Sterling Standards Library



# Using AS2 and the AS2 Edition

Version 8.04, for Sterling B2B Integrator 5.24

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Note

Before using this information and the product it supports, read the information in "Notices" on page 89.

#### Copyright

This edition applies to the 8.0.4 Version of the IBM Sterling B2B Integrator and to all subsequent releases and modifications until otherwise indicated in new editions.

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## Chapter 1. Overview of the Sterling B2B Integrator AS2 Edition

### Overview of Using AS2 and theIBM Sterling B2B Integrator AS2 Edition

Sterling B2B Integrator enables you to send and receive AS2 messages either through the Sterling B2B Integrator user interface or through the Sterling B2B Integrator. The Sterling B2B Integrator AS2 Edition combines the strengths of Sterling B2B Integrator with Applicability Statement 2 (AS2) EDIINT technology, a protocol for securely exchanging data with non-repudiation of receipt over the Internet.

The Sterling B2B Integrator AS2 Edition is a message management system enabling the exchange of a variety of documents between trading partners using secure AS2 EDIINT technology. The Sterling B2B Integrator AS2 Edition uses the Internet as a transport mechanism, ensures privacy and security of documents exchanged, and provides a means of non-repudiation. The Sterling B2B Integrator AS2 Edition extends your investments by sending and receiving documents and interacting with your existing processes. Basically, you put a document into a specific mailbox or directory to send it to a specific partner (or just sent it directly to the partner) and you receive documents from partners in partner-specific mailboxes or directories.

This section explains what the Sterling B2B Integrator AS2 Edition is and what you need to know to interact with the product. This section also gives an overview of the steps you must take from installation to exchanging documents with your AS2 trading partners.

## Is Sterling B2B Integrator AS2 Edition Right for Your Implementation?

The Sterling B2B Integrator AS2 Edition contains all the components necessary to configure a basic AS2 implementation. The Sterling B2B Integrator AS2 Edition may not be suitable for all environments. We recommend that you carefully evaluate whether your needs will be met by the Sterling B2B Integrator AS2 Edition or if you require an advanced implementation that will necessitate you writing custom business processes to use the EDIINT services. You will require a custom implementation for any of the following reasons:

- You need to trade messages with many trading partners.
- You want to integrate directly with the translator or any other application subsystem, instead of simply doing input and output to mailboxes or to the file system.
- You want to write either more simple or different processes for performance reasons (for example, you do not want to use the JDBC service or the AS2\_TRADEPART\_INFO table (the Sterling B2B Integrator-specific database table for mapping directories or mailboxes to contracts) because foregoing these components will improve performance).
- You need to exchange AS1 messages.

### **AS2** Components

The Sterling B2B Integrator AS2 Edition has the following components that are embedded in Sterling B2B Integrator. These components are also available to AS2 users of Sterling B2B Integrator (those AS2 users who are not using the Sterling B2B Integrator AS2 Edition but rather using Sterling B2B Integrator to meet their AS2 needs):

- Predefined business processes to send messages and check for acknowledgements (MDNs)—these business processes contain built-in error notification mechanisms that are able to send e-mails if MDNs are not received or if a negative MDN is received
- Services
- Browser-based user interface to configure and manage AS2 trading partners
- Database table (AS2\_TRADEPART\_INFO) that enables the mapping of directories and mailboxes to trading partner contracts
- Default AS2 URL (ApplicationIP\_ADDRESS:port/b2bhttp/inbound/as2), which invokes the business process EDIINTParse and is designed to work both with and without the Sterling B2B Integrator AS2 Edition to verify whether the sender/recipient are in the AS2\_TRADEPART\_INFO database table and, if so, perform application-specific handling in addition to message parsing

The predefined business processes and the services leverage the EDIINT implementation and enable you to exchange documents with your trading partners through AS2.

The Sterling B2B Integrator AS2 Edition uses either the Sterling B2B Integrator file system (directories) or mailboxes for processing business documents inbound and outbound, or the AS2 Edition allows you to send the documents to be processed directly and bypass file system directories and mailboxes. If you use mailboxes and directories, they are created by the AS2 wizard. This enables you to put a document into a specified mailbox or directory to send it to a particular trading partner and you receive documents from partners though partner-specific mailboxes and directories.

**Note:** While mailboxes are displayed in the Sterling B2B Integrator AS2 Edition Wizard, the Sterling B2B Integrator AS2 Edition functionality does not support them. Sterling B2B Integrator AS2 Edition users should not select the mailbox options in the wizard.

### **AS2 Predefined Business Processes**

The AS2 implementation uses predefined business processes (in conjunction with predefined services) to implement the AS2 EDIINT protocol. These predefined business processes are automatically installed and configured when you install the Sterling B2B Integrator AS2 Edition or the Sterling B2B Integrator.

The AS2 implementation uses these predefined business processes along with services to build and transmit messages to trading partners. Data files are collected from the file system or extracted from mailboxes, or they are sent to be processed using a Direct Processing business process. After the Sterling B2B Integrator collects files from the file system, extracts files from mailboxes, or if sending files directly, it launches business processes that:

- Encapsulate the data files into AS2-compliant messages.
- Attempt to transmit those messages through HTTP or HTTPS.

• Potentially process responses or acknowledgements to those messages.

Sterling B2B Integrator provides business processes for sending messages and checking for acknowledgements (MDNs). These business processes contain built-in error notification mechanisms that can continue to send e-mails if an MDN is not received, or if a negative MDN is received.

Existing predefined AS2 business processes include enhanced retry logic for each partner, and a parameter that enables you to specify how many files to retrieve from a partner's file system during each scheduled interval. This enables the Sterling B2B Integrator to stop send attempts to a partner's system when it is down. This limits how many processes the system starts at any one time, and prevents the Sterling B2B Integrator from overloading itself and your partner's system.

These business processes can detect several types of errors and can inform users and restage data files if errors occur. The business processes attempt to retry in the following situations:

- When what is potentially a transient HTTP error is detected based on the return code (408, 503, or 504).
- When an asynchronous Message Disposition Notification (MDN) is requested, and the MDN does not show up in the MDN timeout interval.
- When you are collecting and saving data using the file system, a scheduled business process, AS2 File System Adapter.bpml, invokes the Schedule\_<TP Name>\_FS.bpml, which collects data files from the file system. The EDIINT Message Service is used to build AS2 messages and process acknowledgements. The HTTPClientSend business process is used to transmit messages using HTTP. The Wait service is used to wait for acknowledgements or for an interval to expire before a retry, and the EDIINT Acknowledge Check Service is used to check for acknowledgements.

The following steps summarize the activities completed by business processes when sending messages:

- 1. Business processes send messages requesting synchronous receipts, asynchronous receipts, or no receipts.
- **2**. Based on the receipt options specified for a trading partner, the business processes handle business documents, as appropriate.
- **3**. The following provide an overview of activities completed by predefined business processes when receiving messages:
  - Business processes parse messages, generate and send receipts.
  - Using the File System adapter, the business processes extract business documents.
  - Predefined business processes run up to three times if the message transaction is not completed within a specified amount of time. The Sterling B2B Integrator AS2 Edition enables you to monitor the predefined business processes and perform manual activities, such as starting and stopping predefined business processes.

The following types of business processes enable document transactions with the Sterling B2B Integrator AS2 Edition:

- Extraction business process
- Message sending business process

### **AS2 Extraction Business Process**

Sterling B2B Integrator provides one extraction predefined business process, the AS2Extract business process. The AS2Extract business process writes a business document that is attached to a message to an inbound folder for a trading partner by completing the following process:

- 1. The AS2Extract business process calls the JDBC adapter to obtain the name of the trading partner inbound folder from the AS2TradingPartnerInfo table.
- 2. The AS2Extract business process calls the File System adapter to write the business document to a file in the inbound folder.

The following table describes the extraction business processes:

<b>Business Process</b>	Description	
EDIINTParse	This business process is invoked for all inbound AS2 messages. It employs the EDIINT Pipeline service to determine the AS2 Relationship parameters, and then invoke one of the following EDIINTParse subprocesses: AS2Extract (for File System), MailboxAS2Add (for Mailbox), and AS2Inbound (for Direct Processing).	
	Parses messages; is configured on the default application AS2 URL (Sterling B2B IntegratorIP_ADDRESS:port/b2bhttp/inbound/as2). EDIINT Parse invokes the default instance of the EDIINT Header Scanning service and uses the value of the AS2-To header to attempt to find the appropriate row in the AS2TradingPartnerInfo database table. If the row is found, the value configured for "Wait for MDN" prompts the default instance of the EDIINT Pipeline service whether to build an MDN. If the EDIINT Pipeline service does not build an MDN, it propagates the MDN building information to the business process called to handle the payload data (either AS2Extract or MailboxAS2Add or AS2Inbound). Additionally, this business process queries the name of HTTP Client Adapter from the AS2_PROFILE table. Note: This business process uses the EDIINT Pipeline service instead of the EDIINT Message service because of the ability of the former service to handle large and high-concurrency files.	
	<b>Note:</b> The Sterling B2B Integrator AS2 Edition includes a configured URL that runs the EDIINTParse business process on both the base port and the base port + 33.	
AS2Extract	Extracts business payload data to the trading partner's inbound subdirectory. Determines whether a Message Disposition Notification (MDN) must be built and sent before extracting payload data. If an MDN must be built and sent, the default instance of the EDIINT MDN Building service is invoked to build the MDN. The process for sending the MDN is then initiated synchronously and data is extracted if the process for sending the MDN completes successfully. <b>Note:</b> MDNs are only built and sent by the EDIINT MDN Building service if you are using deferred extraction. Otherwise, they are built and sent by the EDIINT Pipeline service.	

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Business Process	Description
MailboxAS2Add	Extracts business payload data to the trading partner's inbound mailbox. Determines whether an MDN needs to be built and send before extracting payload data. If the MDN does need to be built and sent, the default instance of the EDIINT MDN Building services is called to build the MDN, and the process for sending the MDN is then invoked synchronously. If the process for sending the MDN completes successfully, the payload data is extracted.
AS2Inbound	Note: MDNs are only built and sent by the EDIINT MDN Building service if you are using deferred extraction. Otherwise, they are built and sent by the EDIINT Pipeline service. Forwards business payload data as Primary Document to the user defined business process. Determines whether a Message Disposition Notification (MDN) must be built and sent before extracting payload data. If an MDN must be built and sent, the default instance of the EDIINT MDN Building service is invoked to build the MDN. The process for sending the MDN is then initiated synchronously and data is extracted if the process for sending the MDN completes successfully. <b>Note:</b> MDNs are only built and sent by the EDIINT MDN Building service if you are using deferred extraction. Otherwise, they are built and sent by the EDIINT Pipeline service.

### **AS2 Message Sending Business Processes**

Sterling B2B Integrator provides business processes for sending messages. Depending on which message disposition notification (MDN) option you choose when configuring your trading partner information, Sterling B2B Integrator selects the appropriate business process to send data to a trading partner.

The message sending processes and mailbox routing rules are input/output specific-that is, there is one set of processes using documents from file system directories, one set of processes using documents from mailboxes, and one set of processes that allow you to send documents to be processed directly. If you are using file system input/output, you use one of the file system business processes. If you are using the mailbox input/output, you use one of the mailbox business processes. If you are using direct process, you use one of the direct business processes to invoke a business process that you have customized. Both the file system and mailbox business processes use throttling. If you are using direct processing, then you use one of the direct business processes. Then, if a lock is set by an associated business process, the business process responsible for creating (spawning) the business process to send the documents will not attempt to create more sending business process instances while the lock is set. Once Sterling B2B Integrator determines that the trading partner is able to accept messages, the backlog of messages (messages that were unable to be sent while the database lock was in place) are cleared in a manner so that your trading partner is not bombarded with many messages all at once.

**Note:** Please note that the mailbox and file systems behave differently when a message is in error: While using file system, the message is moved to the error directory. While using mailbox, the message remains in the mailbox and the Extractable Count of the message in the Outbound Mailbox does not decrease.

You can set a Max Files to Collect parameter in the business process to ensure that any backlog of messages is cleared in an orderly manner.

#### Using the Customer\_Overrides.properties File

If you need to override the mode in which a business process is invoked, you do so by adding the override value to the ediint.invokeMode.[inbound | outbound].[Name of business process] property in the customer\_overrides.properties file.

For each property that you want to override, you must have the following information:

- PROPERTY\_FILE\_NAME\_PREFIX The name used in the servers.properties file to reference the actual property file.
- PROPERTY\_NAME The name of the property in the specified property file.
- PROPERTY\_VALUE The value you want to assign to the property.

The customer override properties file can be used to override default property settings in the property files. The customer override properties file is not changed during installation of upgrades or patches. To prevent having your customized settings overwritten, use overrides whenever possible rather than editing the property files. If you have made changes to property files in a previous version, either directly or by editing the associated .in files, your changes may be overwritten when a patch is applied. To prevent this, create a customer\_overrides.properties file. After you update the customer\_overrides.properties file, you must stop and restart the application for the change to take effect.

Business Process	Description
AS2SendNoMDN	Builds a message with a file collected from the file system for which no MDN is requested, calls AS2SendAndProcessNoMDN to send the message, verifies whether a final notification needs to be sent and, if so, invokes the EDIINTErrorNotification business process <b>Note:</b> This business process uses the EDIINT Pipeline service instead of the EDIINT Message service because of the ability of the former service to handle large and high-concurrency files. This is a primary business process that invokes secondary business processes
	in INLINE mode for File System (that is, read from a property).
AS2SendAndProcessNoMDN	Sends a message from the file system when no MDN is expected. Verifies whether an intermediate notification needs to be sent after each failed send attempt and, if so, invokes EDIINTErrorNotification. Waits for the configured retry interval and requeues a message up to the maximum configured number of times to handle transient errors and when the trading partner's system is down. <b>Note:</b> This business process uses the EDIINT Pipeline service instead of the EDIINT Message service because of the ability of the former service to handle large and high-concurrency files. <b>Note:</b> AS2SendAndProcessNoMDN is invoked in INLINE mode. This can be changed, if required, by overriding the property invokeMode.outbound.SendAndProcessBP.

The following table describes each message sending business process:

Business Process	Description
AS2SendSyncMDN	Builds a message with a file collected from the file system for which a synchronous MDN is expected, calls AS2SendAndProcessSyncMDN to send the message, verifies whether a final notification needs to be sent and, if so, invokes the EDIINTErrorNotification business process. <b>Note:</b> This business process uses the EDIINT Pipeline service instead of the EDIINT Message service because of the ability of the former service to handle large and high-concurrency files.
	This is a primary business process that invokes secondary business processes in INLINE mode for File System (that is, read from a property).
AS2SendAndProcessSyncMDN	<ul> <li>Sends the message from the file system and processes the MDN when a synchronous MDN is expected. Verifies whether an intermediate notification needs to be sent after each failed send attempt and, if so, invokes the EDIINTErrorNotification business process. Waits for the configured retry interval and requeues a messages up to the maximum configured number of times to handle transient errors and when the trading partner's system is down.</li> <li>Note: This business process uses the EDIINT Pipeline service instead of the EDIINT Message service because of the ability of the former service to handle large and high-concurrency files.</li> <li>Note: AS2SendandProcessSyncMDN is invoked in INLINE mode. This can be changed, if required, by overriding the property invokeMode.outbound.SendAndProcessBP. See the Using the Customer_Overrides.properties File section for instructions on changing the invoke mode through the customer_overrides.properties file.</li> </ul>
AS2SendAsyncMDN	<ul> <li>Builds a message with a file collected from the file system for which an asynchronous MDN is expected, calls AS2SendAndProcessAsyncMDN to send the message, verifies whether a final notification needs to be sent and, if so, invokes the EDIINTErrorNotification business process.</li> <li>Note: This business process uses the EDIINT Pipeline service instead of the EDIINT Message service because of the ability of the former service to handle large and high-concurrency files.</li> <li>Note: This is a primary business process that invokes secondary business processes in INLINE mode for File System (that is, read from a property).</li> </ul>
AS2SendAndProcessAsyncMDN	<ul> <li>Sends the message from the file system and processes the MDN when an asynchronous MDN is expected. Verifies whether an intermediate notification needs to be sent after each failed send attempt and, if so, invokes the EDIINTErrorNotification business process. Waits for the configured retry interval and requeues a messages up to the maximum configured number of times to handle transient errors and when the trading partner's system is down.</li> <li>Note: This business process uses the EDIINT Pipeline service instead of the EDIINT Message service because of the ability of the former service to handle large and high-concurrency files.</li> <li>Note: AS2SendandProcessAsyncMDN is invoked in INLINE mode. This can be changed, if required, by overriding the property invokeMode.outbound.SendAndProcessBP. See the Using the Customer_Overrides.properties File section for instructions on changing the invoke mode through the customer_overrides.properties file.</li> </ul>
EDIINTErrorNotification	Sends E-mail notifications when errors occur in the send process. Uses the BP MetaData service to obtain the parent ID of its parent process, the TimeStamp service to obtain the current time, and provides additional information to the SCLT service to construct the notification message. <b>Note:</b> You must complete E-mail notification parameters (E-mail address, E-mail Host, and E-mail Port) if you want to receive e-mail notifications.

Business Process	Description
MailboxAS2SendNoMDN	Builds and sends a message from a mailbox when no MDN is expected. Also uses throttling if a trading partner is "down" or unable to accept messages (based on a connection failure or a non-transient HTTP error code) by setting a lock in the database. Verifies whether a final notification needs to be sent and, if so, invokes the EDIINTErrorNotification business process. <b>Note:</b> This business process uses the EDIINT Pipeline service instead of the EDIINT Message service because of the ability of the former service to handle large and high-concurrency files. <b>Note:</b> This is a primary business process that invokes secondary business processes in INLINE mode for Mailbox (that is, read from a property).
MailboxAS2SendNoMDNSpawner	<ul> <li>Launches the MailboxAS2SendNoMDN. The MailboxAS2SendNoMDN builds messages, calls the MailboxAS2SendAndProcessNoMDN processes to do the sending, sends intermediate notifications, and sets locks. The MailboxAS2SendAndProcessNoMDN processes then return control to the MailboxAS2SendNoMDN processes, which may send a final error notification if the trading partner's configuration requires.</li> <li>If a lock is set by the MailboxAS2SendNoMDN business process, this spawning process will not attempt to create more sending process instances while the lock is set.</li> <li>Note: This business process uses the EDIINT Pipeline service instead of the EDIINT Message service because of the ability of the former service to handle large and high-concurrency files.</li> <li>Note: This business process uses the EDIINT Pipeline service instead of the EDIINT Message service because of the ability of the former service to handle large and high-concurrency files.</li> </ul>
MailboxAS2SendSyncMDN	<ul> <li>Builds and sends a message from a mailbox when a synchronous MDN is expected. Also uses throttling if a trading partner is "down" or unable to accept messages (based on a connection failure or a non-transient HTTP error code) by setting a lock in the database.</li> <li>Note: This business process uses the EDIINT Pipeline service instead of the EDIINT Message service because of the ability of the former service to handle large and high-concurrency files.</li> <li>Note: This is a primary business process that invokes secondary business processes in INLINE mode for Mailbox (that is, read from a property).</li> </ul>
MailboxAS2SendSyncMDNSpawner	Launches the MailboxAS2SendSyncMDN, which builds messages, calls the MailboxAS2SendAndProcessSyncMDN processes to do the sending, sends intermediate notifications, and sets locks. The MailboxAS2SendAndProcessSyncMDN processes then return control to the MailboxAS2SendSyncMDN processes, which may send a final error notification if the trading partner's configuration requires. If a lock is set by the MailboxAS2SendSyncMDN business process, this spawning process will not attempt to create more sending process instances while the lock is set. <b>Note:</b> This business process uses the EDIINT Pipeline service instead of the

Business Process	Description
MailboxAS2SendASyncMDNSpawner	Launches the MailboxAS2SendAsyncMDN, which builds messages, calls the MailboxAS2SendAndProcessAsyncMDN processes to do the sending, sends intermediate notifications, and sets locks. The MailboxAS2SendAndProcessAsyncMDN processes then return control to the MailboxAS2SendAsyncMDN processes, which may send a final error notification if the trading partner's configuration requires. <b>Note:</b> This business process uses the EDIINT Pipeline service instead of the EDIINT Message service because of the ability of the former service to handle large and high-concurrency files.
MailboxAS2SendAndProcessNoMDN	Verifies whether an intermediate notification needs to be sent after each failed send attempt and, if so, invokes the EDIINTErrorNotification business process. Waits for the configured retry interval and requeues a messages up to the maximum configured number of times to handle transient errors and when the trading partner's system is down.
MailboxAS2SendAsyncMDN	Builds a message from the mailbox when an asynchronous MDN is expected. Verifies whether a final notification needs to be sent and, if so, invokes the EDIINTErrorNotification business process. <b>Note:</b> This business process uses the EDIINT Pipeline service instead of the EDIINT Message service because of the ability of the former service to handle large and high-concurrency files. <b>Note:</b> This is a primary business process that invokes secondary business processes in INLINE mode for Mailbox (that is, read from a property).
MailboxAS2SendAnd ProcessAsyncMDN	Sends the message from the mailbox and processes the MDN when an asynchronous MDN is expected. Verifies whether an intermediate notification needs to be sent after each failed send attempt and, if so, invokes the EDIINTErrorNotification business process. <b>Note:</b> This business process uses the EDIINT Pipeline service instead of the EDIINT Message service because of the ability of the former service to handle large and high-concurrency files. <b>Note:</b> MailboxAS2SendAndProcessAsyncMDN is invoked in INLINE mode. This can be changed, if required, by overriding the property invokeMode.outbound.SendAndProcessBP. See the Using the Customer_Overrides.properties File section for instructions on changing the invoke mode through the customer_overrides.properties file.
MailboxAS2SendSyncMDN	Builds a message from the mailbox when a synchronous MDN is expected. Verifies whether a final notification needs to be sent and, if so, invokes the EDIINTErrorNotification business process. Waits for the configured retry interval and requeues a messages up to the maximum configured number of times to handle transient errors and when the trading partner's system is down. <b>Note:</b> This business process uses the EDIINT Pipeline service instead of the EDIINT Message service because of the ability of the former service to handle large and high-concurrency files. <b>Note:</b> This is a primary business process that invokes secondary business processes in INLINE mode for Mailbox (that is, read from a property).

