

Party Discovery Use Cases

This note describes two use cases for Party Discovery. They are:

- Use Case 1 - Discovery by Prior Agreement, and
- Use Cas 2 - Discovery Through a Registry

The term "Party" has been used instead of "Trading Partner" since the both use cases apply whether or not a "trade" is involved. "Party Discovery" has been used instead of "Trading Partner Agreement", since in the second use case, the first message is sent before there is any agreement.

Before the use cases are described, two assumptions have been made that are used in both the use cases.

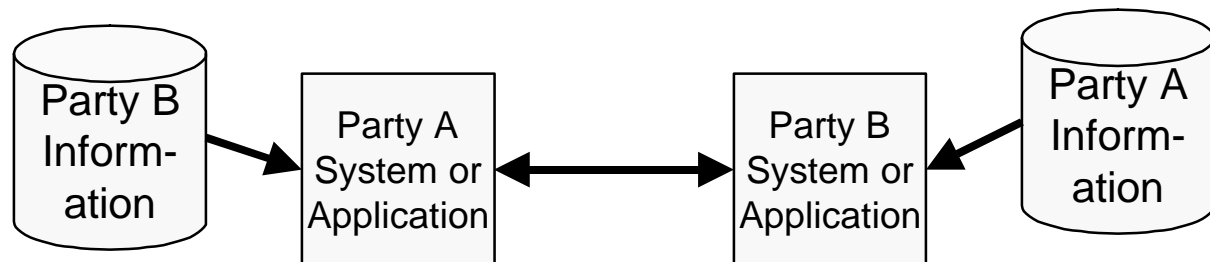
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Assumptions

Assumption 1 - Each party must know sufficient information about each other that they can send each other messages that each will be able to successfully process.

This assumption is illustrated in the diagram below that shows the "end state" of the discovery process.



In outline Party A needs to know information about Party B and Party B needs to know information about Party A before they can communicate.

Assumption 2 - The method by which a party discovers information about another party is immaterial.

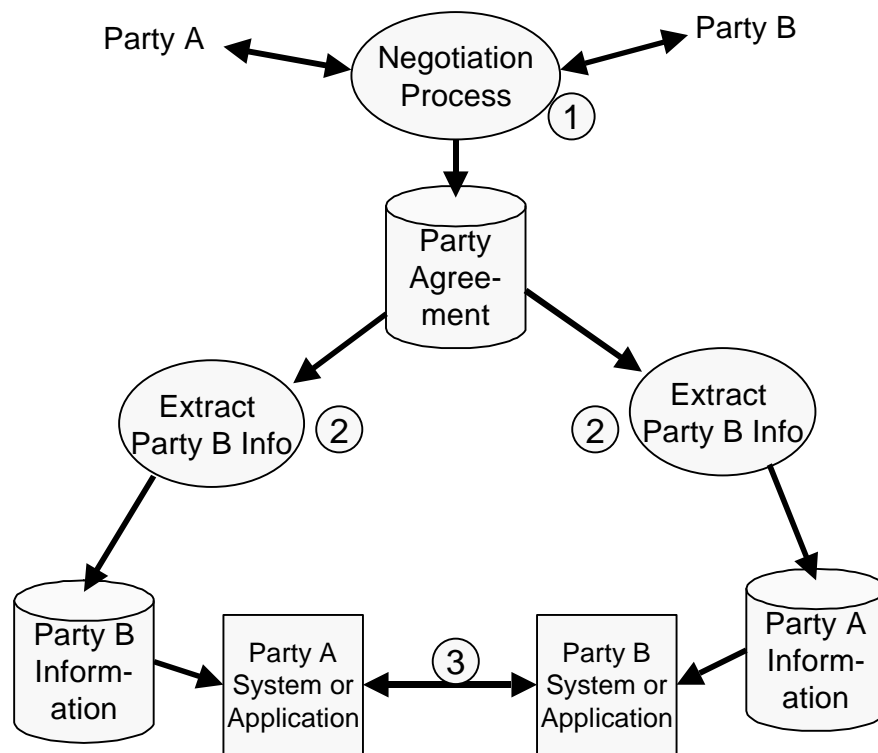
If a first party wants to send a message to a second party all they need to know is:

- the types of process that the second party supports and the specifications that they follow
- the transport/data communications that should be used to send a message to the second party
- whether or not the second party will accept the message from the first party.

Now for the use cases.

Use Case 1 - Discovery by prior agreement

This use case is illustrated by the diagram below.



