BizTalk Server 2006 R2: AS2

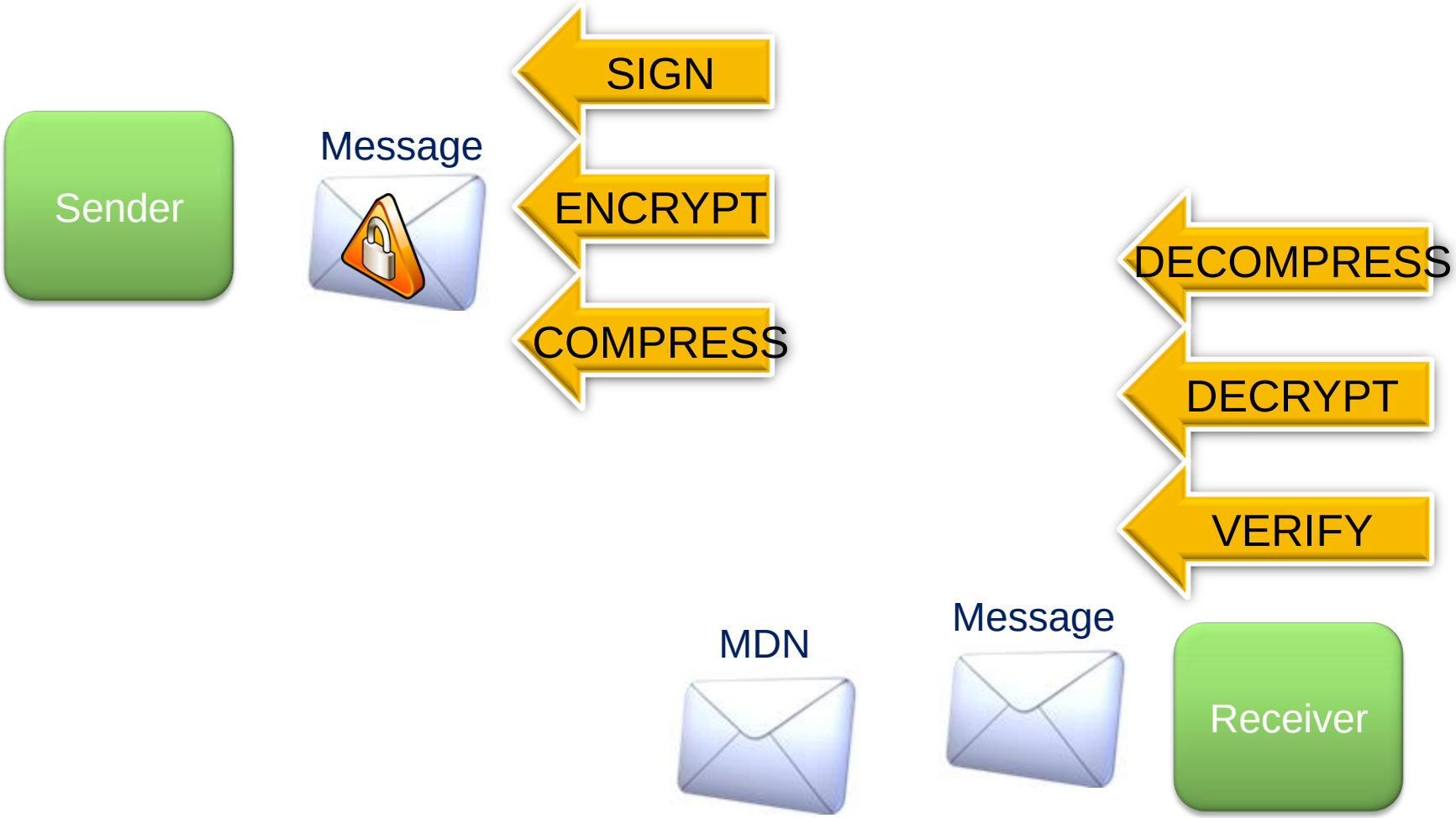
Objectives

- What is AS2
- AS2 Implementation in R2
- How to configure Parties
- How to configure Certificates

AS2

- **EDI over the internet (EDIINT)**
- **W3C specification (rfc4130) for mime-encoding, encrypting, and signing of message over HTTP**
  - Built for EDI – but doesn't limit itself to EDI messages
- **BizTalk Server 2006 has fully Drummond Group compliant implementation**
  - Doesn't limit itself to EDI messages
  - Is limited to HTTP Receive and Send Adapters
  - HTTPS can be used
- **Key settings for BizTalk**
  - Party configuration
  - Certificate management (in both Windows Certificate Stores and BizTalk configuration)

What does an AS2 implementation do?

