Thankfully we have robust and secure protocols such as AS2 which work over the Internet. Aidant Technologies leverages best of BizTalk Server and its own SDK toolkits to integrate with trading partner over AS2. ITs one time setup that you can own and scale up, thereby removing the hassles and overhead of a VAN.

This white paper is to introduce some considerations and technical information that you can use to help making this move. Whether you have existing setup or want to setup new Biztalk environments, Aidant can help set the right cause for your EDI RoadMap. Contact us for more information. www.aidant-tech.com/contact-us

EDI Approach/Considerations for AS2

- **To Receive EDI over AS2 communication:**

There will be one URL given to Trading Partners to send the AS2 communications to HOME ROLE (SELF). The URL is public facing on the HOME ROLE (SELF) DMZ. After the message is received, the URL will be NAT'ed to the IIS Server inside HOME ROLE (SELF) Firewall which is hosted on local BizTalk Server (AS2 Web-Site).

A Request-Response Type (2-Way) BizTalk Receive Port is setup to listen to the local IIS URL. The Receive Location will use AS2EDIReceive Pipeline for receive side and use AS2Send Pipeline on the send.

- **To Send EDI over AS2 communication**

Once a message is ready to be sent out over AS2, a One Way Solicit Response Send Port is required which will use AS2EDISend Pipeline for send side and AS2Receive for the receive side of the Send Port

The send side will assemble EDI, encrypt and sign the message with customer public key and receive side will be used to AS2 received the MDN sent by the customer

IIS Configuration for BizTalk AS2

Keys Components

- ISAPI Filters & Handler Mappings
- AS2 Web-Site and BizTalk App Pool
- Test the AS2 Web-site is reachable

Step 1: ISAPI Filters & Handler Mappings

1. Click Start, point to All Programs, point to Administrative Tools, and then click Internet Information Services (IIS) Manager.
2. Select the root Web server entry and in the Features View, double-click Handler Mappings and then in the Actions pane, click Add Script Map. -----
3. In the Add Script Map dialog box, enter BtsHttpReceive.dll in the Request path field.
4. In the Executable field, click the ellipsis (...) button and browse to drive:\Program Files\Microsoft BizTalk Server\HttpReceive. Select BtsHttpReceive.dll, and then click OK.
5. Enter BizTalk HTTP Receive in the Name field, and then click Request Restrictions.
6. In the Request Restrictions dialog box, select the Verbs tab and then select One of the following verbs. Enter POST as the verb.
7. On the Access tab, select Script, and then click OK.
8. Click OK and when prompted to allow the ISAPI extension, click Yes.
9. Right-click the BTSHttpReceive.dll entry, and then select Edit Feature Permissions.
10. Ensure that Read, Script and Execute are selected, and then click OK.
11. Click Features View, and then double-click ISAPI and CGI Restrictions.
12. Ensure that an entry for BTSHTTPReceive.dll exists, and that Restriction is set to Allowed.

NOTE

Configuring the script mapping at the Web server level will cause this mapping to apply to all child Web sites. Remove this mapping from the AS2 specific Web site or virtual folder under Default Web-Site

Step 2: AS2 Web-Site and BizTalk App Pool

1. In IIS Manager, right-click Application Pools and select Add Application Pool.
2. In the Add Application Pool dialog box, enter BizTalkAppPool in Name, and then select .NET Framework V2.0.50727 in the .NET Framework version drop-down list. Click OK.
3. Select Application Pools, in the Features View select BizTalkAppPool, and then click Advanced Settings in the Actions pane.
4. In the Advanced Settings dialog box, set Enable 32-Bit Applications to True.
5. Select Identity and then click the ellipsis (...) button.
6. In the Application Pool Identity dialog box, select Custom account and then click Set.
7. Enter the User name and Password for a user account that is a member of the administrators group and is the BizTalk Service Account for the host that is running Receive and Send Handler Host for AS2 Ports/Adapter, enter the password in Confirm password and then click OK three times to return to the IIS Manager.
8. In IIS Manager, open the Sites folder. Right-click the Default Web Site, and then select Add Application.
9. In the Add Application dialog box, enter AS2Test in Alias, and then click Select.
10. In the Select Application Pool dialog box, select BizTalkAppPool and click OK.
11. Click the ellipsis (...) button and browse to drive:\Program Files\Microsoft BizTalk Server\HTTPReceive for the Physical path.
12. Click Test Settings and verify that there are no errors displayed in the Test Connection dialog box. Click Close, and then click OK.
13. In IIS Manager, select the AS2Test virtual directory and in Features View, double-click Authentication.
14. In Authentication, select Anonymous Authentication and verify that the Status is Enabled. If the Status is Disabled, click Enable in the Actions pane.

NOTE

The version number may vary depending on the version of .NET Framework 2.0 installed on the machine.