Business Process	Description
MailboxAS2SendAndProcessSyncMDN	<ul> <li>Sends the message from the mailbox and processes the MDN when a synchronous MDN is expected. Verifies whether an intermediate notification needs to be sent after each failed send attempt and, if so, invokes the EDIINTErrorNotification business process. Waits for the configured retry interval and requeues a messages up to the maximum configured number of times to handle transient errors and when the trading partner's system is down.</li> <li>Note: This business process uses the EDIINT Pipeline service instead of the EDIINT Message service because of the ability of the former service to handle large and high-concurrency files.</li> <li>Note: MailboxAS2SendAndProcessSyncMDN is invoked in INLINE mode. This can be changed, if required, by overriding the property invokeMode.outbound.SendAndProcessBP. See the Using the Customer_Overrides.properties File section for instructions on changing the invoke mode through the customer_overrides.properties file.</li> </ul>
HTTPSyncSend	Sends a synchronous MDN using the EDIINT Message service or EDIINT Pipeline service.
HTTPAsyncSend	Sends an asynchronous MDN using the EDIINT Message service or EDIINT Pipeline service.
HTTPClientSend	This business process is used to send an outbound AS2 message. It uses the HTTP Client Adapter name passed to it from the parent business process. If an HTTPClientSend adapter has not been set by the parent business process, it uses the default adapter (HTTPClientAdapter).
SMTPSend	Sends an SMTO (mailto) MDN using the EDIINT Message service or EDIINT Pipeline service.
DirectAS2SendNoMDN	Builds a message with a file, passed on as a Primary Document from the parent business process (AS2Outbound), for which no MDN is requested, calls DirectAS2SendAndProcessNoMDN to send the message, verifies whether a final notification needs to be sent, and, if so, invokes the EDIINTErrorNotification business process.
	This business process uses the EDIINT Pipeline service instead of the EDIINT Message service because of the ability of the former service to handle large and high-concurrency files.
	DirectAS2SendNoMDN is invoked in SYNC mode by AS2Outbound.
DirectAS2SendSyncMDN	Builds a message with a file, passed on as a Primary Document from the parent business process (AS2Outbound), for which no MDN is requested, calls DirectAS2SendAndProcessSyncMDN to send the message, verifies whether a final notification needs to be sent, and, if so, invokes the EDIINTErrorNotification business process.
	This business process uses the EDIINT Pipeline service instead of the EDIINT Message service because of the ability of the former service to handle large and high-concurrency files.
	DirectAS2SendSyncMDN is invoked in SYNC mode by AS2Outbound.

Business Process	Description
DirectAS2SendAsyncMDN	Builds a message with a file, passed on as a Primary Document from the parent business process (AS2Outbound), for which no MDN is requested, calls DirectAS2SendAndProcessASyncMDN to send the message, verifies whether a final notification needs to be sent, and, if so, invokes the EDIINTErrorNotification business process.
	This business process uses the EDIINT Pipeline service instead of the EDIINT Message service because of the ability of the former service to handle large and high-concurrency files.
	DirectAS2SendAsyncMDN is invoked in SYNC mode by AS2Outbound.
DirectAS2SendAndProcessNoMDN	Sends the message, when using direct process, and does not expect an MDN. Verifies whether an intermediate notification needs to be sent after each failed send attempt and, if so, invokes EDIINTErrorNotification. Waits for the configured retry interval and requeues a message up to the maximum configured number of times to handle transient errors and when the trading partner's system is down.
	This business process uses the EDIINT Pipeline service instead of the EDIINT Message service because of the ability of the former service to handle large and high-concurrency files. This can be changed, if required, by overriding the property invokeMode.outbound.SendAndProcessBP. See the Using the Customer_Overrides.properties File section for instructions on changing the invoke mode through the customer_overrides.properties file.
DirectAS2SendAndProcessSyncMDN	Sends the message, when using direct process, and processes the MDN when a synchronous MDN is expected. Verifies whether an intermediate notification needs to be sent after each failed send attempt and, if so, invokes the EDIINTErrorNotification business process. Waits for the configured retry interval and requeues a messages up to the maximum configured number of times to handle transient errors and when the trading partner's system is down.
	This business process uses the EDIINT Pipeline service instead of the EDIINT Message service because of the ability of the former service to handle large and high-concurrency files. This can be changed, if required, by overriding the property invokeMode.outbound.SendAndProcessBP. See the Using the Customer_Overrides.properties File section for instructions on changing the invoke mode through the customer_overrides.properties file.
DirectAS2SendAndProcessAsyncMDN	Sends the message, when using direct process, and processes the MDN when an asynchronous MDN is expected. Verifies whether an intermediate notification needs to be sent after each failed send attempt and, if so, invokes the EDIINTErrorNotification business process. Waits for the configured retry interval and requeues a messages up to the maximum configured number of times to handle transient errors and when the trading partner's system is down.
	This business process uses the EDIINT Pipeline service instead of the EDIINT Message service because of the ability of the former service to handle large and high-concurrency files. This can be changed, if required, by overriding the property invokeMode.outbound.SendAndProcessBP. See the Using the Customer_Overrides.properties File section for instructions on changing the invoke mode through the customer_overrides.properties file.

Business Process	Description
AS2Outbound	Acts as a wrapper business process for AS2 core outbound processing.
	AS2Outbound is to be invoked when using direct processing. It must be invoked with one of the following options:
	<ol> <li>AS2 Identifiers of the Organization and Partner in relationship; set the parameters 'org-as2-id' and 'partner-as2-id' in process data and invoke AS2Outbound.</li> </ol>
	<ol> <li>Profile IDs of the Organization and Partner in relationship; set the parameters 'org-profile-id' and 'partner-profile-id' in process data and invoke AS2Outbound.</li> </ol>
	<ol> <li>Profile Names of the Organization and Partner in relationship; set the parameters 'org-profile-name' and 'partner-profile-name' in process data and invoke AS2Outbound.</li> </ol>
	<ol> <li>Identity Names of the Organization and Partner in relationship; set the parameters 'org-identity-name' and 'partner-identity-name' in process data and invoke AS2Outbound.</li> </ol>
AS2Inbound	This process is invoked by the EDIINTParse business process to handle immediate processing. It performs the same general functions as the MailboxAS2Add and AS2Extract business processes, but at the end of processing AS2Inbound invokes the user-defined Success business process instead of adding to a mailbox or file system. If there is a failure while processing for AS2, there is an option to invoke a user-defined error business process. Similar to MailboxAS2Add and AS2Extract business processes, AS2Inbound also handles the processing of the AS2 relationship parameter <b>Wait For Synchronous MDN Process To Complete Before Extracting Data</b> .

### AS2 Message Sending Business Process Description

Each business process completes the following process:

- 1. The business process calls the JDBC adapter to obtain the MDN information for a trading partner. This information consists of the error directory, the receipt timeout value, and the retry interval value.
- **2**. The business process calls the EDIINT Pipeline service (or in rare cases, the EDIINT Message service) to build a message for a trading partner.
- 3. The business process invokes the HTTPClientSend business process to send the message to the trading partner. The HTTPClientSend business uses the HTTP Client Begin Session Service, HTTP Client POST Service, and HTTP Client End Session Service. If the send request fails, the process attempts to resend the message based on the time interval (seconds) defined by the Retry Interval configured in the partner profile. If needed, this step repeats a total of "n" times where "n" is the Max Retries configured.
  - If the send request is successful, the AS2SendSyncMDN process calls the EDIINT Pipeline service to parse the response, which should be a valid message disposition notification.
  - If the send request fails, an error is written to the error log.
- 4. The AS2SendSyncMDN and the AS2SendASyncMDN business processes call the EDIINT Acknowledge Check service periodically to check whether the message has been acknowledged. These calls continue until the receipt timeout interval expires.
  - If the message is acknowledged, the EDIINT Acknowledge Check service completes successfully.

• If the message is not acknowledged, the EDIINT Acknowledge Check service waits for the time period set in the Retry Interval parameter. If the retry interval expires and the message is still not acknowledged, the process retries from step 1 in this process. If the retry fails "n" times where "n" is the Max Retries configured, an error indicating that the service failed is written to an error log in your trading partner's error folder on your Sterling B2B Integrator AS2 Edition system. A second error is written to the trading partner error log containing the original collected file under another name.

### **Message Disposition Notifications**

A message disposition notification (MDN) is a receipt document that contains the original message ID of a message and status information about the original message.

Electronic Data Interchange Internet Integration (EDIINT) is a family of protocols developed by the Internet Engineering Task Force (IETF) for securely packaging and transporting messages containing business data over the Internet, using S/MIME.

There are two types of EDIINT:

- AS1, which uses SMTP, POP, and IMAP as the transport
- AS2, which uses HTTP as the transport

Within a business process in Sterling B2B Integrator, the EDIINT Message service builds and parses EDIINT AS1 and AS2 messages. The EDIINT Pipeline service on the other hand builds and parses only AS2 messages, including plain text, signed, and encrypted data.

MDNs that conform to the EDIINT specifications can contain a cryptographic hash calculated over the content of the message after EDIINT processing.

#### An MDN can be either:

- Signed Contains an encrypted digital signature of the receiver.
- Unsigned Contains only the original message ID and not a digital signature.

Signed MDNs that conform to the EDIINT specifications can provide nonrepudiation of receipt in addition to message status information. A valid digital signature over an EDIINT MDN shows that the MDN was sent by the trading partner possessing the relevant key pair. It also shows that the signed area of the MDN (which includes the cryptographic hash calculated over the received content) was not altered after signing. A message sender compares the hash in the MDN with the hash calculated when the message was generated. If the hashes match, the sender knows that the receiver received the content and has the MDN to demonstrate the status.

Whether signed or not, MDNs do not show that the received message content conforms to EDI or other business document formatting requirements.

**Note:** By default, Sterling B2B Integrator uses AS2 version 1.1 in the MDN. If you want to use AS2 version 1.2 in your MDNs, you must change the **AS2VersionForMDN** property in **customer\_overrides.properties** file.

MDNs are sent either:

• Synchronously – Returned immediately during the same communication session. As shown in the following diagram, A initiates the connection to B and delivers

the data to B. A then leaves the connection open while waiting for an MDN from B during the same communication session. After A receives the MDN, A closes the connection.

• Asynchronously – Returned at a later time during a different communication session. As shown in the following diagram, A initiates the connection to B and drops the data for delivery to B. A closes the connection and does not wait for an MDN from B during the same communication session. In a later session, B initiates a connection to A, receives the data from A, and sends an MDN to A. When the MDN is delivered, B closes the connection.

## Reprocessing and Resending Messages with the Original Message ID

Sterling B2B Integrator allows you to easily reprocess messages because the building and sending of messages is all handled by the predefined business processes. This enables you to reprocess and resend messages using the same message identifier by simply restarting the appropriate business process. The business process will automatically use the primary document (message) with the original message identifier.

To restart a business process, navigate to the Business Process Manager and perform a business process restart. see *Running and Stopping Predefined AS2 Business Processes*.

### AS2 Services and Adapters

Sterling B2B Integrator uses services within predefined business processes to carry out a range of AS2-related functions.

The EDIINT-related services are available for customized implementations.

The following services enable document transactions with Sterling B2B Integrator and the Sterling B2B Integrator AS2 Edition:

- HTTP Server adapter
- HTTP Client adapter
- HTTP Client Begin Session service
- HTTP Client POST service
- HTTP Client End Session service
- EDIINT Message service
- EDIINT Acknowledge Check service
- EDIINT Pipeline service
- EDIINT MDN Building service
- EDIINT Header Scanning service
- AS2 File System adapter

Because of our continuing efforts to improve services and adapters to align with new technology and capabilities, the B2B HTTP Server adapter and the B2B HTTP Client adapter have entered the retirement process in Sterling B2B Integrator and are changed to the HTTP Server adapter and the HTTP Client adapter and elated services, respectively.

### **HTTP Server Adapter**

**Note:** Because of our continuing efforts to improve services and adapters to align with new technology and capabilities, the B2B HTTP Server adapter has entered the retirement process in Sterling B2B Integrator and has been changed to the HTTP Server adapter.

The HTTP Server adapter completes the following actions in the Sterling B2B Integrator AS2 Edition:

1. Receives messages in the Sterling B2B Integrator AS2 Edition from a Java servlet running in a Web server.

#### **CAUTION:**

The Java servlet provides the HTTP listener service for receiving AS2 messages from trading partners.

2. Runs business processes to handle the messages.

CAUTION:

The Java servlet can deploy in a demilitarized zone (DMZ) environment, while the Sterling B2B Integrator AS2 Edition, including the HTTP Server adapter, resides in the secure area behind the DMZ.

### **HTTP Client Adapter**

**Note:** Because of our continuing efforts to improve services and adapters to align with new technology and capabilities, the B2B HTTP Client adapter has entered the retirement process in Sterling B2B Integrator and is being replaced with the HTTP Client adapter and related services.

The HTTP Client adapter sends messages and asynchronous MDNs to trading partners using the HTTP/HTTPS communication protocols.

### **EDIINT Message Service**

The EDIINT Message service completes the following steps in the Sterling B2B Integrator AS2 Edition:

- 1. Builds or parses EDIINT messages.
- 2. Generates receipts for messages, as necessary.
- 3. Correlates receipts with messages.

Runs business processes that send receipts and process inbound documents.

### EDIINT Acknowledge Check Service

The EDIINT Acknowledge Check service determines whether an MDN acknowledgement has been received for an EDIINT message within a business process in Sterling B2B Integrator . If the MDN acknowledgement is not received within a specific period of time or if a negative MDN is received, the service can cause the business process to fail (or it can continue successfully, depending on the service configuration).

This service is designed to be used in a business process after a message has been sent

You must always include an EDIINT Message service or EDIINT Pipeline service configuration in a business process whenever you include an EDIINT Acknowledge Check service configuration.

### **EDIINT Pipeline Service**

Within a business process, the EDIINT Pipeline service builds and parses only AS2 messages, including plain text, signed, and encrypted data.

Communications services, such as the B2B SMTP Client adapter or the HTTP Client adapter, then send or receive the messages within the business process.

The EDIINT Pipeline service also generates signed or unsigned Message Disposition Notifications (MDNs) when requested to do so and launches the workflow to send MDNs, and will request and process such MDNs too if the contract is so configured. Signed MDNs provide nonrepudiation of receipt, which is realized when the original sender of a message verifies the signed receipt coming back from the receiver.

The EDIINT Pipeline service is identical to the EDIINT Message service in terms of functionality except for its added ability to parse large documents (up to 2 GB in size).

### **EDIINT MDN Building Service**

The EDIINT MDN Building service builds a Message Disposition Notification (MDN) based on information in process data and a specified contract ID. This enables you to perform additional custom operations between message parsing and MDN generation so that you can consider the outcome of those operations by reviewing the status code reported in the MDN.

**Note:** This service is currently not used automatically by the Sterling B2B Integrator AS2 Edition (the embedded AS2 application) or any predefined business processes—you must create a custom (user-defined) business process to implement it.

### **EDIINT Header Scanning Service**

The EDIINT Header Scanning service parses the header area of messages without loading or examining the entire message, and then outputs the header information to process data.

### Sterling B2B Integrator AS2 Edition File System Adapter

The File System adapter performs the following:

- Monitors an outbound directory configured for a trading partner for documents to send to the trading partner.
- Extracts business documents and error information to appropriate directories configured for a trading partner.

When configuring information about an AS2 trading partner, you configure the File System adapter to monitor the outbound folder for that trading partner. The frequency with which the monitoring occurs is specified during the trading partner configuration.

When monitoring the outbound directory, the File System adapter polls the folder to determine whether any new messages need to be sent to your trading partner. If new documents are in the folder and are ready to be sent, the adapter sends the documents to your trading partner.

**Note:** You can view the files in the inbound and outbound folders in the File Tracking page (the initial page that opens upon accessing the Sterling B2B

Integrator AS2 Edition). The File Tracking page also displays the error log for outbound documents that the File System adapter could not send because of processing errors.

When documents are received from a trading partner, the File System adapter extracts the documents to the inbound folder configured for the partner.

### **Transmission Failures**

If a transmission attempt fails, the File System adapter extracts an error log and the original document to the error folder configured for the partner.

Note: This process does not work with mailbox input or output.

- 1. The business processes that send messages to trading partners do not retry when errors cannot be interpreted as transient HTTP errors (that is, timeouts because a system is busy at the moment) based on HTTP return codes. These processes use the System Lock service to set a lock when unable to communicate with a trading partner's server.
- **2**. The business processes that send messages to trading partners use the Wait service.
- **3**. The AS2 File System Adapter checks for a lock before invoking the File System Adapter to collect files. If the lock is found, the File System adapter will not be invoked.
- 4. The AS2 File System Adapter allows you to specify the maximum number of files to collect when invoking the File System adapter to collect files. The use of this value in conjunction with appropriate system sizing allows you to configure your system to be able to clear queued data when a trading partner's server comes back online.

### **Duplicate Message Processing**

EDIINT messages contain message IDs. Message IDs are used to correlate receipts with messages. When a message received from a trading partner is parsed, information about the message, including its message ID, is stored in the database. If a second message is received with the same message ID as a previous message, Sterling B2B Integrator handles the second message as a duplicate. In this case, Sterling B2B Integrator returns the MDN that it sent for the previous instance of the message to the message sender. Sterling B2B Integrator does not extract the message content to the inbound folder configured for the trading partner.

You can force the Sterling B2B Integrator AS2 Edition to fully process duplicate messages by completing the following actions:

- 1. Stop the Sterling B2B Integrator AS2 Edition.
- 2. Edit the file ediint.properties in the properties directory of your Sterling B2B Integrator AS2 Edition installation.
- **3**. Add the line ProcessDuplicateMessages = true to the file ediint.properties.
- 4. Save the file ediint.properties.
- 5. Start the Sterling B2B Integrator AS2 Edition.

### How the Sterling B2B Integrator AS2 Edition Works

The Sterling B2B Integrator AS2 Edition (and using AS2 with Sterling B2B Integrator) works in the following way:

1. You place a document in the Outbound directory or mailbox configured for a trading partner in your Sterling B2B Integrator AS2 Edition system.

(Alternatively, you can skip adding the document to a file system or mailbox and send the document to be processed directly. In this scenario, skip to step 3 in this process).

- 2. The File System adapter or Mailbox adapter checks the trading partner Outbound directory based on the schedule that you have specified.
- **3.** If a document is found in the Outbound directory, the File System adapter (or Mailbox adapter or HTTP Client Adapter) starts a predefined business process that sends the document to your trading partner's AS2 system. When using direct processing, invoking the business process AS2Outbound starts a predefined business process that sends the document to your trading partner's AS2 system.
- 4. If an error occurs during transmission of your document to your trading partner, a copy of the data and an error log are placed in the Error directory for that trading partner on your system. You can review the error log, make the correction to the data and copy the corrected document to the Outbound directory to be sent to the trading partner.
- 5. If you requested an MDN, your trading partner's AS2 system returns the MDN to your system. Your Sterling B2B Integrator AS2 Edition system processes the MDN and updates the EDIINT transaction information for the MDN.
- 6. If the MDN contains a negative response, a copy of the data and an error log are placed in the Error directory for that trading partner on your system. You can review the error log, make the correction to the data and copy the corrected document to the Outbound directory to be sent to the trading partner.
- 7. After the document is received by your trading partner, a system external to Sterling B2B Integrator extracts the document for use in another system.