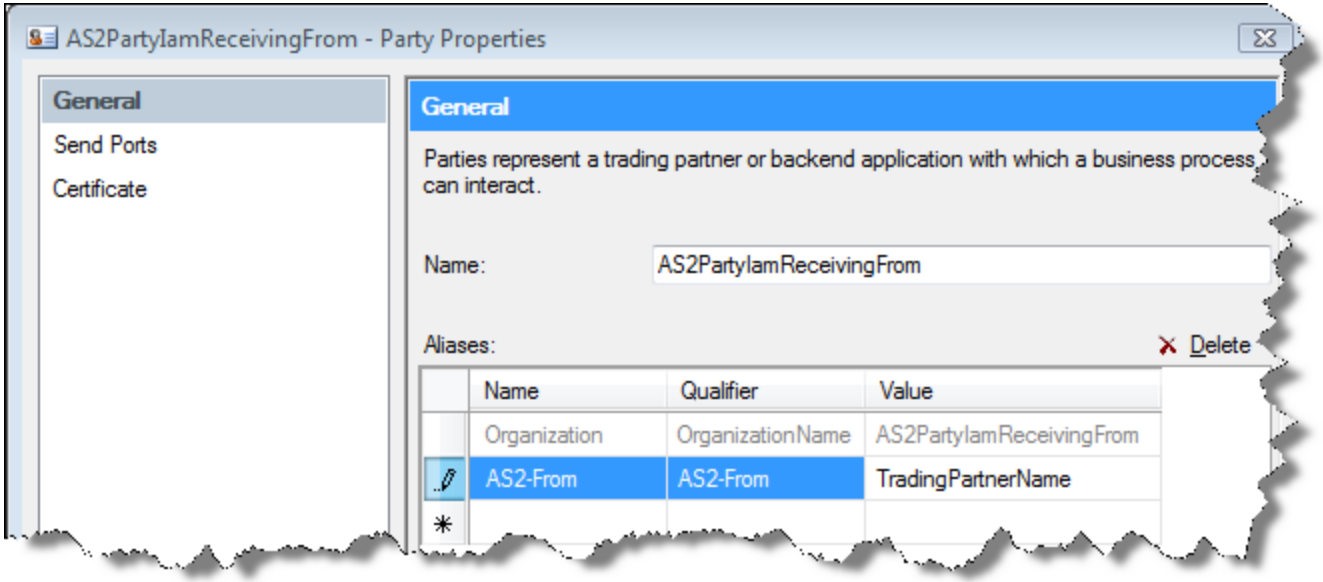


AS2 Pipelines

- **One each for EDI messages**
  - AS2EDIReceive
  - AS2EDISend
- **One each for non-EDI messages**
  - AS2Receive
  - AS2Send
- **AS2 processing in R2 done by pipelines (not adapters)**
  - Pipelines require HTTP Receive and Send Adapters be used