Step 1

The first step involves Party A and Party B agreeing the rules that will apply when they interact to carry out one or more business process. The method of agreement could potentially be:

- 1) a telephone conversation
- 2) an exchange of emails
- 3) an exchange of XML documents by email that represent various drafts of the "agreement". Each draft is reviewed by a human until agreement is reached
- 4) the same as 3 put the negotiation and agreement is carried automatically by computer

Step 2

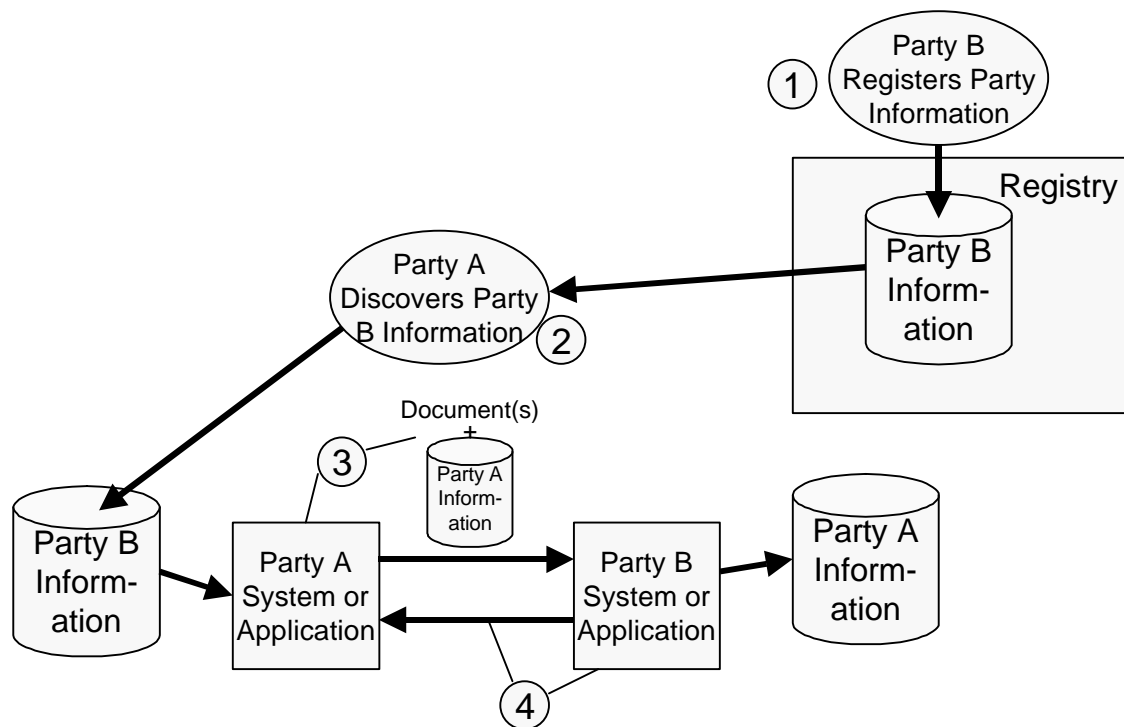
Once agreement is reached, a Party Agreement is created and then information extracted from it to create the Party A (or Party B) information.

Step 3

Finally, once the Party Information is in place, the exchange of messages can start.

Use Case 2 - Discovery Through a Registry

This use case is illustrated by the diagram below.



Step 1

Party B registers information about itself in a Registry. Included in the information are the statements that:

- Party B is prepared to accept messages without prior contact or agreement
- Party B can process messages that conform to the ebXML Messaging Services specification.

Step 2

Party A discovers the existence of Party B and decides that they want to exchange messages with them. They therefore download information about Party B from the Registry. Downloads of information from the Registry can occur in a variety of ways, for example:

- using software that conforms to a specification produced by the ebXML Registry and Repository group, if the Registry is ebXML compliant
- by downloading the information from a URL
- by receiving the information as an XML document from another Party that they know who recommends they contact them

Note that:

- Party A also supports the ebXML Messaging Services specification
- Party B is unaware that Party A has downloaded this information.

Step 3

Party A decides to send Party B a message using the reliable messaging services feature of ebXML Messaging Services that it knows Party B supports.

Included in the first message is:

- 1) A reference or pointer to the Party B information that was download from the registry, and
- 2) A "Delivery Semantics" of "AtMostOnce" in the ebXML Header Document

- 3) A copy of either:
- Party A's Information, or
 - a pointer to Party A's information in a registry.

In essence, Party A, by sending the message to Party B, is requesting that Party B start an exchange of messages with Party A under the terms and conditions described in the Party A and Party B Information. Note that there ~~is no "agreement"~~has been no "negotiation" between Party A and Party B at this point in time.

Step 4

Party B reviews the message and checks the information Party A has provided about itself and decides that either:

- ~~#~~It is acceptable. Party B then decides to agree to the terms and conditions specified in the message sent by Party A and implies acceptance of this by sending a message back to Party A. Exchange of messages between Party A and Party B then continues according to the agreed business process.
- It is potentially acceptable. In which case Party B could enter into communications with Party A to agree terms on which messages could be exchanged. This might result in the creation of a Trading Partner Agreement that was used in subsequent exchanges of messages, or
- It is unacceptable. In this case, Party B would send an error message back to Party A to indicate that the original message would not be processed.

Note that if the message sent by Party B to Party A did not arrive, then recovery would have occurred through the Reliable Messaging features of the ebXML Messaging Service that both support.