## Starting the Sterling B2B Integrator AS2 Edition in UNIX or Linux

### About this task

**Note:** To use AS2 with Sterling B2B Integrator, you need to have Sterling B2B Integrator installed.

To start Sterling B2B Integrator AS2 Edition in a UNIX or Linux environment, follow these steps:

### Procedure

- 1. Change the directory to */install\_dir/bin*.
- 2. Enter run.sh.
- **3**. Enter the passphrase that you supplied during installation. If you receive a message about an invalid or corrupt license file, see UNIX/Linux troubleshooting information in the *Installation Guide*.

When startup is complete, a message like the following is displayed:

Open your Web browser to http://host:port/dashboard, where host:port is the IP address and port number where Sterling B2B Integrator resides on your system.

4. Make a note of the URL address so you can access Sterling B2B Integrator later. The system returns you to a UNIX prompt.

## Starting the Sterling B2B Integrator AS2 Edition in Windows About this task

**Note:** To use AS2 with Sterling B2B Integrator, you need to have Sterling B2B Integrator installed.

To start Sterling B2B Integrator AS2 Edition in a Windows environment, follow these steps:

### Procedure

- 1. Do one of the following:
  - Double-click the Sterling B2B Integrator shortcut icon on the server desktop. The Sterling B2B Integrator starts running.
  - Use Windows Explorer to open the installation directory (c:\sterlingcommerce\si\bin). Then, click on **startWindowsService.cmd**.

**Note:** It may take several minutes for Sterling B2B Integrator components to initialize and start up.

If Sterling B2B Integrator does not start or if you receive a message about an invalid or corrupt license file, see Windows troubleshooting information in the *Installation Guide*.

2. When startup is finished, a message like the following is displayed:

*Open your Web browser to http://host:port/dashboard*, where *host:port* is the IP address and port number where Sterling B2B Integrator resides on your system.

Make a note of the URL address so that you can access Sterling B2B Integrator later.

## Starting the Sterling B2B Integrator AS2 Edition in iSeries About this task

**Note:** To use AS2 with Sterling B2B Integrator, you need to have Sterling B2B Integrator installed.

To start Sterling B2B Integrator AS2 Edition in an iSeries<sup>®</sup> environment, follow these steps:

### Procedure

- 1. Sign onto iSeries with your application user profile.
- 2. Submit a batch job by entering the following command: SBMJOB CMD(QSH CMD('umask 002 ; cd install\_dir/bin ; ./run.sh')) JOB(SIMAIN)

**Note:** The job queue to which you submit the command must allow at least two active jobs. If the maximum number of active jobs is less than two, Sterling B2B Integrator will not start up completely.

To reduce keying errors at startup, create a command language (CL) program similar to the following example:

```
PGM
SBMJOB CMD(QSH CMD('umask 002 ; cd install_dir/bin; ./run.sh')) +J
OB(SIMAIN)
ENDPGM
```

- 3. Wait for startup to complete, a process that takes 10 to 15 minutes.
- 4. Startup creates a spool file. When startup is finished, open the QPRINT spool file and check the end of the file for a message about how to connect to Sterling B2B Integrator. For example, you may see a message like the following: Open your Web browser to http://host:port/dashboard, where host:port is the IP address and port number where Sterling B2B Integrator resides on your system.

Make a note of the address so you can access Sterling B2B Integrator later.

**Note:** It may take several minutes for Sterling B2B Integrator to be available from the Web browser, even after the above URL message has been issued.

- 5. (Optional) To verify that Sterling B2B Integrator has started normally and completely, view the system through WRKACTJOB and verify that only two QP0ZSPWP jobs (of yours) are left running in your GIS batch subsystem.
- 6. Prepare your browser to log in to Sterling B2B Integrator. Configure your browser so that there is direct connection between the Web browser and iSeries. Do not configure the browser to use any proxy server between you and iSeries (unless it is a requirement of your network).

### Accessing the Sterling B2B Integrator AS2 Edition About this task

To open the Sterling B2B Integrator AS2 Edition:

### Procedure

- 1. Open a browser window.
- 2. In the Address line, type the following address: http://IP address:port number/dashboard

**Note:** You can either use the IP address or host name to open a login page. Ensure that you separate the IP address (or host name) and port number with a colon (:), for example, http://Application\_IPAddress:Installation BasePortNumber+33/dashboard

**3**. At the login page, type your Sterling B2B Integrator AS2 Edition user name and password.

**Note:** The Sterling B2B Integrator AS2 Edition generic user name is **as2\_user**. For security purposes, change this user name and password after you have installed Sterling B2B Integrator AS2 Edition.

## Using the Sterling B2B Integrator AS2 Edition About this task

The following steps illustrate how to begin exchanging documents using the Sterling B2B Integrator AS2 Edition:

### Procedure

1. Generate or check in one or more system certificates for use by your organization. For more information, see *About Digital Certificates*.

- 2. Establish or acquire your company's AS2 identifier within your trading partner community. AS2 identifier is an identification number or name that your company uses when communicating with your trading partners.
- **3**. Check out your certificates to files. For more information, see *Checking out a System Certificate*.
- 4. If you are going to require inbound SSL, contact Customer Support for instructions.
- 5. Exchange the following information with your trading partners, as appropriate:
  - Certificates
  - AS2 identifiers
  - Server names or IP addresses
  - Server ports
  - Server URLs
  - Agreed on algorithms for signing and encryption
  - Receipt options
- 6. Check the trading partner certificates in to Sterling B2B Integrator. For information, see *Managing Digital Certificates in Sterling B2B Integrator AS2 Edition*.
- 7. Configure other trading partner settings. For information, see *Configuring Organization and Trading Partner Information*.

## About the Sterling B2B Integrator AS2 Edition Interface

The Sterling B2B Integrator AS2 Edition interface enables you to easily navigate the Sterling B2B Integrator AS2 Edition and quickly enable your organization to exchange documents with your trading partners.

#### **CAUTION:**

Use the navigation buttons in the Sterling B2B Integrator AS2 Edition interface instead of your browser Back and Forward buttons. Using the Back and Forward buttons can cause errors.

The following menu options display the pages that make up the Sterling B2B Integrator AS2 Edition interface:

Menu Option	Description
File Tracking	<ul> <li>Displays the File Tracking page, which is the first page that opens when you access the Sterling B2B Integrator AS2 Edition. The page provides a link to system logs and after you provide information about your organization, configure your trading partner information, and define file locations for saving documents, this page lists:</li> <li>Inbound documents from trading partners</li> <li>Outbound documents to trading partners</li> </ul>
	• Errors that occurred when sending (outbound) documents to trading partners
	<b>Note:</b> The File Tracking page automatically refreshes every 10 seconds. To disable this feature, clear the <b>Automatically refresh every 10 seconds</b> check box.
	If the Multi-Org license is installed, the first page that opens asks which Organization you want to track the files of. As you type the name in the field, a list of possible matches is shown. Make a selection and click Go! The File Tracking page appears.
Business Process	Provides access to the Execution Manager page. The Execution Manager page enables you to:
	Monitor predefined business processes.
	Perform activities to stop and start business processes, as appropriate
Central Search	Displays the Central Search page, which enables you to perform basic and advanced searches for:
	• Live (active) business processes
	<ul> <li>Active, archived, and restored business processes</li> </ul>
	<ul> <li>EDIINT transaction records for messages that include requests for MDNs</li> </ul>
Trading Partners	Displays Trading Partner Configuration pages. Using the Trading Partner Configuration pages, you can establish communication and set preferences, which enable your organization and your AS2 trading partners to exchange documents.
Certificates	Displays the System Certificates pages, which enable you to check in digital certificates for secure document exchange.
Schedules	Displays the Schedules page, which enables you to schedule a business process and search for services, including predefined business processes After locating a service, you can obtain archiving information about the service, edit the default service schedule to meet your business requirements, and enable or disable the service.

## **Using AS2 to Support Multi-Organizations**

Some businesses have a need to create multiple organizations that they need to represent individually. The AS2 wizard was originally designed to support the creation of only one organization, but with the purchase of a Multi-Org license, users are able to create more than one organization in the AS2 wizard. Users having the Multi-Org license can also create multiple organization and partner profiles for the same identity.

### **Auto Complete Lists**

Several text box fields in the AS2 wizard now have an automated list to make navigation easier. As you begin to type a word in the text box, a list of possible matches pops up on the screen. The following conditions apply:

• The maximum number of results shown in the list is set to a default value of 500. This limit has been set in a property file and is eligible for customer\_overrides.properties configuration, if necessary. The property name is autocomplete2\_maxresults.as2.

**Note:** This limit is in place to ensure that the system is not overwhelmed with a potentially very large result set. If the server had a very large set of matches (~ 5000), returning all results at the same time could potentially cause an out-of-memory issue or a slow page load time.

• If the number of possible matches exceeds the set limit, the bottom of the list will contain the text "...continue text entry to see additional matches...". This will prompt the user that some matches may not appear in the current list.

A maximum of 15 results are visible at a time to the user, anything over 15 are scrollable.

## Import/Export Considerations

There are some important points to consider in regards to import and export behavior of the AS2 wizard profiles for Single-Org users (users who use the default AS2 wizard and don't have a Multi-Org license) and Multi-Org users who have a Multi-Org license and create more than one organization.

- (Single-Org only) For a system without the Multi-Org license (such as, the Single-Org license model) of the AS2 wizard, import of an Organization profile is not allowed if an Organization profile is already present in the system. However, if at the time of import there was no organization profile present in the system, the organization profile being imported would be marked as a default organization. This is useful to the users who want to clean up their system while upgrading and later import their configurations through import files created before upgrade.
- Contracts between Organization and Partner Profiles are needed to setup a communication channel between the two profiles. When importing the organization and partner profiles, contracts should also be imported. If the required contracts have not been imported and you use a Multi-Org license, you will have to manually edit the relationship. If the required contracts have not been imported and you use Single-Org, you will need to edit the partner profile by clicking through all of the edit screens and clicking Finish. Doing this will internally generate the required contracts.
- (Multi-Org only) Relationships get imported or exported along with the Partner Profile, not with the Organization Profile.
- (Multi-Org only) If a new import file is created from Sterling B2B Integrator version 5.1, there are two ways of establishing a working relationship:
  - Import the organizations in a relationship along with the partners. Relationship is established.
  - If only partners are imported, a broken relationship is established because the organization profile was not imported. You will have to manually edit such a relationship and you will be asked to choose an existing organization to link your partner with.

- (Multi-Org only) If you are using import files older than Sterling B2B Integrator version 5.1, there are two ways of establishing a working relationship:
  - Import the organization profile (profile\_ORGANIZATION) along with the partner profile(s). The relationship is established.
  - If only partners are imported, a broken relationship is established because importing the organization profile was not satisfied. You will have to manually edit such a relationship and you will be asked to choose an existing organization to link your partner with.

## **Chapter 2. Managing Digital Certificates**

## Managing Digital Certificates in the Sterling B2B Integrator AS2 Edition

The Sterling B2B Integrator AS2 Edition uses digital certificates to securely transport documents between system components. Before you add your trading partners' information to the Sterling B2B Integrator AS2 Edition, you must obtain and check in any digital certificates.

To help you manage your digital certificates, Sterling B2B Integrator includes the Certificate Wizard, a standalone tool that enables you to generate:

- Private and public keys protected with a passphrase
- A certificate signing request (CSR) to send to a trusted certificate authority (CA)

After the CA authorizes the CSR and issues a digitally-signed certificate, you can then use the Certificate Wizard to generate and validate a key certificate that you check in to Sterling B2B Integrator.

**Note:** To manage digital certificates in Sterling B2B Integrator (that is, if you are not using the Sterling B2B Integrator AS2 Edition), see Sterling B2B Integrator documentation for Digital Certificates.

As an AS2 user, you need to check in the following certificates into Sterling B2B Integrator:

- CA certificates
- Trusted certificates
- Self-signed certificates

## Chapter 3. Configuring AS2 Organization and Trading Partner Information

## **Configuring AS2 Organization and Trading Partner Information**

To exchange documents between trading partners, Sterling B2B Integrator and the Sterling B2B Integrator AS2 Edition use predefined business processes that link trading partners together. A trading partner is a company or business entity that participates in the exchange of business application data. To enable Sterling B2B Integrator and the Sterling B2B Integrator AS2 Edition to run these business processes, you must provide information about each trading partner participating in the business processes, including your organization.

Sterling B2B Integrator allows you to send e-mail notifications to the e-mail address you configure for your AS2 organization. Additionally, you can configure notifications to be sent when retries fail (an intermediate failure of the sending process) and when the entire sending process fails (after the maximum number of retries have been exhausted), and you can configure these notifications for each trading partner. The e-mail notifications include the following details:

- Message identifier for which the notification applies
- URL to which the message should be sent
- Current attempt number for resending the message
- Total number of retry attempts configured for the trading partner to which the message is being sent
- Business process attempting to send the message
- Timestamp of the notification

You can also specify exactly how messages for which delivery fails should be requeued to be resent. Messages are requeued and the sending process retried a specified number of times at the interval you configure.

Sterling B2B Integrator also offers you an option to defer (until the process for returning a Message Disposition Notification (MDN) is complete) the extraction of payload data to either the file system or mailbox (if you are not sending an Asychronous MDN to be processed directly), when the sender requests a synchronous MDN. If the process for returning the MDN fails, the payload is not extracted. This option prevents you from introducing duplicate data into the system from a trading partner that terminates the connection prior to receiving the MDN, and then resends the data.

**Note:** Deferred extraction must not be enabled if duplicate suppression is enabled. Conversely, if deferred extraction is enabled, duplicate suppression must not be enabled. These two features are mutually exclusive.

### **Upgrade Considerations When Using Identity**

If upgrading, the following considerations should be noted:

• If the user edits the organization or partner profile and also modifies the Identity Name in the profile, the existing profile name will be changed to the new naming convention.

- If the user edits the organization or partner profile and does not make any changes in the Identity Name, the existing profile name will be retained.
- The naming convention for profiles and underlying objects (transports, doc exchanges, and so forth) is AS2\_[ORG | PART]\_<Identity Name>.

### **Before You Begin**

Before you configure information about your organization and trading partners:

- Check in digital certificates for the secure transport of data.
- Collect the following information about your organization and trading partners:
  - Name and address information
  - AS2 identifiers
  - The following certificates, as appropriate:
    - System certificates
    - SSL server certificates
    - End-user certificates
  - IP addresses, port numbers, and URLs
  - Agreed on algorithms for signing and encryption
  - Passwords

## Creating an AS2 Organization

### About this task

Before you can create trading partners in your system, you must create your organization. An organization is the company or business entity that administers your system. You can have only one organization for each Sterling B2B Integrator AS2 Edition. This organization is comparable to a profile and an identity in Sterling B2B Integrator. Sterling B2B Integrator and Sterling B2B Integrator AS2 Edition only allow you to create one organization (representing your company) because the Sterling B2B Integrator AS2 Edition is limited to a "one hub, many spokes" configuration (that is, you can send AS2 documents to many partners and receive AS2 documents from those partners, but a "many-to-many" trading partner scenario is not supported).

Keep the following in mind as you create your organization information:

- The option to validate the certificate dates is checked when you check the certificate in (or you can go back and edit that setting), but the actual validation is done when the certificate is used, not at check-in time.
- The system will allow the use of certificates that have expired, or have future go-live dates. This is to support both backwards compatibility and scenarios where partners do not provide an updated certificate but need business continuity.
- "Closest non-future Go Live date, or only certificate in the list" policy means that when multiple certificates are provided, the system will choose the certificate with the nearest "go live" date that is not in the future; however, if there is only one certificate, it will use it, even if it has a future go-live date.
- The ordering of certificates in the user interface is currently an option to change the user interface display of the list. This ordering is not used to determine the order in which the system selects certificates.
- Certificates cannot have the same go-live dates.

To create your organization information:

### Procedure

1. From the File Tracking page, select Trading Partner.

**Note:** If you are not using the Sterling B2B Integrator AS2 Edition but are instead using Sterling B2B Integrator to send and receive AS2 messages, from the Administration menu, select **Trading Partner > AS2**.

- 2. In the Trading Partners Configurations page, in the Create section next to New AS2 partner or organization, click **Go!**
- 3. In the AS2 Configuration Type page, select **Organization** and click **Next**.
- 4. On the New Identity page you can either use an existing Identity or create a new one:
  - a. To use an existing identity, select Use Existing Identity and begin typing the name of the identity. A list automatically appears that match your entry. This list contains all the identities available in your system, some of which might not be associated with any of the AS2 profiles. Make a selection and click **Next**.
  - b. To create a new Identity, select Create a New Identity and click Next.
- 5. In the Organization Details page, complete the fields, as appropriate, and click **Next**.
- 6. In the Confirm page, verify the information and click **Finish**. To edit information about your organization, see *Editing AS2 Organization and Trading Partner Information*.

### Creating an AS2 Organization Reference Organization Details Page

Field	Description
Identity Name	Name of the identity used for the organization profile. Required. This parameter will be populated automatically if the existing identity is chosen.
	Note: You can not enter spaces in this field.
AS2 Identifier	AS2 identifier of your organization. It could be a DUNS number, EDI interchange ID, e-mail address, or another unique string. Required.
	<b>Note:</b> This parameter will be populated automatically if the existing identity is chosen.
Profile Name	Name of the organization profile. Required.
Exchange Certificate	Name of certificate that your organization is using for decryption. Required.
	<b>Note:</b> The Configure Certificates link enables you to open a common window displaying all certificates list that you may use. This window is used to select multiple certificates for the purpose of seamless transition from one certificate to the other when its validity expires and to select the policy for this certificate. The default policy is Closest non-future Go Live Date or the only certificate in the list.
Selection policy	This is a default policy which returns the certificate with the closest non-future Go Live Date. Default value is Closest non-future Go Live Date or the only certificate in the list.

Field	Description
Go Live Date	This is the date when the certificate becomes valid and is ready for use by Sterling B2B Integrator. You cannot specify a Go Live Date that precedes the Not Before Date in the digital certificate. Using this parameter results in less system down time for both you and your trading partner when your certificates expire. The default value is the Not Before Date.
Not After Date	This is the date beyond which the certificate is no longer valid. Using this parameter results in less system down time for both you and your trading partner when your certificates expire. You cannot specify a Not After Date that succeeds the termination date in the certificate. The default value is Not After Date.
Signing Certificate	Name of the certificate that your organization is using to sign messages. This certificate can be the same as the certificate that you are using for key exchange. Required.
	<b>Note:</b> The Configure Certificates link enables you to open a common window displaying all certificates list that you may use. This window is used to select multiple certificates for the purpose of seamless transition from one certificate to the other when its validity expires and to select the policy for this certificate. The default policy is Closest non-future Ge Live Date or the only certificate in the list.
Selection policy	This is a default policy which returns the certificate with the closest non-future Go Live Date. Default value is Closest non-future Go Live Date or the only certificate in the list.
Go Live Date	This is the date when the certificate becomes valid and is ready for use by Sterling B2B Integrator. You cannot specify a Go Live Date that precedes the Not Before Date in the digital certificate. Using this parameter results in less system down time for both you and your trading partner when your certificates expire. The default value is the Not Before Date.
Not After Date	This is the date beyond which the certificate is no longer valid. Using this parameter results in less system down time for both you and your trading partner when your certificates expire. You cannot specify a Not After Date that succeeds the termination date in the certificate. The default value is Not After Date.
E-mail Address (optional)	The e-mail address of your organization. Optional.
	<b>Note:</b> You must provide an e-mail address if you want to receive e-mail notifications, because the SMTP client does not perform a record lookup to retrieve the e-mail address.
E-mail Host (optional)	The host name (server) for your organization's e-mail. Optional (except when E-mail Address is used and then E-mail Host is mandatory).
E-mail Port	The port for the e-mail server. Optional. Default is 25.

## **Creating an AS2 Trading Partner**

You must create a Trading Partner record for each trading partner with whom you will be exchanging AS2 documents. Each time you create a partner using the AS2 wizard, it automatically creates two contracts between that partner profile and the organization—one contract for the sending system and one for the receiving system. A contract has a production profile and a consumption profile, and each contract is associated with a business process.

Additionally, each contract has up to four extensions that are used for AS2. These extensions are the identifiers in the contract and may also be the e-mail addresses from the transport mechanism(s). These identifiers are used by the EDIINT Message service and EDIINT Pipeline service to look up contracts.

The contract lookup fails if more than one contract is found for a set of extensions.

## Creating a Trading Partner About this task

To create a trading partner:

### Procedure

1. From the File Tracking page, select Trading Partner.

**Note:** If you are not using the Sterling B2B Integrator AS2 Edition but are instead using Sterling B2B Integrator to send and receive AS2 messages, from the Administration menu, select Trading Partner > AS2.

- 2. In the Trading Partners Configurations page, in the Create section next to New AS2 partner or organization, click **Go**!
- 3. In the AS2 Configuration Type page, select Partner and click Next.
- 4. On the New Identity page you can either use an existing Identity or create a new one:
  - a. To use an existing identity, select **Use Existing Identity** and begin typing the name of the identity. A list automatically appears that match your entry. Make a selection and click **Next**.
  - b. To create a new Identity, select Create a New Identity and click Next.

**Note:** The identity name and AS2 identifier belong to the selected identity itself and thus any changes will affect all profiles belonging to that identity.