AS2 and Parties

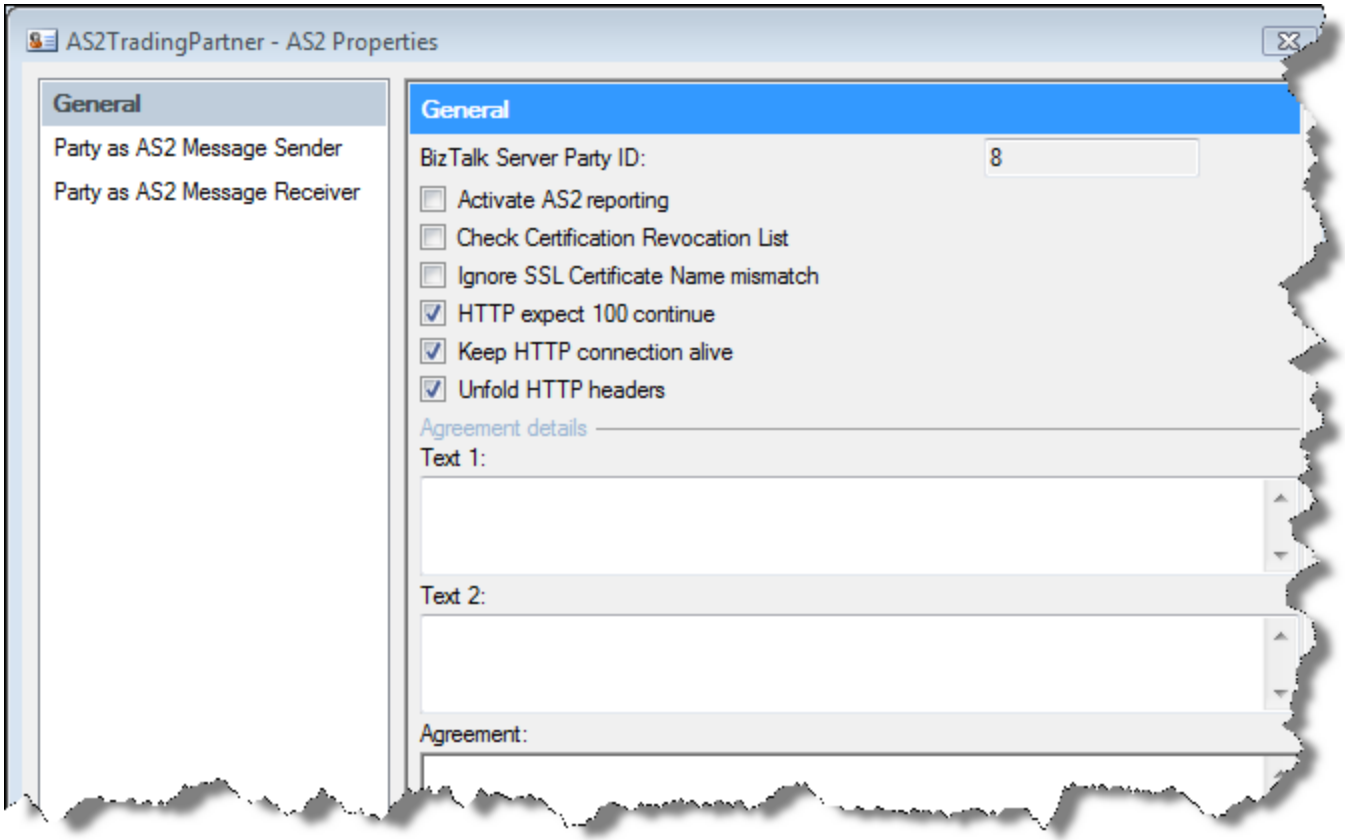
- **Every AS2 partner must be configured as a party**
- **Must set Party level properties**
  - AS-From must be set for inbound message recognition
  - Certificate (assuming encryption/signing is configured)



pluralsight
see what you can learn

AS2 Properties

- Right-click on Party in MMC and select “AS2 Properties”
- Defaults are set to common AS2 settings