Step 3: AS2 Web-Site and BizTalk App Pool

1. Create a default.htm in the HTTPReceive Folder under BizTalk Install directory
2. In IIS Manager right click the AS2 application and browse
3. The default browser should open and show the default.htm

Certificates

1. Install Certificate Services on Windows Server 2008 by adding Certificates to the Server Roles
2. Generate a CSR from the Certificate Manager
3. Generate the Private certificate on the server
4. Install the Private Key on the BizTalk Server Certificate Store under Personal
5. Generate a Public key and send this off to the External Trading Partners
6. Install External TP's Public Certificate under Other People and Trusted People
7. Select the Private certificate under BizTalk Server Group
8. Select TP's Public Certificate under Send Port
9. Select self Public Certificate under Party
10. In the Select Application Pool dialog box, select BizTalkAppPool and click OK.

NOTE

Alternatively, a certificate can be purchased from VeriSign® or other providers so that the CA Root Authority is more standard and available when dealing with outside Trading Partners. Especially when Servers are not exposed to the Internet.

NOTE

All Certificate related activities and configuration above should be performed as BizTalk Service Account

EDI Approach/Considerations for AS2

- **To Receive EDI over AS2 communication (Reference Considerations Page 1)**

Once the message is received successfully, send ports for each respective party can be created to perform mapping functions to the canonical etc.... Alternatively if Orchestrations are used, direct binding can be done using similar or additional set of Context Properties from the BizTalkMsgBox. Context properties to be used:

- a. BTS.MessageType
- b. BTS.ReceivePortName
- c. EDI.ISA06
- d. EDI.ISA08

- **To Send EDI over AS2 communication (Reference Considerations Page 1)**

- **Setting up Ports and AS2 Party**

Receive Port – this should be a “Request-Response” Receive Port

§ This is a common port that is created keeping in mind that all customer communications will come to the same port as explained in the approach above

- ReceivePort All AS2
 - RecevieLocation All AS2

Adapter Used: HTTP | URI: /{IIS Virtual Dir. Name under Default Web Site}

Receive Pipeline: AS2EDIReceive

Send Pipieline: ASSend

AS2 Send Port for Trading Partner

- Create a new Send Port which is one Way Solicit Response Port. Create Configuration as follows:

- SP.CustomerName.All.AS2.Out

-Adapter Used: HTTP | URI: http://{PartnerURL}

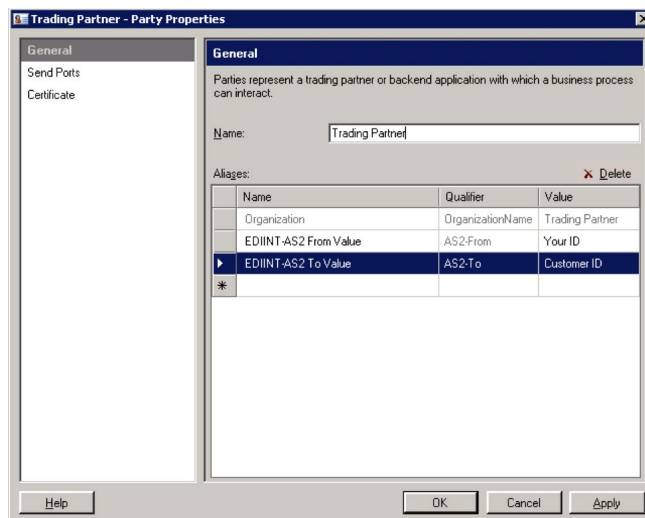
-Send Pipieline: AS2EDISend

-Receive Pipeline: AS2Receive

-Select the Partner Certificate under Certificates for this Send Port

AS2 Party (Figure A1)

- Create new Party. Right Click on the properties and then follow the screen shot below: Select the Send Port for AS2 Outbound created above under this party Send Ports.
- Also Select the Trading Partner Certificate under Party Properties-Certificates section



(Figure A1/ click to enlarge)

- **Certificate Setup**

Message or MDN	Direction	Certificate Type	Certificate Owner	Public or Private	Certificate Location	Where to configure
Message	Outbound	Signing	Home Org	Private	Personal certificate store of in-proc host user	BizTalk Group / Properties / Certificate
Message	Outbound	Encryption	Partner	Public	Other People certificate store of local computer	Send port / Certificate
Message	Inbound	Signing	Partner	Public	Other People certificate store of local computer	Party / Certificate
Message	Inbound	Encryption	Home Org	Private	Personal certificate store of in-proc host user	Isolated Host / Certificates
MDN	Outbound	Signing	Home Org	Private	Synch MDN: Personal certificate store of isolated host user Asynch MDN: Personal certificate store of in-proc host user	BizTalk Group / Properties / Certificate
MDN	Inbound	Signing	Partner	Public	Other People certificate store of local computer	Party / Certificate