- 5. In the Identification page, complete the fields, as appropriate, and click Next.
- 6. In the HTTP Communication page, complete the fields, as appropriate, and click **Next**.
- 7. In the Notifications and Retries page, complete the fields, as appropriate, and click **Next**.

**Note:** These notification options enable you to configure, on a per trading partner basis, the sending of notifications with either each failed send attempt or when all retries have been exhausted.

- 8. In the Messages page, complete the fields as appropriate and click Next:
- 9. Complete one of the following steps:
  - If you did not select MDN Receipt, go to step 10.
  - If you selected MDN Receipt, in the Receipt page, complete the following fields, as appropriate, and click **Next**:
- 10. If you need to set up an additional URL for MDNs (if a trading partner wants MDNs sent to a URL that differs from the main AS2 URL), select Setup additional Server Communications and add the URL.

**Note:** For Sterling B2B Integrator to send AS2 messages, you must have a trading partner profile set up that includes a transport listing any URL to which you need to send AS2 messages (including MDNs). If you need to send asynchronous MDNs to a URL that is different than the trading partner's main

URL, you must configure an additional profile (belonging to that trading partner's identity) with the appropriate information.

11. In the Collection page, complete the fields, as appropriate, and click Next.

**Note:** The folders identified in this step are created during the installation of Sterling B2B Integrator AS2 Edition and are found in the *install\_dir/* as2organization/as2partner. By default, an inbound, outbound, and an error folder is created.

**12.** In the Confirm page, verify the information and click **Finish** to update the Sterling B2B Integrator AS2 Edition with your trading partner information.

### Results

You can test the AS2 profile by going to the Trading Partner Profile screen in the Admin Console and selecting **Test Now** next to the profile you want to verify. The TestNow option enables you to verify that a new or updated trading partner profile is working correctly.

# Creating a Trading Partner Reference Identification Page

Field	Description
Identity Name	Name of the identity used for your trading partner. Required. <b>Note:</b> This parameter will be populated automatically if the existing identity is chosen. <b>Note:</b> Do not enter spaces in this field.
AS2 Identifier	AS2 identifier of your trading partner. Required.
	<b>Note:</b> This parameter will be populated automatically if the existing identity is chosen.

### **HTTP Communication Page**

Field	Description
Profile Name	Name of the trading partner profile. Required.
HTTP Client Adapter	The name of the HTTP Client Adapter instance to use when sending outbound AS2 messages or asynchronous MDNs. Required.
End Point	<ul> <li>HTTP address or URL to post AS2 messages to for this specific trading partner. For AS2, the end point must be the complete URL to send messages. Contact your trading partner for the value to use in this field. Required.</li> <li>Note: The Sterling B2B Integrator AS2 Edition includes a configured URL that runs the EDIINTParse business process on the base port + 33.</li> </ul>
User ID	User name for HTTP basic authentication, if required to log in to the trading partner system. Optional.
Password	Password that is associated with the User ID identified in the previous field for HTTP basic authentication, if required to log in to the trading partner system. Optional.

Field	Description
Response Timeout (seconds)	Number of seconds the HTTP client adapter waits for a response from the trading partner's server before the system times out. Valid value is number of seconds. Required. <b>Note:</b> To avoid timing out, set both the Response Timeout and Socket Timeout fields to the same value and ensure that the value is greater than 180 seconds. This ensures the socket remains open for a reasonable amount of time, so it can receive responses.
Firewall Proxy	IP address, port number, login ID, and password of your proxy server if you need to use a proxy server to connect outbound to this trading partner. Separate values with a comma. If used, you must specify both the login ID and password. Optional. <b>Note:</b> If you connect through a proxy server, but authentication is not required, the IP address and port number routes the outbound message through the specified proxy server.
Firewall Connect Count	Number of attempts that Sterling B2B Integrator can make to connect to the proxy server before timing out. Optional. The value of Firewall Connect count should be less than 50. <b>Note:</b> If the proxy server is used heavily, set the Firewall Connect Count to a high number to reduce the number of time outs.
Socket Timeout (seconds)	Number of seconds that the socket connection can idle before timing out. Valid value is any positive number that is optimal for your system. Optional. <b>Note:</b> To avoid timing out, set both the Response Timeout and Socket Timeout fields to the same value and ensure that the value is greater than 180 seconds.
SSL	<ul> <li>Whether Secure Sockets Layer (SSL) should be active. SSL is a negotiation between the client and the server that establishes the method of encrypting and decrypting data transmissions. Optional. Valid values are:</li> <li>None – SSL is not used (default).</li> <li>Optional – SSL encryption.</li> <li>Must – Uses this protocol configured for SSL encryption.</li> <li>If you select Optional or Must, the asset protection key must enable SSL</li> </ul>
Key Certificate Passphrase	for the appropriate protocol. Type a passphrase to be used with this key certificate. Required only if a key certificate is being used for SSL client side authentication and if the SSL parameter is set to Optional or Must.

Field	Description
Cipher Strength	Strength of the algorithms used to encrypt data. Only accepts supported algorithm. Required. Valid values are:
	• ALL – Includes all cipher strengths (weak and strong as listed below).
	• WEAK – Required for international e-commerce if government regulations prohibit STRONG encryption from being exported. Includes the following strengths:
	• Export level RSA 512-bit with 40-bit RC4 and MD5
	• Export level RSA 512-bit with 40-bit DES and SHA1
	<ul> <li>STRONG – This is the default. Required if SSL option is anything other than None. Includes the following strengths:</li> </ul>
	• RSA with 128-bit RC4 with SHA1
	• RSA with 128-bit AES with SHA1
	• RSA with 256-bit AES with SHA1
	• RSA with 3DES with SHA1
	• RSA with 128-bit RC4 with MD5
	• RSA with DES with SHA1
	<b>Note:</b> If you are using an older or retired adapter, the 128-bit and 256-bit AES ciphers might not be available. For more information on the phases of the Retiring process, see <i>Retiring and Removed Services and Adapters</i> .
Key Certificate (System Store)	A combination of ASCII-encoded certificate and ASCII-encoded PKCS5 encrypted key. Select a key certificate. Optional. <b>Note:</b> You must have already checked the certificate in to Sterling B2B Integrator for it to be displayed in this list. The Configure Certificates link enables you to open a common window displaying all certificates list that you may use. This window is used to select multiple certificates for the purpose of seamless transition from one certificate to the other when its validity expires and to select the policy for this certificate. The default policy is Closest non-future Go Live Date or the only certificate in the list.
Selection policy	This is a default policy which returns the certificate with the closest non-future Go Live Date. Default value is Closest non-future Go Live Date or the only certificate in the list.
Go Live Date	This is the date when the certificate becomes valid and is ready for use by Sterling B2B Integrator. You cannot specify a Go Live Date that precedes the Not Before Date in the digital certificate. Using this parameter results in less system down time for both you and your trading partner when your certificates expire. The default value is the Not Before Date.
Not After Date	This is the date beyond which the certificate is no longer valid. Using this parameter results in less system down time for both you and your trading partner when your certificates expire. You cannot specify a Not After Date that succeeds the termination date in the certificate. The default value is Not After Date.

Field	Description
CA Certificates	Certificate used to validate SSL server authentication of the trading partner. Required if you selected Must or Optional in the SSL field. <b>Note:</b> The Configure Certificates link enables you to open a common window displaying all certificates list that you may use. This window is used to select multiple certificates for the purpose of seamless transition from one certificate to the other when its validity expires and to select the policy for this certificate. The default policy is Closest non-future Go Live Date or the only certificate in the list.
	For information about checking in self-signed CA certificates, see <i>Managing Digital Certificates in Sterling B2B Integrator AS2 Edition</i> .
Selection policy	This is a default policy which returns the certificate with the closest non-future Go Live Date. Default value is Closest non-future Go Live Date or the only certificate in the list.
Go Live Date	This is the date when the certificate becomes valid and is ready for use by Sterling B2B Integrator. You cannot specify a Go Live Date that precedes the Not Before Date in the digital certificate. Using this parameter results in less system down time for both you and your trading partner when your certificates expire. The default value is the Not Before Date.
Not After Date	This is the date beyond which the certificate is no longer valid. Using this parameter results in less system down time for both you and your trading partner when your certificates expire. You cannot specify a Not After Date that succeeds the termination date in the certificate. The default value is Not After Date.

### **Notification and Retries Page**

Field	Description
Retry Interval (sec)	The interval (in seconds) after which messages will be requeued and an attempt will be made to resend them (after a send failure). Default is 300. Required.
Max Retries	The maximum number of retries that should be attempted after repeated send failures. Required. Default is 5.
Notify on Immediate Failures	Select this check box to be notified immediately after a send attempt fails. Default is selected (this functionality is turned on).
Notify on Final Failure	Select this check box to be notified after the maximum number of retries (Trading Partner Max Retries) have been exhausted. Default is selected (this functionality is turned on).

Field	Description
Store AS2	Stores your AS2 messages in the directories you choose. Required.
Messages in File System	AS2 messages are stored in the directories you choose or, by default are stored in:
	< <i>Path to Install_dir&gt;</i> /as2partner/ <organization identity<br="">Name&gt;/<partner identity="" name="">/Outbound</partner></organization>
	< <i>Path to Install_dir&gt;</i> /as2partner/ <organization identity<br="">Name&gt;/<partner identity="" name="">/Inbound</partner></organization>
	<path install_dir="" to="">/as2partner/<organization identity<br="">Name&gt;/<partner identity="" name="">/error</partner></organization></path>
	<b>Note:</b> When you are configuring a large number of AS2 partners or relationships using the AS2 wizard, we do not recommend that you choose the option to store messages for those partners or relationships in file system directories. Using file system directories with a large number of AS2 partners or relationships may cause Out Of Memory errors to occur due to the large number of schedules that are required. Instead, we recommend that you use the option to store messages in mailboxes since this avoids the need for additional schedules.
Store AS2 Messages in Mailbox	Store AS2 Messages in the mailbox. If you select this option, you are asked to select default or custom mailboxes. <b>Note:</b> You must have a Mailbox Edition license to access the Mailbox feature.
	AS2 messages are stored in the mailboxes you choose or, by default are stored in:
	/AS2/ <organization identity="" name="">/<partner identity="" name="">/Outbound</partner></organization>
	/AS2/ <organization identity="" name="">/<partner identity<br="">Name&gt;/Inbound</partner></organization>
Invoke Business Processes Directly	Invokes the configured business processes directly without sending the messages to a file system or mailbox.

## **Messages Page**

Field	Description
Payload Type	Payload is the document at the inner level of the message. The payload type describes the message format for transporting documents. Optional. Valid values are:
	<ul> <li>Plain Text – Payload is not signed and it is not encrypted.</li> </ul>
	<ul> <li>Signed Detached – Payload is signed with a detached signature, according to the EDIINT specifications.</li> </ul>
	<ul> <li>Encrypted – Payload is encrypted according to the EDIINT specifications.</li> </ul>
	<ul> <li>Signed Detached Encrypted – Payload is signed with a detached signature and then encrypted, according to the EDIINT specifications. This is the default.</li> </ul>

Field	Description
МІМЕ Туре	How to package the lowest level of payload content (the document at the inner level of a message) to be sent. MIME type helps to implement the EDIINT specification correctly, and provides some flexibility, because receiving programs might expect a specified MIME type and sub-type.
	The MIME type value is used as the Content-type value in the header of the payload section of the message. Optional.
	Valid values are:
	• Text – For XML or text
	• Application – For EDI, or any other type of data (this is the default)
	• Message
	• Image
	• Video
	• Audio
MIME Sub Type	How to package the lowest level of payload content (the document at the inner level of a message) to be sent.
	The MIME sub type value combined with the MIME type value creates the Content-type values in the header of the payload section of the message. For example, Content-Type: Application/EDI-X12, where Application is a MIME type and EDI-X12 is the MIME sub type.
	<ul><li>Optional. Valid values are:</li><li>EDI-X12 (this is the default)</li><li>EDIFACT</li></ul>
	• EDI-Consent
	Octet-stream – For any type of data
	• XML
	• Plain
Compress Data	Level to compress the payload. Optional. Valid values are:
	• None
	• Low
	• Medium
	• High
	• Default (this is the default)
Exchange Certificate	Name of the trading partner encryption certificate. Use the trusted certificate that this specific trading partner sent to you. You must check in the trading partner certificate prior to setting up the trading profile. Optional.
	<b>Note:</b> The Configure Certificates link enables you to open a common window displaying all certificates list that you may use. This window is used to select multiple certificates for the purpose of seamless transition from one certificate to the other when its validity expires and to select the policy for this certificate. The default policy is Closest non-future Go Live Date or the only certificate in the list.
Selection policy	This is a default policy which returns the certificate with the closest non-future Go Live Date. Default value is Closest non-future Go Live Date or the only certificate in the list.

Field	Description
Go Live Date	This is the date when the certificate becomes valid and is ready for use by Sterling B2B Integrator. Using this parameter results in less system down time for both you and your trading partner when your certificates expire. You cannot specify a Go Live Date that precedes the Not Before Date in the digital certificate. The default value is the Not Before Date.
Not After Date	This is the date beyond which the certificate is no longer valid. Using this parameter results in less system down time for both you and your trading partner when your certificates expire. You cannot specify a Not After Date that succeeds the termination date in the certificate. The default value is Not After Date.
Signing Certificate	Name of the signing certificate that your trading partner sent you. This certificate can be the same as the exchange certificate, if your trading partner uses the same certificate for both encryption and signing. Use the trusted certificate that this specific trading partner sent to you. You must check in the trading partner certificate prior to setting up the trading profile. Required. <b>Note:</b> The Configure Certificates link enables you to open a common window displaying all certificates list that you may use. This window is used to select multiple certificates for the purpose of seamless transition from one certificate to the other when its validity expires and to select the policy for this certificate. The default policy is Closest non-future Go Live Date or the only certificate in the list.
Selection policy	This is a default policy which returns the certificate with the closest non-future Go Live Date. Default value is Closest non-future Go Live Date or the only certificate in the list.
Go Live Date	This is the date when the certificate becomes valid and is ready for use by Sterling B2B Integrator. Using this parameter results in less system down time for both you and your trading partner when your certificates expire. You cannot specify a Go Live Date that precedes the Not Before Date in the digital certificate. The default value is the Not Before Date.
Not After Date	This is the date beyond which the certificate is no longer valid. Using this parameter results in less system down time for both you and your trading partner when your certificates expire. You cannot specify a Not After Date that succeeds the termination date in the certificate. The default value is Not After Date.
Encryption Algorithm	<ul> <li>If you selected a payload type requiring encryption, identifies the encryption algorithm to use.</li> <li>Triple DES 168 CBC with PKCS5 padding</li> <li>56-bit DES CBC with PKCS5 padding (default)</li> <li>128-bit RC2 CBC with PKCS5 padding</li> <li>40-bit RC2 CBC with PKCS5 padding</li> </ul>
Signing Algorithm	Algorithm to use to sign messages to the trading partner. Optional. Valid values are MD5 and SHA1 (Secure Hash Algorithm). The default is SHA1. This field is required if you select a payload type requiring a signature.
MDN Receipt	Whether you request Message Disposition Notifications (MDNs) for messages from your trading partner. Select the check box to view the MDN page. Clear the check box to disable viewing.

## **Receipt Page**

Field	Description
Receipt Signature Type	Type of signing algorithm requested on receipts. Valid values are None (default), MD5, and SHA1. Selection of a value other than None makes the EDIINT Message service request a signed Message Disposition Notification (MDN) when sending messages to the trading partner.
Receipt Timeout	Timeout value in seconds for receipt of expected MDNs. Required. Default is 300.
Wait for synchronous MDN process to complete before extracting data	When selected (and when the sender requests a synchronous MDN), defers the extraction of payload data to the file system or mailbox until the process for returning the MDN is complete. Optional. Default is not selected. <b>Note:</b> This option prevents duplicate data that results if a trading partner terminates the connection before receiving a requested MDN and then resends the data. If such data is resent using a different message identifier, the duplicate data cannot be detected unless you have duplicate detection enabled in the translator. <b>Note:</b> Deferred extraction (this parameter) must not be enabled if duplicate suppression is enabled in the EDIINT Pipeline service. Conversely, if deferred extraction (this parameter) is enabled, duplicate suppression must not be enabled in the EDIINT Pipeline service. These two features are mutually exclusive. <b>Note:</b> We recommend that you do not select this option if you are performing asynchronous MDN delivery because the performance penalties can be substantial. Use this option only for synchronous MDN delivery.
Delivery Mode	Delivery mode for MDNs. Optional. Valid values are:
	<ul> <li>Synchronous – Requests a synchronous receipt. This the default mode.</li> <li>Asynchronous HTTP – Request an asynchronous receipt over HTTP. If you select this option, you must put the complete URL identifying where the partner should send the receipt in the Receipt to Address field.</li> </ul>
	• Asynchronous HTTPS – Request an asynchronous receipt over HTTPS. If you select this option, you must put the complete URL identifying where the partner should send the receipt in the Receipt to Address field.
	• Asynchronous SMTP – Request an asynchronous receipt over SMTP. If you select this option, you must put the complete URL identifying where the partner should send the receipt in the Receipt to Address field.
Receipt to Address	If you are using EDIINT AS2 requesting asynchronous MDNs, you must type the complete URL where you want your trading partner to send the MDN. This may be your usual AS2 URL. Optional. <b>Note:</b> The Sterling B2B Integrator AS2 Edition includes a configured URL that runs the EDIINTParse business process on the base port + 33.
Setup additional Server Communication	Enables you to configure additional transport profiles for a trading partners that requests asynchronous MDNs over HTTP/HTTPS to a URL other than their standard AS2 message URL. Sterling B2B Integrator will not send receipts to URLs that have not been configured in the system. Select this option if your trading partner requests asynchronous HTTP/HTTPS receipts to a URL other than their primary AS2 URL. If you select this, repeat steps 5 through 7 again for each additional transport profile.

## **Collection Page**

Field	Description
Collection folder	Directory that contains outgoing (outbound) documents to your trading partners. Required. The default directory is <i>Install_dir/as2partner/</i> < <i>Organization_Identity_Name&gt;/</i> Partner_Identity_Name/outbound.
	Note:
	If the trading partner set up that is being created is with the organization that was existing before upgrade, then the collection directory structures will follow old convention which is <i>install_dir/as2partner/<partner_name>/</partner_name></i> outbound.
Extraction folder	Directory that contains incoming (inbound) documents from your trading partner. Required. The default directory is <i>install_dir/as2partner/</i> < <i>Organization_Identity_Name&gt;/<partner_identity_name>/</partner_identity_name></i> inbound.
	<b>Note:</b> If the trading partner set up that is being created is with the organization that was existing before upgrade, then the extraction directory structures will follow old convention which is <i>install_dir/as2partner/<partner_name>/</partner_name></i> inbound.
Error log folder	Directory to which errors are written for outgoing (outbound) documents that contain errors (for example, if the AS2 Edition cannot send a document because of an invalid IP address, the Sterling B2B Integrator AS2 Edition generates an error log and saves it in this folder). Required. The default directory is <i>install_dir/as2partner/</i> < <i>Organization_Identity_Name&gt;/<partner_identity_name>/</partner_identity_name></i> error.
	<b>Note:</b> If the trading partner set up that is being created is with the organization that was existing before upgrade, then the error log directory structures will follow old convention which is <i>install_dir/as2partner/<partner_name>/</partner_name></i> error.
Max files to Collect	The number of files that are picked up from the collection folder each time that the scheduled business process executes. Valid values range from 0 to 500. The default value is All. Optional.
Run service based on a timer every	Hours and minutes for which to run the File System adapter. The default time is five minutes. Required.
Use Message File Name to Save File	Attempts to use the filename specified for the document in the message received from the trading partner to save the file. If your trading partner sends multiple messages with the same included filenames, existing files with the same names (that is, files currently in the inbound directory) may be overwritten.
Include File Name in Message	Includes the name of the file in the message when building messages to send to a trading partner. Valid values are:
tunite in message	• None – Does not provide a file name in the message. This is the
	<ul> <li>default.</li> <li>File Name Only – Provides only the file name in the message.</li> <li>Full Path – Provides the full path to the file in the message.</li> </ul>
Note: Monitor the	document status by accessing the File Tracking page.

### **Mailbox Page**

Field	Description
Use Default Inbound/ Outbound Mailboxes	Whether to use the default inbound and outbound mailboxes. The default mailboxes are: /AS2/ <organization identity="" name="">/<partner identity="" name="">/Inbound and /AS2/<organization identity="" name="">/<partner identity="" name="">/Outbound</partner></organization></partner></organization>
Select Existing Parent Mailbox	If desired, select a parent mailbox where the mailbox you are creating will be embedded. If you do not want to embed the mailbox, select the slash (/). Creates two mailboxes with the format Parent Mailbox/Inbound and Parent Mailbox/Outbound, where Parent Mailbox is the mailbox you selected.
	<b>Note:</b> If a message has been received and there is a problem putting it in the inbound mailbox, the received message will be located in the dead letter mailbox.