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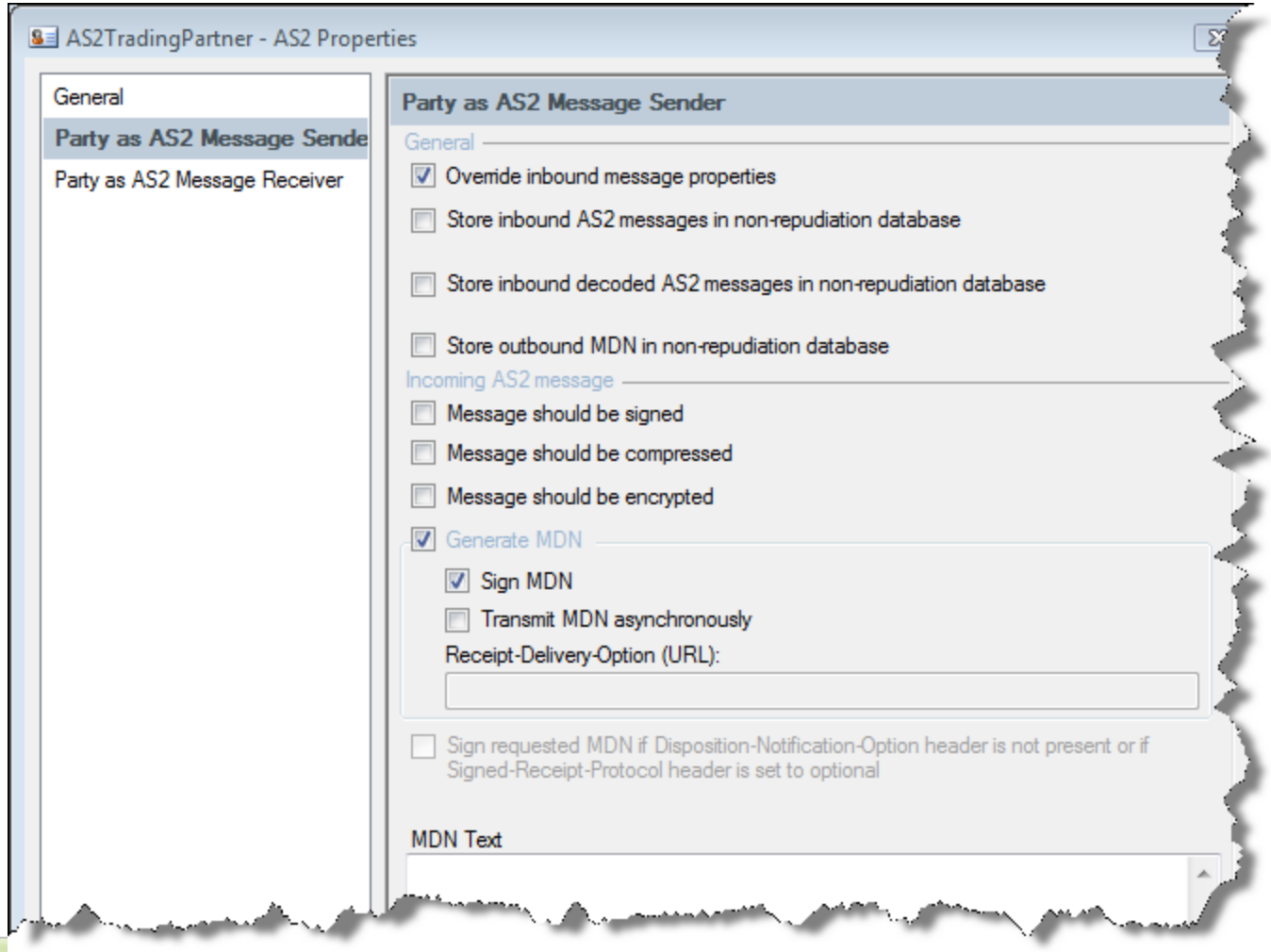
Party as AS2 Message Sender

- For when you are *receiving* messages from this party
- Default is to accept inbound message as-is
- Override inbound message properties allows configuration



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Receiving AS2 Messages

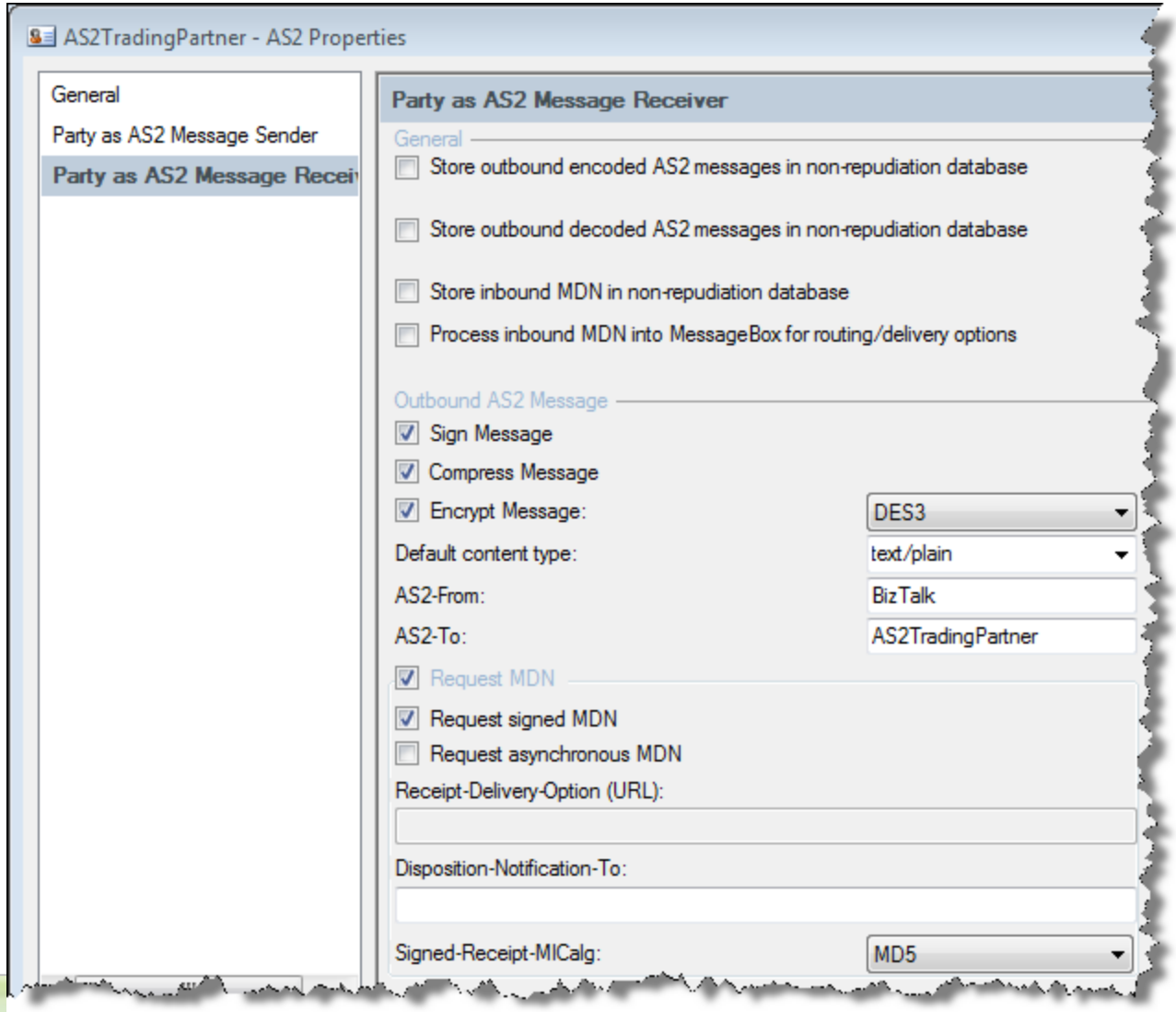
- **R2 looks at the AS2-From HTTP header of the incoming message to resolve the Party**
  - First look for AS2-From qualifier in the Party configuration – tries to match value
  - If not found – will try to match value of AS2-From against the names of each Party configured
  - If Party is not found – message will be rejected
  - Once party is resolved - AS2 Properties kick in for processing
- **Create a subscription for the incoming message using any valid Message Context properties**