### **Business Process Page**

Field	Description
Inbound Success Business Process	The Success business process that is invoked upon successful completion of inbound AS2 core processing. Required.
Inbound Error Business Process	The error business process that is invoked when there is an error in inbound AS2 core processing and AS2Inbound BP goes into on-fault. Optional.
Set Message File Name in Process Data	Whether to extract the inbound message file name to Process Data. Optional. The default is not selected (that is, do not extract the inbound message file name).
Include File Name In Message	Whether to include the file name in the message. Optional. The default is not selected (that is, do not include the file name in the message).

## **Editing AS2 Organization and Trading Partner Information**

You can edit the information for your AS2 organization or trading partner after you have entered it. This may be necessary, for example, if you are negotiating a contract and you or your trading partner wants to change some of the information.

**Note:** Ensure that you do not skip any screens when editing the AS2 partner profiles.

## Editing Organization Information About this task

To edit organization information:

### Procedure

1. From the File Tracking page, select Trading Partner.

**Note:** If you are not using the Sterling B2B Integrator AS2 Edition but are instead using Sterling B2B Integrator to send and receive AS2 message, from the **Administration** menu, select **Trading Partners** > **AS2**.

- 2. In the **Search Profiles by Identity** field, you can search several ways, which include:
  - Typing the Identity name. A list automatically appears with a list of profiles that match your entry.
  - Using a partial search by typing only a few characters. A list automatically appears with a list of profiles that match your entry.
  - Not typing anything in the field. This will list all the AS2 profiles in the system.
- 3. In the list, locate the organization you want to edit and click edit.
- 4. Update your organization information as necessary and click Next.
- 5. Click **Finish** to update the organization with your changes.

### Editing Trading Partner Information About this task

To edit trading partner information:

#### Procedure

1. From the File Tracking page, select Trading Partners.

**Note:** If you are not using the Sterling B2B Integrator AS2 Edition but are instead using Sterling B2B Integrator to send and receive AS2 message, from the **Administration** menu, select **Trading Partners** > **AS2**.

- 2. In the **Search Profiles by Identity** field, you can search several ways, which include:
  - Typing the Identity name. A list automatically appears with a list of profiles that match your entry.
  - Using a partial search by typing only a few characters. A list automatically appears with a list of profiles that match your entry
  - Not typing anything in the field. This will list all the AS2 profiles in the system.
- 3. Update your trading partner information as necessary and click Next.

**Note:** The identity name and AS2 identifier belong to the selected identity itself and thus any changes will affect all profiles belonging to that identity.

4. Click Finish to update the trading partner information with your changes

### Deleting Trading Partner Information About this task

You can delete the trading partner information when it becomes obsolete. This may be necessary, for example, if a trading partner is lost, or when two trading partners merge.

**Note:** You can delete only trading partner information and not organization information. The Sterling B2B Integrator AS2 Edition will not work without an organization definition.

To delete trading partner information:

### Procedure

1. From the File Tracking page, select Trading Partner.

**Note:** If you are not using the Sterling B2B Integrator AS2 Edition but are instead using Sterling B2B Integrator to send and receive AS2 message, from the **Administration** menu, select **Trading Partners** > **AS2**.

- 2. In the Trading Partners page, under List, next to List all configurations, click **Go!** In the AS2 Profiles page, a list of trading partners displays.
- **3.** In the list, locate name of the trading partner whose information you want to delete and click **delete**.
- 4. In the message prompting you to confirm your intent to delete, complete one of the following actions:
  - Click **OK** to continue the deletion.
  - Click **Cancel** to cancel the deletion.
- 5. In the Delete Resources page, review the information and click **Next**.

#### CAUTION:

When you click Delete, you completely remove this trading partner from the database. This action cannot be undone.

6. In the Confirm page, click **Delete** to complete the deletion.

# Editing the HTTP Server Adapter About this task

#### CAUTION:

Because of our continuing efforts to improve services and adapters to align with new technology and capabilities, the B2B HTTP Server adapter has entered the retirement process in Sterling B2B Integrator and is being replaced with the HTTP Server adapter.

To edit the HTTP Server adapter properties:

### Procedure

1. From the File Tracking page, select Trading Partners.

**Note:** If you are not using the Sterling B2B Integrator AS2 Edition, from the Administration menu, select **Deployment > Services**.

2. In the Trading Partner Configurations page, under Edit, next to Edit HTTP Server Adapter, click **Go**!

**Note:** If you are not using the Sterling B2B Integrator AS2 Edition, from the Services menu, select **Configuration**. Then from List by service type, select **HTTP Server Adapter** and click Go!.

- 3. In the Name page, update the fields as appropriate and click Next.
- 4. In the HTTP Connection Properties page, update the fields, as appropriate, and click **Next**.
- 5. In the HTTP Connection Properties: SSL Settings page, update the fields, as appropriate, and click **Next**.

Note: This page is only displayed if you set Use SSL to Must.

- 6. In the URI page, complete one of the following steps:
  - To add a new uniform resource identifier (URI), click add next to New URI.
  - To edit an existing uniform resource identifier (URI), click **edit** next to the URI you want to edit.
  - To delete an existing uniform resource identifier (URI), click delete next to the URI you want to delete and go to step 8. To take no action on the URIs page, click **Next**.
- 7. In the URIs: Specification page, update the fields and click Next.
- 8. In the Confirm page, complete the following steps:
  - a. Verify the changes you made to the HTTP Server adapter.
  - b. Click **Enable Service for Business Processes**, if you want to enable the service for use with business processes.
  - c. Click **Finish** to update the Sterling B2B Integrator AS2 Edition with your changes.

### Editing the HTTP Server Adapter Reference Name Page

Field	Description
Name	Name of this adapter. No action necessary.
Description	Meaningful description for this adapter, for reference purposes. Required.
Select a Group	<ul> <li>Specifies a group to associate with this configuration. Valid values are:</li> <li>None – no group association. This is the default.</li> <li>Create New Group – Creates a new group to associate with this configuration.</li> <li>Select Group – Select from the list an existing group to associate with this configuration.</li> </ul>

### **HTTP Connection Properties Page**

Field	Description
HTTP Listen Port	The port number on which the Perimeter server process listens for connections from external trading partner HTTP clients. If a local-mode Perimeter server is chosen, this listen port is bound on the local computer. Valid values are 1 through 65536. On many operating systems, only the root user can bind on ports 1 through 1024. Required.
Perimeter Server Name	List of available Perimeter servers, including local-mode Perimeter servers. Required. Default is local-mode Perimeter server.
Total Business Process queue depth threshold	Indicates the maximum number of queued business processes allowed for this adapter. If a value other than 0 is specified, the adapter will limit the number of business process requests put on the queue. If the SUM of business processes on all the queues is less than the queue threshold value, processing occurs normally. For example, a queue threshold of 500 will stop a request if queue 4 has 300 business processes, queue 6 has 200, and queue 7 has 3. If the threshold is exceeded, the adapter will return a Service Unavailable message, which will trigger senders to retry later. Valid value is any integer. 0 indicates no threshold.

Field	Description
Document Storage	<ul><li>Where to store the body of the request document. Valid values are:</li><li>System Default</li><li>Database</li><li>File System</li></ul>
	Default is System Default. Required. <b>Note:</b> For more information about document storage types, see Managing Services and Adapters.
User Authentication Required	<ul> <li>Whether to enable HTTP basic authentication. Valid values are:</li> <li>Yes - A connection must pass HTTP basic authentication to be serviced.</li> <li>No - HTTP basic authentication is not to be used.</li> </ul>
Use SSL	<ul> <li>Default is Yes. Required.</li> <li>Whether SSL Server authentication must be enabled or not. Valid values are: <ul> <li>Must - SSL is enabled</li> <li>None - SSL is disabled</li> </ul> </li> <li>Default is Must. Required.</li> <li>Note: User Authentication without SSL will result in a weak security configuration.</li> </ul>

# **SSL** Information

Field	Description
System Certificate	Select a system certificate from the list. This is the private key that the SSL server will use. Required if Use SSL is Must.
Cipher Strength	Specifies the strength of the algorithms (cipher suites) used to encrypt data. Valid values are:
	• STRONG - Required if Use SSL is Must
	• ALL - All cipher strengths are supported
	• WEAK - Often required for international trade, because government regulations prohibit STRONG encryption from being exported
	Default is STRONG. Required if SSL is checked.
CA Certificate	Move one or more CA Certificates to the use column. These are the digital security certificates that the SSL server will use to authenticate the client. Optional.

# **Specifications Page**

Field	Description
URI	Uniform resource identifier representing incoming requests. Required.
Launch Business Process or WAR	Corresponding business process or a WAR file associated with the URI. Required.
Enter WAR File Path	Specifies WAR file to be launched by URI. Valid value is any accessible path. Required if WAR File is selected for Launch BP or WAR File field.

Field	Description
Business Process	Specifies business process to be launched by URI. Select from the list of available business processes. Required if BP is selected for Launch BP or WAR File field.
Send Raw Messages	Whether the raw message is presented to the business process. The term raw denotes that the primary document associated with the business process contains HTTP headers. Valid values are:
	• Yes - Both the HTTP headers and the entity body are copied to the body of the business process document before the business process is started. This setting is required for EDIINT AS2, RosettaNet, and ebXML.
	<ul> <li>No - Just the HTTP entity body is copied to the body buffer of the business process document. The headers are not available to the business process.</li> </ul>
	Default is No. Required if BP is selected for Launch BP or WAR File field. Note: Any business process that uses the EDIINT Message service requires raw messages.
Run BP in sync mode	<ul> <li>Whether to invoke Web services in synchronous mode. Valid values are:</li> <li>Yes - HTTP Server Adapter bootstraps the BP in synchronous mode. HTTP Server Adapter executes the BP in the same thread.</li> <li>No - HTTP Server Adapter bootstraps the BP asynchronous mode.</li> </ul>
	Default is No. Required if BP is to be run in synchronous mode.

# **Chapter 4. Configuring AS2 Multiple Organizations**

## **Configuring AS2 Multiple Organizations**

Some businesses have a need to create multiple organizations that they need to represent individually. The AS2 wizard was originally designed to support the creation of only one organization, but with the purchase of a Multi-Org license, users are now able to create more than one organization in the AS2 wizard. Users without a Multi-Org license will use the default AS2 wizard where only one organization can be created; however, there is no restriction on the number of Trading Partners that can be created.

Configuring the AS2 wizard with a Multi-Org license is a 3 step process that sets a working communication channel between an organization and its partner (Steps 1 and 2 are interchangeable):

- 1. Create an Organization profile
- 2. Create a Trading Partner profile
- 3. Create a Relationship between the two profiles from step 1 and 2

For additional information on configuring AS2 to support multiple organizations see *Creating AS2 Multiple Organization*. For additional information on configuring AS2 organizations, see *Configuring AS2 Organization and Trading Partner Information*.

### Using an Existing Identity in the AS2 Multiple Organization Wizard

Users can now use an existing Identity to create a new organization or partner profile. An Identity is created in the Advanced Trading Partner Profile and describes the trading partner and contains information referenced when a business process involving the trading partner is run. A trading partner can have more than one Identity to represent the different ways it does business.

Separate profiles are used for organization information and partner information, each with their own delivery channel, doc exchange, transport, etc. A given identity can be used to create any number of organization and partner profiles. For additional information about Identity, see *Advanced Trading Partner Profile*.

If the user edits the organization or partner profile and modifies the Identity name, then:

- · All the dependent profile objects will get renamed accordingly
- · The filesystem directories will remain unchanged
- The mailbox directories will remain unchanged

## **Before You Begin**

Before you configure information about your organization and trading partners:

- Check in digital certificates for the secure transport of data.
- Collect the following information about your organization and trading partners:
  - Name and address information
  - AS2 identifiers
  - The following certificates, as appropriate:

- System certificates
- SSL server certificates
- End-user certificates
- IP addresses, port numbers, and URLs
- Agreed on algorithms for signing and encryption
- Passwords

# **Creating AS2 Multiple Organization**

### About this task

To create your organization information:

### Procedure

- 1. From the Administration menu, select Trading Partner > AS2.
- 2. In the Trading Partners Configurations page, in the Create New section next to New AS2 partner or organization, click **Go**!
- **3**. In the AS2 Configuration Type page, select **Organization** and click **Next**. The New Identity page appears.
- 4. On the New Identity page you can either use an existing Identity or create a new one:
  - a. To use an existing identity, select **Use Existing Identity** and begin typing the name of the identity. A list automatically appears that match your entry. This list contains all the identities available in your system, some of which might not be associated with any of the AS2 profiles. Make a selection and click **Next**.
  - b. To create a new Identity, select Create a New Identity and click Next.
- 5. In the Organization Details page, complete the fields, as appropriate, and click **Next**:
- 6. In the Confirm page, verify the information and click Finish.
- 7. To edit information about your organization, see *Editing AS2 Organization* and Trading Partner Information and *AS2 Relationships*.

### Creating an AS2 Multiple Organization Reference Organization Details Page

Field	Description
Identity Name	Name of the identity used for your organization. You can not enter spaces in this field. Required. <b>Note:</b> If the option of using an existing identity is selected, this field is populated automatically.
AS2 Identifier	AS2 identifier of your organization. It could be a DUNS number, EDI interchange ID, e-mail address, or another unique string. Required. <b>Note:</b> If the option of using an existing identity is selected, this field is populated automatically.
Profile Name	Name of the organization profile. Required.

Field	Description
Exchange Certificate	Name of certificate that your organization is using for decryption. Required.
	<b>Note:</b> The Configure Certificates link enables you to open a common window displaying all certificates list that you may use. This window is used to select multiple certificates for the purpose of seamless transition from one certificate to the other when its validity expires and to select the policy for this certificate. The default policy is Closest non-future Go Live Date or the only certificate in the list.
Selection policy	This is a default policy which returns the certificate with the closest non-future Go Live Date. Default value is Closest non-future Go Live Date or the only certificate in the list.
Go Live Date	This is the date when the certificate becomes valid and is ready for use by Sterling B2B Integrator. You cannot specify a Go Live Date that precedes the Not Before Date in the digital certificate. Using this parameter results in less system down time for both you and your trading partner when your certificates expire. The default value is the Not Before Date.
Not After Date	This is the date beyond which the certificate is no longer valid. Using this parameter results in less system down time for both you and your trading partner when your certificates expire. You cannot specify a Not After Date that succeeds the termination date in the certificate. The default value is Not After Date.
Signing Certificate	Name of the certificate that your organization is using to sign messages. This certificate can be the same as the certificate that you are using for key exchange. Required.
	<b>Note:</b> The Configure Certificates link enables you to open a common window displaying all certificates list that you may use. This window is used to select multiple certificates for the purpose of seamless transition from one certificate to the other when its validity expires and to select the policy for this certificate. The default policy is Closest non-future Go Live Date or the only certificate in the list.
Selection policy	This is a default policy which returns the certificate with the closest non-future Go Live Date. Default value is Closest non-future Go Live Date or the only certificate in the list.
Go Live Date	This is the date when the certificate becomes valid and is ready for use by Sterling B2B Integrator. You cannot specify a Go Live Date that precedes the Not Before Date in the digital certificate. Using this parameter results in less system down time for both you and your trading partner when your certificates expire. The default value is the Not Before Date.
Not After Date	This is the date beyond which the certificate is no longer valid. Using this parameter results in less system down time for both you and your trading partner when your certificates expire. You cannot specify a Not After Date that succeeds the termination date in the certificate. The default value is Not After Date.
E-mail Address (optional)	The e-mail address of your organization. Optional. <b>Note:</b> You must provide an e-mail address if you want to receive e-mail notifications, because the SMTP client does not perform a record lookup to retrieve the e-mail address.

Field	Description
E-mail Host (optional)	The host name (server) for your organization's e-mail. Optional.
E-mail Port	The port for the e-mail server. Optional. Default is 25.

## **Creating an AS2 Trading Partner for Multiple Organizations**

### About this task

For additional information about creating an AS2 Trading Partner, see *Creating an* AS2 Trading Partner.

To create a trading partner:

### Procedure

- 1. From the Administration menu, select **Trading Partner > AS2**.
- 2. In the Trading Partners Configurations page, in the Create New section next to New AS2 partner or organization, click **Go!**
- **3**. In the AS2 Configuration Type page, select **Partner** and click **Next**. The New Identity page appears.
- 4. In the New Identity page you can either use an existing Identity or create a new one:
  - a. To use an existing identity, select **Use Existing Identity** and begin typing the name of the identity. A list automatically appears that match your entry. Make a selection and click **Next**.
  - b. To create a new Identity, select Create a New Identity and click Next.
- 5. In the Identification page, complete the fields, as appropriate, and click Next.
- 6. In the HTTP Communication page, complete the fields, as appropriate, and click **Next**.
- 7. In the Messages page, complete the fields as appropriate and click Next.
- 8. Complete one of the following steps:
  - If you did not select MDN Receipt, go to step 10.
  - If you selected MDN Receipt, in the Receipt page, complete the fields, as appropriate, and click **Next**.
- **9**. If you need to set up an additional URL for MDNs (if a trading partner wants MDNs sent to a URL that differs from the main AS2 URL), select Setup additional Server Communications and add the URL.

**Note:** For Sterling B2B Integrator to send AS2 messages, you must have a trading partner profile set up that includes a transport listing any URL to which you need to send AS2 messages (including MDNs). If you need to send asynchronous MDNs to a URL that is different than the trading partner's main URL, you must configure an additional profile (belonging to that trading partner's identity) with the appropriate information.

**10**. On the Confirm page, verify the information and click **Finish** to update AS2 with your trading partner information.

# Creating an AS2 Multiple Organization Trading Partner Reference

# **Identification Page**

Field	Description
Identity Name	Name of identity used for your trading partner. Do not enter spaces in this field. Required.
	<b>Note:</b> If the option of using an existing identity is selected, this field is populated automatically.
AS2 Identifier	AS2 identifier of your trading partner. Required.
	<b>Note:</b> If the option of using an existing identity is selected, this field is populated automatically.

# **HTTP Communication Page**

Field	Description
Profile Name	Name of your trading partner profile. Required.
HTTP Client Adapter	The name of the HTTP Client Adapter instance to use when sending outbound AS2 messages or asynchronous MDNs. Required.
End Point	HTTP address or URL to post AS2 messages to for this specific trading partner. For AS2, the end point must be the complete URL to send messages. Contact your trading partner for the value to use in this field. Required.
	<b>Note:</b> The Sterling B2B Integrator AS2 Edition includes a configured URL that runs the EDIINTParse business process on the base port + 33.
User ID	User name for HTTP basic authentication, if required to log in to the trading partner system. Optional.
Password	Password that is associated with the User ID identified in the previous field for HTTP basic authentication, if required to log in to the trading partner system. Optional.
Response Timeout (seconds)	Number of seconds the HTTP client adapter waits for a response from the trading partner's server before the system times out. Valid value is number of seconds. Required.
	<b>Note:</b> To avoid timing out, set both the Response Timeout and Socket Timeout fields to the same value and ensure that the value is greater than 180 seconds. This ensures the socket remains open for a reasonable amount of time, so it can receive responses.
Firewall Proxy	IP address, port number, login ID, and password of your proxy server if you need to use a proxy server to connect outbound to this trading partner. Separate values with a comma. If used, you must specify both the login ID and password. Optional.
	<b>Note:</b> If you connect through a proxy server, but authentication is not required, the IP address and port number routes the outbound message through the specified proxy server.

Field	Description
Firewall Connect Count	Number of attempts that Sterling B2B Integrator can make to connect to the proxy server before timing out. Optional. The value of Firewall Connect count should be less than 50.
	<b>Note:</b> If the proxy server is used heavily, set the Firewall Connect Count to a high number to reduce the number of time outs.
Socket Timeout (seconds)	Number of seconds that the socket connection can idle before timing out. Valid value is any positive number that is optimal for your system. Optional.
	<b>Note:</b> To avoid timing out, set both the Response Timeout and Socket Timeout fields to the same value and ensure that the value is greater than 180 seconds.
SSL	Whether Secure Sockets Layer (SSL) should be active. SSL is a negotiation between the client and the server that establishes the method of encrypting and decrypting data transmissions. Optional. Valid values are:
	• None – SSL is not used (default).
	• Optional – SSL encryption.
	• Must – Uses this protocol configured for SSL encryption.
	If you select Optional or Must, the asset protection key must enable SSL for the appropriate protocol.
Key Certificate Passphrase	Type a passphrase to be used with this key certificate. Required only if a key certificate is being used for SSL client side authentication and if the SSL parameter is set to Optional or Must.
Cipher Strength	Strength of the algorithms used to encrypt data. Only accepts supported algorithm. Required. Valid values are
	• ALL – Includes all cipher strengths (weak and strong as listed below).
	<ul> <li>WEAK – Required for international e-commerce if government regulations prohibit STRONG encryption from being exported. Includes the following strengths:</li> </ul>
	– Export level RSA 512-bit with 40-bit RC4 and MD5
	- Export level RSA 512-bit with 40-bit DES and SHA1
	• STRONG – This is the default. Required if SSL option is anything other than None. Includes the following strengths:
	– RSA with 128-bit RC4 with SHA1
	– RSA with 128-bit AES with SHA1
	– RSA with 256-bit AES with SHA1
	– RSA with 3DES with SHA1
	– RSA with 128-bit RC4 with MD5
	– RSA with DES with SHA1
	:
	<b>Note:</b> If you are using an older or retired adapter, the 128-bit and 256-bit AES ciphers might not be available. For more information on the phases of the Retiring process, see <i>Retiring and Removed Services and Adapters</i> .