Message Disposition Notification (MDN)

- **AS2 Pipelines generate MDN if configured**
  - Can be synchronous or asynchronous
- **Synchronous MDNs**
  - Requires Request-Response Receive Port
  - MDN send as HTTP response to trading partner
- **Asynchronous MDNs**
  - One way Receive Port
  - MDN sent to Message Box
  - Create a Send Port with the correct subscription (one-way dynamic Send Port)
  - URI comes from Receipt-Delivery-Option (from message or properties)
  - EdiIntAS.IsAS2AsynchronousMDN can be used in the Send Port subscription
  - Can be passed through an Orchestration

Party as AS2 Message Receiver

- For when you are *sending* messages to this party
- AS2-From & AS2-To settings configured here are used in outbound message



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Sending AS2 Messages

- **Requirements**
  - Send Port configured with the HTTP Send Adapter
  - AS2Send or AS2EDISend pipeline configured
- **AS2 pipelines determines the Party by (in order)**
  - Looks for AS2To Message Context property (must be set in Orchestration or via custom pipeline component)
  - Looks for AS2-To HTTP header in Http.UserHttpHeaders context property
  - Tries to match Send Port against Send Port associated with Parties
- **Uses Party AS2 settings to generate AS2 message**
  - EDI settings will also be used if AS2EDISend is configured
  - Processing fails if no Party found

Certificates

- **Implementation of AS2 requires certificates**
- **Your certificate**
  - Public and Private key needed for decryption and signing
- **Partner's certificate**
  - Public key needed to for encryption and signature verification
- **Certificates must be in the proper Windows Certificate Store**
- **Certificates must be configured in the proper place in BizTalk**

Certificate Management

Msg	Direction	Type	Owner	Public or Private	Location	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

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see what you can learn

Non-repudiation and reporting

- **AS2 reporting is enabled on a per-party basis**
  - Disabled by default
- **AS2 reporting requires BAM**
- **AS2 reports:**
  - AS2 Message and Correlated MDN Status Report
  - AS2 Message Content Status Reports (requires messages sent to non-repudiation database)
- **Report is found at bottom of Group Hub page in the BizTalk Server Administration Console MMC**
  - Data can be pulled for custom reporting as well

Summary

- **BizTalk Server 2006 R2 has a Drummond Group certified AS2 implementation**
- **Need to configure**
  - Certificates
  - Parties
  - Pipelines
- **HTTP adapters only**