Field	Description
Key Certificate (System Store)	A combination of ASCII-encoded certificate and ASCII-encoded PKCS5 encrypted key. Select a key certificate. Optional.
	<b>Note:</b> You must have already checked the certificate in to Sterling B2B Integrator for it to be displayed in this list. The Configure Certificates link enables you to open a common window displaying all certificates list that you may use. This window is used to select multiple certificates for the purpose of seamless transition from one certificate to the other when its validity expires and to select the policy for this certificate. The default policy is Closest non-future Go Live Date or the only certificate in the list.
Selection policy	This is a default policy which returns the certificate with the closest non-future Go Live Date. Default value is Closest non-future Go Live Date or the only certificate in the list.
Go Live Date	This is the date when the certificate becomes valid and is ready for use by Sterling B2B Integrator. You cannot specify a Go Live Date that precedes the Not Before Date in the digital certificate. Using this parameter results in less system down time for both you and your trading partner when your certificates expire. The default value is the Not Before Date.
Not After Date	This is the date beyond which the certificate is no longer valid. Using this parameter results in less system down time for both you and your trading partner when your certificates expire. You cannot specify a Not After Date that succeeds the termination date in the certificate. The default value is Not After Date.
CA Certificates	Certificate used to validate SSL server authentication of the trading partner. Required if you selected Must or Optional in the SSL field.
	<b>Note:</b> The Configure Certificates link enables you to open a common window displaying all certificates list that you may use. This window is used to select multiple certificates for the purpose of seamless transition from one certificate to the other when its validity expires and to select the policy for this certificate. The default policy is Closest non-future Go Live Date or the only certificate in the list.
Selection policy	This is a default policy which returns the certificate with the closest non-future Go Live Date. Default value is Closest non-future Go Live Date or the only certificate in the list.
Go Live Date	This is the date when the certificate becomes valid and is ready for use by Sterling B2B Integrator. You cannot specify a Go Live Date that precedes the Not Before Date in the digital certificate. Using this parameter results in less system down time for both you and your trading partner when your certificates expire. The default value is the Not Before Date.
Not After Date	This is the date beyond which the certificate is no longer valid. Using this parameter results in less system down time for both you and your trading partner when your certificates expire. You cannot specify a Not After Date that succeeds the termination date in the certificate. The default value is Not After Date.

# Notification and Retries Page

Field	Description
Retry Interval (sec)	The interval (in seconds) after which messages will be requeued and an attempt will be made to resend them (after a send failure). Default is 300. Required.
Max Retries	The maximum number of retries that should be attempted after repeated send failures. Required. Default is 5.
Notify on Immediate Failures	Select this check box to be notified immediately after a send attempt fails. Default is selected (this functionality is turned on).
Notify on Final Failure	Select this check box to be notified after the maximum number of retries (Trading Partner Max Retries) have been exhausted. Default is selected (this functionality is turned on).
Store AS2	Stores your AS2 messages in the directories you choose. Required.
Messages in File System	AS2 messages are stored in the directories you choose or, by default are stored in:
	<path install_dir="" to="">/as2partner/<organization identity<br="">Name&gt;/<partner identity="" name="">/Outbound</partner></organization></path>
	< <i>Path to Install_dir&gt;</i> /as2partner/ <organization identity<br="">Name&gt;/<partner identity="" name="">/Inbound</partner></organization>
	<path install_dir="" to="">/as2partner/<organization identity<br="">Name&gt;/<partner identity="" name="">/error</partner></organization></path>
	<b>Note:</b> When you are configuring a large number of AS2 partners or relationships using the AS2 wizard, we do not recommend that you choose the option to store messages for those partners or relationships in file system directories. Using file system directories with a large number of AS2 partners or relationships may cause Out Of Memory errors to occur due to the large number of schedules that are required. Instead, we recommend that you use the option to store messages in mailboxes since this avoids the need for additional schedules.
Store AS2 Messages in Mailbox	Store AS2 Messages in the mailbox. If you select this option, you are asked to select default or custom mailboxes. <b>Note:</b> You must have a Mailbox Edition license to access the Mailbox feature.
	AS2 messages are stored in the mailboxes you choose or, by default are stored in:
	/AS2/ <organization identity="" name="">/<partner identity="" name="">/Outbound</partner></organization>
	/AS2/ <organization identity="" name="">/<partner identity="" name="">/Inbound</partner></organization>
Invoke Business Processes Directly	Invokes the configured business processes directly without sending the messages to a file system or mailbox.

# **Messages Page**

Field	Description
Payload Type	<ul> <li>Payload is the document at the inner level of the message. The payload type describes the message format for transporting documents. Optional. Valid values are:</li> <li>Plain Text – Payload is not signed and it is not encrypted.</li> <li>Signed Detached – Payload is signed with a detached signature, according to the EDIINT specifications.</li> <li>Encrypted – Payload is encrypted according to the EDIINT specifications.</li> <li>Signed Detached Encrypted – Payload is signed with a detached signature and then encrypted according to the EDIINT specifications.</li> </ul>
	signature and then encrypted, according to the EDIINT specifications. This is the default.
MIME Type	How to package the lowest level of payload content (the document at the inner level of a message) to be sent. MIME type helps to implement the EDIINT specification correctly, and provides some flexibility, because receiving programs might expect a specified MIME type and sub-type.
	The MIME type value is used as the Content-type value in the header of the payload section of the message. Optional.
	Valid values are:
	• Text – For XML or text
	• Application – For EDI, or any other type of data (this is the default)
	• Message
	• Image
	• Video
	• Audio
MIME Sub Type	How to package the lowest level of payload content (the document at the inner level of a message) to be sent.
	The MIME sub type value combined with the MIME type value creates the Content-type values in the header of the payload section of the message. For example, Content-Type: Application/EDI-X12, where Application is a MIME type and EDI-X12 is the MIME sub type.
	Optional. Valid values are:
	• EDI-X12 (this is the default)
	• EDIFACT
	• EDI-Consent
	Octet-stream – For any type of data
	• XML
	• Plain
Compress Data	Level to compress the payload. Optional. Valid values are:
*	• None
	• Low
	• Medium
	• High
	• Default (this is the default)

Field	Description
Exchange Certificate	Name of the trading partner encryption certificate. Use the trusted certificate that this specific trading partner sent to you. You must check in the trading partner certificate prior to setting up the trading profile. Optional.
	<b>Note:</b> The Configure Certificates link enables you to open a common window displaying all certificates list that you may use. This window is used to select multiple certificates for the purpose of seamless transition from one certificate to the other when its validity expires and to select the policy for this certificate. The default policy is Closest non-future Go Live Date or the only certificate in the list.
Selection policy	This is a default policy which returns the certificate with the closest non-future Go Live Date. Default value is Closest non-future Go Live Date or the only certificate in the list.
Go Live Date	This is the date when the certificate becomes valid and is ready for use by Sterling B2B Integrator. Using this parameter results in less system down time for both you and your trading partner when your certificates expire. You cannot specify a Go Live Date that precedes the Not Before Date in the digital certificate. The default value is the Not Before Date.
Not After Date	This is the date beyond which the certificate is no longer valid. Using this parameter results in less system down time for both you and your trading partner when your certificates expire. You cannot specify a Not After Date that succeeds the termination date in the certificate. The default value is Not After Date.
Signing Certificate	Name of the signing certificate that your trading partner sent you. This certificate can be the same as the exchange certificate, if your trading partner uses the same certificate for both encryption and signing. Use the trusted certificate that this specific trading partner sent to you. You must check in the trading partner certificate prior to setting up the trading profile. Required.
	<b>Note:</b> The Configure Certificates link enables you to open a common window displaying all certificates list that you may use. This window is used to select multiple certificates for the purpose of seamless transition from one certificate to the other when its validity expires and to select the policy for this certificate. The default policy is Closest non-future Go Live Date or the only certificate in the list.
Selection policy	This is a default policy which returns the certificate with the closest non-future Go Live Date. Default value is Closest non-future Go Live Date or the only certificate in the list.
Go Live Date	This is the date when the certificate becomes valid and is ready for use by Sterling B2B Integrator. Using this parameter results in less system down time for both you and your trading partner when your certificates expire. You cannot specify a Go Live Date that precedes the Not Before Date in the digital certificate. The default value is the Not Before Date.
Not After Date	This is the date beyond which the certificate is no longer valid. Using this parameter results in less system down time for both you and your trading partner when your certificates expire. You cannot specify a Not After Date that succeeds the termination date in the certificate. The default value is Not After Date.

Field	Description
Encryption Algorithm	<ul> <li>If you selected a payload type requiring encryption, identifies the encryption algorithm to use.</li> <li>Triple DES 168 CBC with PKCS5 padding</li> <li>56-bit DES CBC with PKCS5 padding (default)</li> <li>128-bit RC2 CBC with PKCS5 padding</li> <li>40-bit RC2 CBC with PKCS5 padding</li> </ul>
Signing Algorithm	Algorithm to use to sign messages to the trading partner. Optional. Valid values are MD5 and SHA1 (Secure Hash Algorithm). The default is SHA1. This field is required if you select a payload type requiring a signature.
MDN Receipt	Whether you request Message Disposition Notifications (MDNs) for messages from your trading partner. Select the check box to view the MDN page. Clear the check box to disable viewing.

# **Receipt Page**

Field	Description
Receipt Signature Type	Type of signing algorithm requested on receipts. Valid values are None (default), MD5, and SHA1. Selection of a value other than None makes the EDIINT Message service request a signed Message Disposition Notification (MDN) when sending messages to the trading partner.
Receipt Timeout	Timeout value in seconds for receipt of expected MDNs. Required. Default is 300.
Wait for synchronous MDN process to complete before extracting data	When selected (and when the sender requests a synchronous MDN), defers the extraction of payload data to the file system or mailbox until the process for returning the MDN is complete. Optional. Default is not selected.
	<b>CAUTION:</b> This option prevents duplicate data that results if a trading partner terminates the connection before receiving a requested MDN and then resends the data. If such data is resent using a different message identifier, the duplicate data cannot be detected unless you have duplicate detection enabled in the translator.
	<b>Note:</b> Deferred extraction (this parameter) must not be enabled if duplicate suppression is enabled in the EDIINT Pipeline service. Conversely, if deferred extraction (this parameter) is enabled, duplicate suppression must not be enabled in the EDIINT Pipeline service. These two features are mutually exclusive.
	<b>Note:</b> We recommend that you do not select this option if you are performing asynchronous MDN delivery because the performance penalties can be substantial. Use this option only for synchronous MDN delivery.

Field	Description
Delivery Mode	<ul> <li>Delivery mode for MDNs. Optional. Valid values are:</li> <li>Synchronous – Requests a synchronous receipt. This the default mode.</li> </ul>
	• Asynchronous HTTP – Request an asynchronous receipt over HTTP. If you select this option, you must put the complete URL identifying where the partner should send the receipt in the Receipt to Address field.
	• Asynchronous HTTPS – Request an asynchronous receipt over HTTPS. If you select this option, you must put the complete URL identifying where the partner should send the receipt in the Receipt to Address field.
	• Asynchronous SMTP – Request an asynchronous receipt over SMTP. If you select this option, you must put the complete URL identifying where the partner should send the receipt in the Receipt to Address field.
Receipt to Address	If you are using EDIINT AS2 requesting asynchronous MDNs, you must type the complete URL where you want your trading partner to send the MDN. This may be your usual AS2 URL. Optional.
	<b>Note:</b> The Sterling B2B Integrator AS2 Edition includes a configured URL that runs the EDIINTParse business process on the base port + 33.
Setup additional Server Communication	Enables you to configure additional transport profiles for a trading partners that requests asynchronous MDNs over HTTP/HTTPS to a URL other than their standard AS2 message URL. Sterling B2B Integrator will not send receipts to URLs that have not been configured in the system. Select this option if your trading partner requests asynchronous HTTP/HTTPS receipts to a URL other than their primary AS2 URL. If you select this, repeat steps 5 through 7 again for each additional transport profile.

### **Business Process Page**

Field	Description
Inbound Success Business Process	The Success business process that is invoked upon successful completion of inbound AS2 core processing. Required.
Inbound Error Business Process	The error business process that is invoked when there is an error in inbound AS2 core processing and AS2Inbound BP goes into on-fault. Optional.
Set Message File Name in Process Data	Whether to extract the inbound message file name to Process Data. Optional. The default is not selected (that is, do not extract the inbound message file name).
Include File Name In Message	Whether to include the file name in the message. Optional. The default is not selected (that is, do not include the file name in the message).

# Testing the AS2 Profile About this task

You can test the AS2 profile by going to the Trading Partners Configuration screen in the Admin Console and selecting **Test Now** next to the profile you want to verify. The TestNow option enables you to verify that a new or updated trading partner profile is working correctly. For additional information about TestNow, see Using the AS2 and HTTP TestNow Feature

# Creating an AS2 Relationship for Multiple Organizations About this task

A new concept of Relationship has also been introduced for users with a Multi-Org license while using the AS2 wizard. A Relationship is an entity where users define the rules explicitly needed for a message transfer between two parties: organization and partner. From the main page of AS2 wizard, relationships can be either created or searched. Relationships do not have names, they are a mapped combination of the names of the organization and partner.

There can be multiple organizations/partner profiles for a given identity; however, the number of relationships between a given pair of identities and AS2 identifiers is limited to only one. When creating or editing a relationship you will have to choose whether to use filesystem or mailbox for storing the messages, or to send the files directly. Based on the choice the user will have to provide the details of filesystem or mailbox, or direct processing.

To create a relationship:

### Procedure

- 1. From the Administration menu, select **Trading Partner > AS2**.
- 2. In the Trading Partners Configurations page, in the Create New section next to AS2 trading relationship, click **Go**!
- **3.** In the AS2 Relationship page, complete the fields, as appropriate, and click **Next**.
- 4. In the Notifications and Retries page, complete the fields, as appropriate, and click **Next**.

**Note:** These notification options enable you to configure, on a per trading partner basis, the sending of notifications with either each failed send attempt or when all retries have been exhausted.

5. In the Collection page, complete the fields, as appropriate, and click Next.

**Note:** The folders identified in this step are created when an AS2 relationship is saved and are found in the *install\_dir/as2partner/<Organization Identity Name>/<Partner Identity Name>* Prior to an upgrade, the collection and extraction directory structures follow this convention: *install\_dir/as2partner/<Partner Identity Name>*. By default, an inbound, outbound, and an error folder is created. If you create a relationship using storage type as a mailbox and an error appears indicating that Mailboxes are in use and a relationship cannot be created, then delete the existing mailbox directory and proceed with creating the new relationship.

When you choose a mailbox, you can select either the default or customized mailboxes.

6. In the Confirm page, verify the information and click **Finish** to update AS2 with your trading partner information.

# Creating an AS2 Relationship for Multiple Organizations Reference

## AS2 Relationship Page

Field	Description
Organization	Name of the organization. Required.
	<b>Note:</b> As you type, a list appears with matching entries. Double-click an entry to select it.
Partner	Name of the trading partner. Required.
	<b>Note:</b> As you type, a list appears with matching entries. Double-click an entry to select it.

## **Notifications and Retries Page**

Field	Description
Retry Interval (sec)	The interval (in seconds) after which messages will be requeued and an attempt will be made to resend them (after a send failure). Default is 300. Required.
Max Retries	The maximum number of retries that should be attempted after repeated send failures. Required. Default is 5.
Notify on Immediate Failures	Select this check box to be notified immediately after a send attempt fails. Default is selected (this functionality is turned on).
Notify on Final Failure	Select this check box to be notified after the maximum number of retries (Trading Partner Max Retries) have been exhausted. Default is selected (this functionality is turned on).
Wait For Synchronous MDN Process To Complete Before Extracting Data:	Select this check box to wait for the synchronous MDN process to complete before extraction of data.
Store AS2 Messages in File System	Stores your AS2 messages in the directories you choose in this procedure. Required.
	AS2 messages are stored in the directories you choose or, by default are stored in:
	<path install_dir="" to="">/as2partner/<organization identity<br="">Name&gt;/<partner identity="" name="">/outbound</partner></organization></path>
	<path install_dir="" to="">/as2partner/<organization identity<br="">Name&gt;/<partner identity="" name="">/inbound</partner></organization></path>
	< <i>Path to Install_dir&gt;</i> /as2partner/ <organization identity<br="">Name&gt;/<partner identity="" name="">/error</partner></organization>
	<b>Note:</b> If the relationship that is being created is with the organization that was existing before upgrade then the collection and extraction directory structures will follow old convention. For example, for the collection folder, the directory structure would be as follows: <i>Path to Install_dir</i> /as2partner/ <i>Partner Identity Name</i> /Outbound

Field	Description
Store AS2 Messages in Mailbox	Store AS2 Messages in Mailbox. <b>Note:</b> You must have a Mailbox Edition license to access the Mailbox feature.
	AS2 messages are stored in the mailboxes you choose or, by default are stored in:
	AS2/ <organization identity="" name="">/<partner identity<br="">Name&gt;/Outbound</partner></organization>
	AS2/ <organization identity="" name="">/<partner identity<br="">Name&gt;/Inbound</partner></organization>
Invoke Business Processes Directly	AS2/ <organization identity="" name="">/<partner identity="" name="">/error Invokes the configured business processes directly without sending the messages to a file system or mailbox.</partner></organization>

Directory that contains outgoing (outbound) documents to your trading artners. Required. The default directory is <i>install_dir/</i> as2partner/ <i>Organization Identity Name&gt;/<partner identity="" name="">/</partner></i> outbound. Directory that contains incoming (inbound) documents from your rading partner. Required. The default directory is <i>install_dir/</i> as2partner/ <i>Organization Identity Name&gt;/<partner identity="" name="">/</partner></i> inbound. Directory to which errors are written for outgoing (outbound) ocuments that contain errors (for example, if the AS2 Edition cannot end a document because of an invalid IP address, the Sterling B2B integrator AS2 Edition generates an error log and saves it in this folder).
rading partner. Required. The default directory is <i>install_dir/as2partner/Organization Identity Name&gt;/<partner identity="" name="">/</partner></i> inbound.
ocuments that contain errors (for example, if the AS2 Edition cannot end a document because of an invalid IP address, the Sterling B2B
dequired. The default directory is <i>install_dir/as2partner/<organization< i=""> dentity Name&gt;/<partner identity="" name="">/error.</partner></organization<></i>
he number of files that are picked up from the collection folder each me that the scheduled business process executes. Valid values range rom 0 to 500. The default value is All. Optional.
Iours and minutes for which to run the File System adapter. The efault time is five minutes. Required.
Attempts to use the filename specified for the document in the message ecceived from the trading partner to save the file. If your trading partner ends multiple messages with the same included filenames, existing files with the same names (that is, files currently in the inbound directory) hay be overwritten.
ncludes the name of the file in the message when building messages to end to a trading partner. Valid values are: None – Does not provide a file name in the message. This is the default. File Name Only – Provides only the file name in the message. Full Path – Provides the full path to the file in the message.
le hn cc-lc e t e c t e e n c e n c e

# **Collection Page**

### **Mailbox Page**

Field	Description
Use Default Inbound/ Outbound Mailboxes	Whether to use the default inbound and outbound mailboxes. The default mailboxes are: /AS2/ <organization identity="" name="">/<partner identity="" name="">/Inbound and /AS2/<organization identity="" name="">/<partner identity="" name="">/Outbound</partner></organization></partner></organization>
Select Existing Parent Mailbox	If desired, select a parent mailbox where the mailbox you are creating will be embedded. If you do not want to embed the mailbox, select the slash (/). Creates two mailboxes with the format Parent Mailbox/Inbound and Parent Mailbox/Outbound, where Parent Mailbox is the mailbox you selected.
	Note: All failed messages are placed in the Dead Letter Mailbox.

### **Business Process Page**

Field	Description
Inbound Success Business Process	The Success business process that is invoked upon successful completion of inbound AS2 core processing. Required.
Inbound Error Business Process	The error business process that is invoked when there is an error in inbound AS2 core processing and AS2Inbound BP goes into on-fault. Optional.
Set Message File Name in Process Data	Whether to extract the inbound message file name to Process Data. Optional. The default is not selected (that is, do not extract the inbound message file name).
Include File Name In Message	Whether to include the file name in the message. Optional. The default is not selected (that is, do not include the file name in the message).

# Editing AS2 Organization, Trading Partner Information, and AS2 Relationships

You can edit the information for your AS2 organization, trading partner, or AS2 relationship information after you have entered it. This may be necessary, for example, if you are negotiating a contract and you or your trading partner wants to change some of the information.

**Note:** Ensure that you do not skip any screens when editing the AS2 partner profiles.

## **Editing Organization Information for Multiple Organizations**

### About this task

To edit organization information:

### Procedure

- 1. From the Administration menu, select **Trading Partners** > **AS2**.
- 2. In the **Search Profiles by Identity** field, you can search several ways, which include:

- Typing the Identity name. A list automatically appears with a list of profiles that match your entry.
- Using a partial search by typing only a few characters. A list automatically appears with a list of profiles that match your entry.
- Not typing anything in the field. This will list all the AS2 profiles in the system.
- 3. Click Go!
- 4. In the list, locate the organization you want to edit and click edit.
- 5. Update your organization information as necessary and click Next.
- 6. Click **Finish** to update the organization with your changes.

## Editing Trading Partner Information for Multiple Organizations About this task

To edit trading partner information:

### Procedure

- 1. From the Administration menu, select Trading Partners > AS2.
- 2. In the **Search Profiles by Identity** field, you can search several ways, which include:
  - Typing the Identity name. A list automatically appears with a list of profiles that match your entry.
  - Using a partial search by typing only a few characters. A list automatically appears with a list of profiles that match your entry
  - Not typing anything in the field. This will list all the AS2 profiles in the system.
- 3. Click Go!
- 4. In the list, locate the trading partner you want to edit and click edit.
- 5. Update your trading partner information as necessary and click Next.
- 6. Click **Finish** to update the trading partner information with your changes.

## Editing Relationship Information for Multiple Organizations About this task

To edit relationship information:

### Procedure

- 1. From the Administration menu, select Trading Partners > AS2.
- 2. In the **Search Relationships** field, you can search several ways, which include:
  - Typing the Organization and Partner name in the respective boxes. A list automatically appears with a list of profiles that match your entry.
  - Using a partial search by typing only a few characters. A list automatically appears with a list of relationships that match your entry
  - Not typing anything in the field. This will list all the AS2 profiles in the system.
- 3. Click Go! In the list, locate the relationship you want to edit and click edit.
- 4. In the list, locate the relationship you want to edit and click **edit**.
- 5. Update your relationship information as necessary and click Next.
- 6. Click Finish to update the relationship information with your changes.

# Deleting Organization, AS2 Trading Partner, or Relationship Information

You can delete an organization, trading partner, or relationship information when it becomes obsolete.

**Note:** When you delete an organization or a partner, it also deletes all the relationships associated with it.

## Deleting Organization Information About this task

To delete organization information:

### Procedure

- 1. From the Administration menu, select Trading Partner > AS2.
- 2. In the Search Profiles by Identity area, begin typing the name of the Organization, a list automatically appears that match your entry.
- 3. Double-click a selection and click Go!
- 4. Identify the organization you want to delete and click delete.
- 5. In the message prompting you to confirm your intent to delete, complete one of the following actions:

**Note:** When you click **delete**, you will be recommended to export and save a copy to offline storage. You can decide if you want to do so.

- Click **OK** to continue the deletion.
- Click **Cancel** to cancel the deletion.
- 6. In the Delete Resources page, review the information and click Next.

**Note:** When you click **Delete**, you completely remove this organization from the database. Deleting an organization will delete all the associated resources and any dependent relationship(s). This action cannot be undone.

7. In the Confirm page, click **Delete** to complete the deletion.

## Deleting AS2 Trading Partner Information About this task

You can delete the trading partner information when it becomes obsolete. This may be necessary, for example, if a trading partner is lost, or when two trading partners merge.

**Note:** Sterling B2B Integrator AS2 Edition will not work without an organization definition.

To delete trading partner information:

### Procedure

1. From the File Tracking page, select Trading Partner.

**Note:** If you are not using the Sterling B2B Integrator AS2 Edition but are instead using Sterling B2B Integrator to send and receive AS2 messages, from the Administration menu, select **Trading Partner > AS2**.

- 2. In the Trading Partners page, under Search Profiles by Identity area, begin typing the first few letters of the trading partner name, a list automatically appears that matches your entry. Select the trading partner name and click**Go**!
- **3**. Identify the trading partner whose information you want to delete and click **delete**.
- 4. In the message prompting you to confirm your intent to delete, complete one of the following actions:

**Note:** When you click **delete**, you will be recommended to export and save a copy to offline storage. You can decide if you want to do so.

- Click **OK** to continue the deletion.
- Click **Cancel** to cancel the deletion.
- 5. In the Delete Resources page, review the information and click Next.

**Note:** When you click **Delete**, you completely remove this trading partner from the database. Deleting trading partner will delete all the associated resources and any dependant relationship(s). This action cannot be undone.

6. In the Confirm page, click **Delete** to complete the deletion.

### Deleting Relationship Information About this task

To delete relationship information:

#### Procedure

- 1. From the Administration menu, select **Trading Partner > AS2**.
- 2. In the Search Relationships area in the Organization and Partner fields, begin typing the names of the Organization and Partners you set up a relationship with. A list automatically appears that match your entry.
- 3. Double-click a selection and click Go!
- 4. In the list, locate the relationship you want to delete and click delete.
- 5. In the message prompting you to confirm your intent to delete, complete one of the following actions:
  - Click **OK** to continue the deletion.
  - Click Cancel to cancel the deletion.
- 6. In the Delete Resources page, review the information and click Next.

**Note:** When you click **Delete**, you completely remove this relationship from the database. Deleting a relationship does not affect its associated profiles (organization and partner). Deleting a relationship does not delete the filesystem/mailbox directories, or the business processes configured for direct processing. The user will have to manually delete these items. This action cannot be undone.

7. In the Confirm page, click **Delete** to complete the deletion.

# Chapter 5. Tracking and Managing AS2 Document Exchange

# **Tracking AS2 Documents**

Sterling B2B Integrator provides information about inbound and outbound documents and any designated outbound documents that cannot be processed because of an error. Viewing the information about documents can help you determine if further action is necessary.

The Current Documents feature offers the following benefits:

- You can monitor document processing to ensure documents are processing successfully, and take corrective action if necessary.
- If a problem document is noted, you can view document details with one click to see what happened.
- By default, the page is automatically refreshed every minute for the most current information.
- You can change the number of documents displayed per page, change the name of the document displayed to something more meaningful—for example, document type—and enable detailed document tracking.

To access Current Documents, go to **Business Processes > Current Documents**. The following information is available on the Current Documents page:

- Up to a week of processed documents is displayed. To view documents older than one week, use the **Advanced Search > Documents** feature.
- Documents are generally listed in the order received, with the most current documents at the top.
- Select Automatically refresh every minute to get current information. Deselect this option to disable the automatic refresh.
- Last update date and time displays when the page was last refreshed.

Note: To modify file locations, see *Editing Trading Partner Information*.

To track documents:

Field Name Description	
Status	Green or red traffic light indicates the processing status of the document:
	• Green status indicates no errors or warnings occurred during processing.
	<ul> <li>Red status indicates errors or warnings were encountered during processing.</li> </ul>

Field Name Description		
Document	Name of the document processed. This can be changed in the business process so that a meaningful name will appear instead of the default. Most pre-configured business processes already have the document name established. Click the document name to view the contents. <b>Note:</b> You can change the meta data for your service to display a more meaningful document name, such as the document type, in Current Documents instead of the default name. The default display is the Body Name, if available, otherwise it is the document ID. Some services, such as EDI documents (EDIFACT, for example), are already configured to display the document type.	
	Contents will not be viewable if encrypted or obscured.	
Proc. ID	Processing ID assigned by Sterling B2B Integrator as an identification number. Click the Processing ID to view Business Process Details.	
Sender ID	ID of the document sender as found in the document. If no ID is found, Sender ID is None.	
Receiver ID	ID of the document receiver as found in the document. If no ID is found, Receiver ID is None.	
Correlations	Click the Correlations icon to view document correlations.	
Details	If document tracking is enabled at the business process level, you can view the document history by clicking on Details from the Current Documents page.	

# Changing the Number of Documents Displayed When Tracking Documents

### About this task

Current Documents displays the most recent 15 documents that have been processed. You can change this and display more than 15 documents per page by making an adjustment on the My Account page.

To change the number of documents displayed:

- 1. Select Accounts > My Account. The My Account page is displayed.
- 2. In the Preferences section, next to Page Size for Current Documents, select the number of documents you want to display on each page. Remember that the larger number you select, the more you will have to scroll to see all of the documents displayed, and the system may take longer to display results.
- **3.** Click **Save**. Your changes are saved. Log out Sterling B2B Integrator and then log back in to see the change in preferences.

# **Running and Stopping Predefined AS2 Business Processes**

### About this task

Predefined business processes associated with a document that contains errors may continue to run unnecessarily. Using the Business Processes page, you can not only obtain general and detailed processing information about predefined business processes, you can also run and stop business process and any subprocesses. After reconciling document errors, you can then use the Business Processes to run the business process again.

To access the Business Processes page and perform activities for predefined business processes:

### Procedure

- 1. From the Administration Menu, select **Business Processes > Manager**.
- 2. In the Business Processes page, use the following fields and columns to view business process information and perform other activities, as appropriate:

Description		Description	
Name of the business process.			
Run the business process and any subprocesses.			
Stop the business process and any subprocesses waiting to run.			
Date and time the business process ran.			
Expiration time of the business process and archiving details.			
User associated with the business process.			

# Searching for Business Process (Basic)

### About this task

In Sterling B2B Integrator, you can use the Central Search pages to perform basic and advanced searches for information about:

- Additional live (active), archived, and restored predefined business processes
- EDIINT transaction records for business processes that included EDI interchange processing

To perform a basic search for a business process:

- 1. From the Administration menu, select Business Processes > Central Search.
- 2. In the Central Search page, specify any combination of the following search criteria, and then click **Go**!
  - Business Process Display business processes by names containing specified characters or strings.
  - Status Display business processes that resulted with a success or error outcome.
  - Start Date From/Start Date To Display business processes run within specific start dates and times.

**3**. In the Central Search Results page, click the number link that indicates the number of matches. The Monitor page opens, listing the business processes that match your search criteria. For information about the Monitor page, see *Viewing General Processing Information*.

# Searching for Business Process (Advanced)

### About this task

In Sterling B2B Integrator, you can use the Central Search pages to perform basic and advanced searches for information about:

- · Additional live (active), archived, and restored predefined business processes
- EDIINT transaction records for business processes that included EDI interchange processing

You can conduct advanced searches for business processes under a variety of characteristics. You can search for:

- Business Processes in Sterling B2B Integrator
- EDIINT transactions
- Correlations

Sterling B2B Integrator also enables you to search for business processes by:

- Location of business process
- · Business process ID
- Business process name

To conduct an advanced search for a business process in Sterling B2B Integrator:

- 1. From the Administration menu, select Business Processes > Central Search.
- 2. In the Central Search page, under Advanced Search, ensure that Sterling B2B Integrator is selected in the list and click **Go**!
- **3**. In the Business Process Monitor Advanced Search page, specify any combination of the following search criteria, as appropriate:

Field	Description	Action
Search Location		
Select the area to search from	Business processes maintained in a specific location.	<ul> <li>Select one of the options:</li> <li>Live Tables – Display live (active) business processes.</li> <li>Archive Tables – Display data for business processes that are archived.</li> <li>Restored Tables – Display data for business processes that have</li> </ul>
Search Using Bus	iness Process ID	been restored from an offline location.
Process ID	ID assigned by the Sterling B2B Integrator AS2 Edition to identify a business process.	Type the ID for the business process.

Field	Description	Action
Search Using Bus	iness Process Name	
Business Processes	List of business processes currently maintained in Sterling B2B Integrator and the Sterling B2B Integrator AS2 Edition.	Select a business process from the list.
System Business Processes	The system business processes (that is, business processes that complete or have completed system operations).	
State	Current or final state of a business process.	The default value is ALL (displays all business processes). Maintain the default value or select one of the following options: • Completed • Waiting • Active • Halted • Halted • Halting • Interrupted_Man • Interrupted_Auto • Terminated
Status	Current or final status of a business process.	<ul><li>The default value is ALL (displays all business processes). Maintain the default value or select one of the following options:</li><li>Success</li><li>Error</li></ul>
Start date/time range	Business processes running or completed within the specified start dates and times.	Type a starting date and time range and select <b>AM</b> or <b>PM</b>

4. Click **Go!** The Monitor page opens, listing the business processes that match your search criteria.

# Searching for EDIINT Transaction Records About this task

To search for EDIINT transaction records for business processes that included EDI interchange processing:

- 1. From the **Administration** menu, select Business Processes > Advanced Search > EDIINT.
- 2. In the EDIINT Transaction Search page, complete one of the following:
  - Click **Go!** to view all EDIINT transaction records.
  - Search for specific EDIINT transaction records. Specify any combination of the following search criteria and click **Go**!
    - Contracts Display the records whose contract name corresponds to the specified contract.

 Status – Display the records whose status corresponds to the specified status. Statuses include ALL, Processed without errors, Processed with errors, Pending, Expired, and MIC Invalid.

**Note:** The status displayed is the status of the MDN as it relates to the received transaction. This status does not signify the result of the HTTP transfer of the MDN.

- Type Display the records whose Internet security protocol type corresponds to the specified type. Search parameters include ALL, AS1, and AS2.
- Start Date From and Start Date To Display the records generated starting on the specified start dates and time.
- End date/time range Display the records generated prior to the specified end dates and time.

# Searching for Correlations About this task

To search for correlations of business processes or documents that have been configured with name-value pairs (using the Correlation service):

- From the Administration menu, select Business Processes > Advanced Search > Correlation.
- 2. In the Central Search page, under Advanced Search, select **Correlation**, and then click **Go**!
- 3. In the Correlation Search page, from the **Type** field, select either **Document** or **Business process**.
- 4. From the Location field, select one of the following options:
  - Live Tables Display correlations of live (active) instances.
  - Archive Tables Display correlations of instances that you have archived in Sterling B2B Integrator.
  - Restored Tables Display correlations of instances that you have restored from an offline location.
- **5**. To refine your search, select up to five names. Typically, the following options display:
  - SenderID
  - ReceiverID
  - Standard
  - Version
  - FunctionalID
  - TransactionSetID
  - ControlNumber
  - Date/Time
  - AcknowledgementRequested
  - AcknowledgementStatus
- 6. In the Value fields, type the value that corresponds with each of the selected names, and then click **Go**!
- 7. In the Correlation Search Results page, click the number link that indicates the number of matches in Sterling B2B Integrator.

The Monitor page opens, listing the business process instances that match your search criteria.

# Searching for EDI Correlations About this task

Sterling B2B Integrator enables you to find and correlate an AS2 message with an EDI document or data, group, or transaction through a link in the EDI Correlation Search details—a **Document Correlation** information link that displays detailed interchange information about AS2 messages.

If you are using AS2, the Document Correlation link enables you using AS2 to quickly and easily view interchange details about AS2 messages, and to see the correlation between an AS2 message and a corresponding EDI document or data.

To search for AS2 correlations:

- 1. From the Administration menu, select Business Process > Monitor > Advanced Search > EDI Correlation.
- 2. In the Search Option area, specify any combination of the following search criteria, as appropriate:

Field	Description	Action
All Level Options		
Location	EDI correlations maintained in a specific location.	<ul> <li>Select one of the following options:</li> <li>Live Tables – Display live (active) EDI correlations.</li> <li>Restored Tables – Display EDI correlations restored from an offline location.</li> </ul>
Search Level Type	EDI processing level.	<ul> <li>Select one of the following options:</li> <li>Interchange – For the search query, display results from the interchange level.</li> <li>Group – For the search query, display results from the group level.</li> <li>Transaction – For the search query, display results from the transaction level.</li> </ul>
Test Mode	Mode of the Sterling B2B Integrator system where documents that contain the EDI correlations were created.	<ul> <li>Select one of the following options:</li> <li>Any (default)</li> <li>Test</li> <li>Production</li> <li>Information</li> <li>Interchange is a test</li> <li>Syntax only test</li> <li>Echo request</li> <li>Echo response</li> </ul>
Direction	Flow of the documents that contain the EDI correlations.	<ul><li>Select one of the following options:</li><li>Any (default)</li><li>Inbound</li><li>Outbound</li></ul>

Field	Description	Action
Sender ID	ID for the organization that is sending documents.	Type the identifier of the sender.
Receiver ID	ID for the receiving organization.	Type the identifier of the receiver.
Sender ID Qualifier	Qualifier used with the Sender ID to define the organization that is sending documents.	Type the qualifier of the sender.
Receiver ID Qualifier	Qualifier used with the Receiver ID for the receiving organization.	Type the qualifier of the receiver.
Start Date	Documents in progress or completed after the specified start date and time.	Using the following formats, type a starting date and time range and select AM or PM:
		• Date – MM/DD/YYYY
		• Time – HR:MN:SC
		<b>Note:</b> Defaults to a range of the last 24 hours.
End Date	Documents in progress or completed before the specified end date and time.	<ul> <li>Using the following formats, type an end date and time range and select AM or PM:</li> <li>Date - MM/DD/YYYY</li> <li>Time - HR:MN:SC</li> </ul>
		Note: Defaults to a range of the last 24 hours.
Interchange Level	Options	
Interchange Control Number	Sequential number, located at the beginning and end of an interchange, used to verify that all interchanges sent have been received and that the information in the interchange is complete.	Type the control number that references the interchange
Standard	EDI standard you agree to use for a trading partnership.	Type the name of the standard (including CHIPS or Fedwire).
Acknowledgement Status	Status of an expected acknowledgement at the interchange level.	<ul> <li>Select one of the following options:</li> <li>Any (default)</li> <li>Waiting</li> <li>Accepted</li> <li>Accepted with Errors</li> <li>Rejected</li> </ul>
		<ul> <li>Rejected</li> <li>OverDue</li> <li>Received</li> <li>None</li> <li>Manually Accepted</li> </ul>
Compliance Status	Status of compliance checking at the interchange level.	<ul><li>Select one of the following options:</li><li>Any (default)</li><li>OK</li><li>NOT OK</li></ul>

Field	Description	Action
Start Date	EDI correlations generated or completed for documents at the interchange level after the specific start date and time. This date is compared with the interchange date/time in the data.	<ul> <li>Using the following formats, type a starting date and time range and select AM or PM:</li> <li>Date – MM/DD/YYYY</li> <li>Time – HR:MN:SC</li> <li>Note: Defaults to a range of the last 24 hours.</li> </ul>
End Date	EDI correlations generated or completed for documents at the interchange level before the specific end date and time. This date is compared with the interchange date/time in the data.	Using the following formats, type an end date and time range and select AM or PM: • Date – MM/DD/YYYY • Time – HR:MN:SC <b>Note:</b> Defaults to a range of the last 24 hours.
Group Level Option	ns	
Functional Group ID	ID of the functional group indicated in the document.	Type the ID of the functional group.
Group Control Number	Sequential number, used to verify that all groups sent have been received and that the information in the group is complete.	Type the control number that references the group.
Acknowledgement Status	Status of an expected acknowledgement at the group level.	<ul> <li>Select one of the following options:</li> <li>Any (default)</li> <li>Waiting</li> <li>Accepted</li> <li>Accepted with Errors</li> <li>Rejected</li> <li>OverDue</li> <li>Received</li> <li>None</li> <li>Manually Accepted</li> <li>Partially Accepted</li> </ul>
Compliance Status	Status of compliance checking at the functional group level.	Select one of the following options: <ul> <li>Any (default)</li> <li>OK</li> <li>NOT OK</li> </ul>
Start Date	EDI correlations generated or completed for documents at the group level after the specific start date and time. This date is compared with the group date/time in the data.	<ul> <li>Using the following formats, type a starting date and time range and select A.M. or P.M.:</li> <li>Date – MM/DD/YYYY</li> <li>Time – HR:MN:SC</li> <li>Note: Defaults to a range of the last 24 hours.</li> </ul>
End Date	EDI correlations generated or completed for documents at the group level before the specific end date and time. This date is compared with the group date/time in the data.	Using the following formats, type an end date and time range and select A.M. or P.M.: • Date – MM/DD/YYYY • Time – HR:MN:SC

Field	Description	Action
Transaction Set ID	ID of the transaction set indicated in the document.	Type the ID of the transaction set.
Compliance Status	Status of compliance checking at the transaction set level.	<ul><li>Select one of the following options:</li><li>Any (default)</li><li>OK</li><li>NOT OK</li></ul>
Message Repair Status	Status of message repair (for SWIFT documents only).	Select one of the following options: • Any • Ready for Edit • Ready for Resend • Aborted • Resent

- 3. Click Go! to display the EDI correlation records that match your search criteria.
- 4. In the EDI Correlation Interchange Results page, click **info** in the Detail column for the AS2 interchange for which you want to view details.
- 5. In the EDI Correlation Interchange/Group/Transaction Detail Results page, click **info** to the right of Document Correlations.
- 6. For SWIFT documents, on the EDI Correlation Transaction Results page, click **info** in the Detail column for the document you want to edit.
- 7. In the Document Correlation Details page, view details about the AS2 message you selected, and to see the correlation between the AS2 message and corresponding EDI document or data. The details available include:
  - time stamp
  - scope
  - process ID
  - document name
  - data value

# Searching for BPSS Correlations About this task

To search for BPSS correlations that define a standard structure of the activities within a business process:

- From the Administration menu, select Business Processes > Advanced Search > BPSS Correlation.
- 2. In the BPSS Tracking page, from the **Location** field, select one of the following options:
  - Live Tables Display BPSS correlations of live (active) business processes.
  - Archive Tables Display BPSS correlations of business processes that you have archived in Sterling B2B Integrator.
  - Restored Tables Display BPSS correlations of business processes that you have restored from an offline location.
- 3. To refine your search, specify any combination of the following search criteria.

- Transaction Type Display the records of the activities that completed the specified transaction.
- Trading Partner Display the records of the activities that associated with the trading partner specified.
- Status Display the records of the activities that resulted with a success or error transaction.
- Start date/time range Display the records of activities completed within the specified start dates and times.
- 4. Click **Go!** to display the BPSS correlation records that match your search criteria.

# **General Processing Information**

The Monitor page refreshes automatically and displays the ten most recent business processes to run and their processing information. If a business process does not display in the Monitor page, you can perform a search to locate the business process. For more information, see *Searching for AS2 Business Processes and Other Information*.

When monitoring active and recent business processes, Sterling B2B Integrator uses two status indicators to indicate further action is required:

Status Indicator	Active Business Process	Recent Business Process
<b>S</b>	Encountering no errors or warnings at this point of the execution.	Encountered no errors during execution.
Ŵ	• Waiting for other activities to complete before continuing execution.	Encountered errors or warnings during execution.
_	• Encountering errors or warnings during execution.	

In the Monitor page, use the following fields and columns to view general processing information about business processes and perform other activities, as appropriate:

Field/Column	Description
Automatically refresh every minute	Default time to refresh the list of the 10 most recent business processes. To disable this feature, clear the check box.
Status	Indicator of the status of an active or recently executed business processes. For more information, see <i>Viewing EDIINT Duplication Transaction Detail Information</i> .
ID	Number assigned by the Sterling B2B Integrator AS2 Edition to identify an business processes. Click the number to display the Business Process Details page. For more information, see <i>Viewing EDIINT Duplication</i> <i>Transaction Detail Information</i> .
Name	Name of an business processes. Click the name to view the BPML code that makes up the business processes.

Field/Column Description		
State	Current state of a business process. The following list shows possible states in the order of precedence during branch processing:	
	Active/Running	
	Completed	
	Terminated	
	• Waiting	
	Interrupted	
	• Halting/Halted	
Started	Date and time a business process started.	
Ended	Date and time a business process ended.	
Expires	Information about when a business process expires. Click Info to display the expiration information, including whether the data for a business process is archived after it expires.	
Parent/Child	Parent or child business process that is referenced when running a business process. Click the up arrow to view a parent business process. Click the down arrow to view a child business process.	

# **Detailed Processing Information**

From the Monitor page, you can access the Business Process Detail page. The Business Process Detail page provides you with a step-by-step progress report on a specific business process. From the Business Process Detail page, you can also perform activities, such as stopping or restarting a business processes.

In the Business Process Detail page, use the following fields to review detailed processing information and perform activities, as appropriate:

Field/Column	Description
Name	Name of a business process for which you are viewing details. Click the name to view the BPML code that makes up the business process.
Instance ID	Number assigned by the Sterling B2B Integrator AS2 Edition to identify a business process.
Status	Current status of a business process. Possible status levels are: • Success • Error
State	Current state of a business process. The following list shows possible states in the order of precedence during branch processing: • Active/Running • Completed • Terminated • Waiting • Interrupted • Halting/Halted

Field/Column	Description
Activities	List of activities to complete for a business process, including an activity to generate an XML report. The activities available in this field are determined by whether a business process is currently active or stopped. Possible activities are:
	<ul> <li>Restart – Continues running a business process</li> </ul>
	<ul> <li>Stop – Stops running a business process</li> </ul>
	<ul> <li>Terminate – Cancels a business process and all remaining active and waiting subprocesses</li> </ul>
	• XML report – Generates an XML report that describes the business process
	If you terminate an active business process, the State field may indicate messages in the following order: Halting > Halted > Terminated.
Step	Current step of a business process.
Service	Name of the service running for a current step. Click the service name to view settings for a service in a business process.
Status	Current status of the steps in a business process. Possible status levels are:
	<ul><li>Success</li><li>Error</li></ul>
Advanced Status	Service details about any errors that occurred for a step in a business process, when applicable. Click the message to display information.
Started	Date and time the step of a business process started.
Ended	Date and time the step of a business process ended.
Status Report	Status report that provides the results of a service. To view the status report, click <b>info</b> .
Document	Business process document that this service is processing (that is, the primary document). To view the document, click <b>info</b> .
Instance Data	Contents of the process data generated after a specific step in a business process. In addition, this field links to any messages going to or coming from a service. To view the information, click <b>info</b> .

# **EDIINT Transaction Information**

In the EDIINT Transaction Summary page, use the following fields and columns to view general processing information about business processes and perform other activities, as appropriate:

Field/Column	Description
Status	Indicator of the status of the EDIINT transaction.
ID	Number assigned by the Sterling B2B Integrator AS2 Edition to identify. Click the number to display the Business Process Details page.

Field/Column	Description
Duplicates	Number of messages with duplicate message IDs. Click the number to display the EDIINT Duplicate Transaction Summary page. When a message with a duplicate message ID is received, a record for a duplicate message is created. This record contains the transaction information for the instance of the message prior to reception of the duplicate. The current transaction record is updated with information about the duplicate, which is the latest instance of the message.
Created	Date and time this transaction record was created. Records are created when messages are built or received.
State	Current state of the EDIINT transaction:
	• Processed with errors - An error occurred processing the message. These are usually EDIINT specific errors returned in MDNs, such as decryption failures.
	• Processed without errors - The message was processed successfully.
	<ul> <li>Pending - An acknowledgement has not yet been received for a message.</li> </ul>
	• Expired - An acknowledgement was not received for the message in the required amount of time.
	• MIC Invalid - The cryptographic hash in an MDN did not match the one calculated by the system when the message was created.
Contract	Contract associated with the EDIINT transaction.
Туре	Type of communication protocol used. AS2 indicates AS2 protocol.
Acknowledged	Date and time that the message was acknowledged

# Viewing EDIINT Duplicate Transaction Summaries About this task

From the EDIINT Transaction Summary page, click the number in the Duplicates column to access the EDIINT Duplicate Transaction Summary page. The EDIINT Duplicate Transaction Summary page provides you with a list of documents that have duplicate message IDs. From the EDIINT Duplicate Transaction Summary page, you can refine the detail of your search by clicking the ID number for each duplicate document.

### **EDIINT Duplicate Transaction Summaries Fields**

In the EDIINT Duplicate Transaction Summary page, use the following fields to review detailed processing information, as appropriate:

Field/Column	Description
Status	Indicator of the status of the EDIINT transaction.
ID	Number assigned by the Sterling B2B Integrator AS2 Edition to identify an business processes. Click the number to display the Business Process Details page.

Field/Column	Description
Duplicates	Number of messages with duplicate message IDs. Click the number to display the EDIINT Duplicate Transaction Summary page. When a message with a duplicate message-ID is received, a record for a duplicate message is created. This record contains the transaction information for the instance of the message prior to reception of the duplicate.
Created	Date and time this transaction record was created. Records are created when messages are built or received.
State	Current state of the EDIINT transaction:
	<ul> <li>Processed with errors - An error occurred processing the message. These are usually EDIINT specific errors returned in MDNs, such as decryption failures.</li> </ul>
	Processed without errors - The message was processed successfully.
	<ul> <li>Pending - An acknowledgement has not yet been received for a message.</li> </ul>
	• Expired - An acknowledgement was not received for the message in the required amount of time.
	• MIC Invalid - The cryptographic hash in an MDN did not match the one calculated by the system when the message was created
Contract	Contract associated with the EDIINT transaction.
Туре	Type of communication protocol used. AS2 indicates AS2 protocol.
Acknowledged	Date and time that the message was acknowledged

# **EDIINT Duplicate Transaction Detail Information**

In the EDIINT Duplicate Transaction Detail page, use the following fields to review detailed process information and perform activities, as appropriate:

Field/Column	Description
ID	Number assigned by the Sterling B2B Integrator AS2 Edition to identify the EDIINT transaction.
Record created	Date and time that this record was created.
Message-ID	Identification string of the message.
State	Current state of the EDIINT transaction:
	• Processed with errors - An error occurred processing the message. These are usually EDIINT specific errors returned in MDNs, such as decryption failures.
	• Processed without errors - The message was processed successfully.
	<ul> <li>Pending - An acknowledgement has not yet been received for a message.</li> </ul>
	• Expired - An acknowledgement was not received for the message in the required amount of time.
	• MIC Invalid - The cryptographic hash in an MDN did not match the one calculated by the system when the message was created
Acknowledged	Date and time that the message was acknowledged.
MDN Message-ID	Identification string of the MDN.

Field/Column	Description
Disposition	The disposition of the message according to the MDN.
SHA1 MIC	Security string information.
Contract	Contract associated with the message.
Туре	Type of transmission protocol used with the message.
Sender	Sender of the message.
Recipient	Recipient of the message.
Output Documents	A link to the business documents extracted from the message, if business documents were extracted from the message. This field does not appear if a document was not extracted from the message. If processing of duplicate messages is not enabled and this transaction is not the first instance of the message, no documents will be extracted from the message.

### **EDIINT Duplicate Transaction Detail Information**

In the EDIINT Duplicate Transaction Detail page, use the following fields to review detailed process information and perform activities, as appropriate:

Field/Column	Description
ID	Number assigned by the Sterling B2B Integrator AS2 Edition to identify the EDIINT transaction.
Record created	Date and time that this record was created.
Message-ID	Identification string of the message.
State	Current state of the EDIINT transaction:
	• Processed with errors - An error occurred processing the message. These are usually EDIINT specific errors returned in MDNs, such as decryption failures.
	• Processed without errors - The message was processed successfully.
	<ul> <li>Pending - An acknowledgement has not yet been received for a message.</li> </ul>
	• Expired - An acknowledgement was not received for the message in the required amount of time.
	• MIC Invalid - The cryptographic hash in an MDN did not match the one calculated by the system when the message was created
Acknowledged	Date and time that the message was acknowledged.
MDN Message-ID	Identification string of the MDN.
Disposition	The disposition of the message according to the MDN.
SHA1 MIC	Security string information.
Contract	Contract associated with the message.
Туре	Type of transmission protocol used with the message.
Sender	Sender of the message.
Recipient	Recipient of the message.

Field/Column	Description
Output Documents	A link to the business documents extracted from the message, if business documents were extracted from the message. This field does not appear if a document was not extracted from the message. If processing of duplicate messages is not enabled and this transaction is not the first instance of the message, no documents will be extracted from the message.

# Viewing EDIINT Duplicate Transaction Messages About this task

From the EDIINT Duplicate Transaction Detail page, click the Message-ID string to access the EDIINT Transaction Message contents. The Message page displays showing the contents of the message sent in the transaction.

### Viewing EDIINT Duplicate Transaction MDNs About this task

From the EDIINT Duplicate Transaction Detail page, click the MDN Message-ID string to access the EDIINT Transaction MDN contents. The MDN page displays showing the contents of the MDN sent in the transaction.

# Viewing EDIINT Transaction Detail Information About this task

From the EDIINT Transaction Summary page, click the ID number to access the EDIINT Transaction Detail page. The EDIINT Transaction Detail page provides you with additional details about the EDIINT transaction. From the EDIINT Transaction Detail page, you can click the Message-ID to view the message, click the MDN Message-ID to view the MDN, or change the state of the business process.

### **EDIINT Transaction Detail Information**

In the EDIINT Transaction Detail page, use the following fields to review detailed process information and perform activities, as appropriate:

Field/Column	Description
ID	Number assigned by the Sterling B2B Integrator AS2 Edition to identify the EDIINT transaction.
Record created	Date and time that the record was created.
Message-ID	Identification string of the message.

Field/Column	Description
State	Current state of the EDIINT transaction:
	• Processed with errors - An error occurred processing the message. These are usually EDIINT specific errors returned in MDNs, such as decryption failures.
	• Processed without errors - The message was processed successfully.
	<ul> <li>Pending - An acknowledgement has not yet been received for a message.</li> </ul>
	• Expired - An acknowledgement was not received for the message in the required amount of time.
	• MIC Invalid - The cryptographic hash in an MDN did not match the one calculated by the system when the message was created
Acknowledged	Date and time that the message was acknowledged.
MDN Message-ID	Identification string of the MDN.
Disposition	Status of the transaction. For example, processed or waiting.
SHA1 MIC	Security string information.
Contract	Contract associated with the message.
Туре	Type of transmission protocol used with the message.
Sender	Sender of the message.
Recipient	Recipient of the message.
Input Documents	A link to the business document used to create the message if the transaction is for a message created by this system. This field does not appear if the message was created by a trading partner's system.
Output Documents	A link to the business documents extracted from the message, if business documents were extracted from the message. This field does not appear if no documents were extracted from the message. If processing of duplicate messages is not enabled and this transaction is not the first instance of the message, no documents are extracted from the message

# Viewing EDIINT Transaction Messages About this task

From the EDIINT Transaction Detail page, click the Message-ID string to access the EDIINT Transaction Message contents. The Message page displays showing the contents of the message sent in the transaction.

# Viewing EDIINT Transaction MDNs About this task

From the EDIINT Transaction Detail page, click the MDN Message-ID string to access the EDIINT Transaction MDN contents. The MDN page displays showing the contents of the MDN sent in the transaction.

# Viewing System Logs

### About this task

You can view system logs to monitor the operational status of Sterling B2B Integrator and the Sterling B2B Integrator AS2 Edition and its components and the activities occurring within the system.

To view the system logs:

### Procedure

- 1. From the Administration Menu, select **Operations > System > Logs**.
- 2. In the System Logs page, select the appropriate log file. The log opens.

**Note:** The interface displays only the last 2500 lines of a log file. To view the entire log file, you must have Read permissions for the file system where the log file is located. Open the log file (located at the installation path on your hard drive), with a text editor.

### Managing Schedules

Depending on your business needs, you may need to change your service or business process schedules. After you have created a schedule, you can enable, disable, or edit the service schedule when necessary.

# Creating a Business Process Schedule About this task

You can schedule a business process to run or you can choose to run the business process manually. If you schedule your business process, you can take advantage of the following advanced scheduling capabilities:

- Schedule your business process to run on specific days of the week Schedule different processes to run on different days, reserving system resources and scheduling business processes around the critical events of your organization. For example, you can run the business process only on Monday through Friday, or Monday, Wednesday, and Friday. This includes the ability to schedule the system resource intensive business processes to run on weekends when network or system traffic is low.
- Schedule your business process to run based on specifically selected hours Much like the ability to run on the weekends or specific days of the week; provides further granularity in scheduling your business processes by selecting specific hours or ranges of hours range of hours to run.
- Schedule exclusions You can set exceptions within the scheduler to exclude peak days or processing hours.

To set up a business process schedule:

- 1. From the Administration Menu, select Deployment > Schedules.
- 2. Next to Schedule a Business Process, click Go!
- **3**. In the Select BP page, select the business process for which you want to set up the scheduled run time from the Business Process field, and then click **Next**.

- 4. In the Schedule Settings page, indicate whether to use a 24-hour clock display (that is, Military time numbers 24 hours of the day from 1 to 24, rather than repeating the cycle of 12 hours twice).
- 5. To specify how you want to schedule your business process to run, complete one of the following steps, and then click **Next**:
  - To set a timer to for running your business process, select **Run based on timer**.
  - To schedule your business process to run on a daily basis, select Run daily.
  - To schedule your business process to run on specific weekdays, select **Run based on day(s)** of the week.
  - To schedule your business process to run on specific days during the month, select **Run based on day(s) of the month**.
- 6. Based on the selections you made in step 5., complete one of the following steps:
  - a. If you are setting up a timer:
    - 1) In the **Hour(s)** field, type the number of hours in which the business process should run (for example, if you want the business process to run every 2 hours, type 2).
    - 2) In the **Min(s)** field, type the number of minutes in which the business process should run (for example, if you want the business process to run every 30 minutes, type 30. However, if you specified 2 in the Hour(s) field and specified 30 in the Min(s) field, the business process runs every 2.5 hours.).
  - b. If you are running the business process daily, based on days of the week, or days of the months, and using a timer:
    - 1) To specify a time interval, select **Check here to select time interval**.
    - 2) In the **From** and **To** fields, type the time to start and end the interval.
    - 3) In the Select Day(s) field, select the number of days in between intervals. This field is only available if you choose Run based on day(s) of the week or month.
    - 4) From Every, Hour(s), and Min(s) lists, select how long the interval lasts.
    - 5) Click add to specify the scheduled time you run the business process.
  - **c**. If you are not using a time interval:
    - 1) In the **From** field, type the time to start and end the interval.
    - 2) In the **Select Day(s)** field, select the number of days in between intervals.
    - 3) From Every, Hour(s), and Min(s) lists, select how long the interval lasts.
    - 4) Click add to specify the scheduled time you run the business process.
- 7. To run the business process at startup, next to the scheduling interval you selected in step 4, ensure that the **At startup** check box is selected, and then click Next.
- **8**. To indicate exclusion dates that business process should not run, complete the following steps:
  - a. In the Months field, select the month not to run the business process.
  - b. In the Days field, select the day of the month in which not to run the business process.
  - c. Click **add** to specify the exclusion dates for the schedule, and then click **Next**.

**9**. Click **Finish** to add the schedule for the business process to Sterling B2B Integrator.

# Searching for a Service Schedule About this task

You can search for a service schedule to verify the schedule information or to edit the service schedule.

To search for a service schedule:

### Procedure

- 1. From the Administration Menu, select **Deployment > Schedules**.
- 2. In the Schedules page, do you know the name of the service you want to locate?
  - If Yes, under Search, in the by Name field, type the name of the service, and then click **Go**!
  - If No, under List, select from the by Scheduler Type list a search method, and then click **Go!** Search Methods include:

All - Lists all services and business processes that have schedules.

Services - Lists only services that have schedules.

Business Processes - Lists only business processes that have schedules.

The Schedules page displays showing a list of the services that matched your search criteria.

### Enabling or Disabling a Scheduled Service About this task

After you have created a service schedule you can enable or disable the service schedule depending on your business needs.

To enable or disable a scheduled service:

### Procedure

- 1. From the Administration Menu, select **Deployment > Schedules**.
- 2. Do you know the name of the service you want to edit?
  - If Yes, under Search, in the by Name field, type the name of the service, and then click **Go**!
  - If No, under List, select from the by Scheduler Type list a search method, and then click **Go!** Search Methods include:

All – Lists all services and business processes that have schedules.

Services – Lists only services that have schedules.

Business Processes – Lists only business processes that have schedules.

- 3. In the Schedules page complete one of the following actions:
  - To enable a scheduled service, under Enabled, click the check box next to the service you want to enable. Ensure that the check box is selected.
  - To disable a scheduled service, under Enabled, clear the check box next to the service you want to disable. Ensure that the check box is cleared.
- 4. In the message box indicating Status change will affect only the service associated schedule, click **OK**.

# Editing a Service Schedule About this task

Predefined services run according to a schedule. You can edit a service schedule to meet your business requirements.

To edit a service schedule:

### Procedure

- 1. From the Administration Menu, select Deployment > Schedules.
- 2. Do you know the name of the service you want to edit?
  - If Yes, under Search, in the by Name field, type the service name. Click Go!
  - If No, under List, select from the by Scheduler Type list a search method, and then click **Go**!Search Methods include:

All – Lists all services and business processes that have schedules.

Services - Lists only services that have schedules.

Business Processes - Lists only business processes that have schedules.

- 3. In the Schedules page, click edit next to the schedule you want to edit.
- 4. In the Schedule Settings page, do you want the service to use a schedule?
  - If No, select Do not use schedule, and then click Next.
  - If Yes, select one of the following: **Run service based on timer every**, **Run service daily at**, or **Run service weekly on**, and complete the hour, minute, time of day, or day of week fields, appropriate to your selection.
- 5. Do you want to run the service at startup?
  - If Yes, next to the scheduling interval you selected in step 4, select the At startup check box, and then click Next.
  - If No, next to the scheduling interval you selected in step 4, clear the At startup check box (or leave the check box clear if not selected), and then click **Next**.
- 6. In the Confirm page, complete the following steps:
  - a. Verify the schedule information. If information is not correct, click Back, make the needed corrections.
  - **b.** Select **Enable Service for Business Processes** if you want to enable the service.
  - c. Click Finish to save the changes to the service schedule.

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