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**E-TrustEx – Submit Query Request Use Case Specification**

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| [0.4] | [22/05/2015] | [Anamaria Batrinu] | [JIRA [**ETRUSTEX-857**](https://webgate.ec.europa.eu/CITnet/jira/browse/ETRUSTEX-857) + updated broken cross-references] |
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# Use Case description

This Use Case describes the specific processing performed by e-TrustEx on a business document of type QueryRequest. This Use Case extends the UC1\_2\_1 Synchronous Service Use Case Specification.

# References

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| --- | --- |
| Document | Location |
| UC1\_2\_1 Synchronous Service Use Case Specification | [https://webgate.ec.europa.eu/CITnet/svn/ETRUSTEX/trunk/001 e-TrustEx/002 Requirements/Use Case Model](https://webgate.ec.europa.eu/CITnet/svn/ETRUSTEX/trunk/001%20e-TrustEx/002%20Requirements/Use%20Case%20Model) |
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# Flow of events

# System performs the specific checks

This Use Case extends the UC1\_2\_1 Synchronous Service Use Case Specification and it is called from Step 2.1.5. System performs the business specific processing.

# System queries the message repository

The specific **search parameters** are detailed in the following table:

| **Parameter** | **Definitions** | **User Defined Value** | **Default Value** |
| --- | --- | --- | --- |
| **Period (i.e. document received date range)** | Used to restrict the search to a specific time period.  When the start and end date of the period are the same then the search is made on this day. | When present in the message then the difference between the *Start Date* and *End Date* must be smaller or equal to one year. | When no User Defined Value is specified in the message then the search is made on one year period prior to and including the search date (i.e. the Start Date is 1 year before the search date, the End Date is the search date). |
| **(Set of) Document Type**  **Codes** | Used to restrict or enlarge the set of document types in the result set | When present in the message then the search is made on the set of valid document types specified in the message. | When no User Defined Value is specified then the result set includes every outbound document type. |
| **ID of the Originator Document Reference** | Used to restrict or enlarge the set of document in the result set to the ones that have a particular Originator Document Reference | When present in the message then the search is made on the set of valid Originator Document Reference.ID specified in the message. | When no User Defined Value is specified then the result set doesn’t take into account the originator Document Reference. |
| **Retrieved Documents Indicator** | Boolean parameter used to enable the addition of retrieved documents into the result set. | When present in the message and set to true then retrieved documents of the specified document types or default document types are included in the message. | When no User Defined Value is specified then the retrieved documents are excluded from the result set. |
| **Retrieved Extensions Indicator** | Boolean parameter used to enable the addition of UBL extensions for all matching documents. | When present in the message and set to true then retrieved documents matching the search criteria will include the UBL extensions. | When no User Defined Value is specified then the retrieved documents do not include the UBL extensions. |
| **(Set of) Receiver Endpoint IDs** | Used to restrict the set of documents to the ones sent to a particular set of **Receiver** Endpoint IDs. | When present in the message then the search is made on the set of **Receiver** IDs specified in the message. | When no User Defined Value is specified then no filtering is applied for the message receiver. |
| **(Set of) Sender**  **Endpoint IDs** | Used to restrict the set of documents to the ones sent by a particular set of **Sender** Endpoint IDs. | When present in the message then the search is made on the set of **Sender** Endpoint IDs specified in the message. | When no User Defined Value is specified then no filtering is applied for the message sender. |

The documents must pertain to a transaction set granted to the Issuer by an eventual party agreement with the Sender.

If the document's transaction is SubmitAttachedDocument or SubmitApplicationResponse, in extenso, if the transaction belongs to Toolbox (write) services and directly relates to a parent document, the transaction of the parent is retrieved. If the parent is an attached document, the transaction of its parent is retrieved. The objective is to identify the transaction of the main (initial) document (e.g Invoice, Bundle, Order, Request For Quotation) and not the transaction of a Toolbox service.

**Note:**

The search must be performed using the following parameters specified in the table above:

**Period** AND

(**Set of) Document Type Codes**AND

**Retrieved Documents Indicator**AND

WHERE

(the sender of the message is the request sender AND the receiver of the message is any of the Parties specified in the (Set of) Receiver Endpoint IDs)

OR

(the receiver of the message is the request sender AND the sender of the message is any of the Parties specified in the (Set of) Sender Endpoint IDs)

# System builds the Query Response

Based on the result of the previously mentioned query, the system builds the Query Request response:

* The documents are ranked by received date descending.The documents having the same received date are ordered at random.
* The following data is returned for each of the matching documents (i.e. 1 or more):

|  |  |
| --- | --- |
| **Element** | **Xpath** |
| **Response Code** (applicable for a response message only) | *DocumentReferenceResponseParentDocs.DocumentReferenceResponse.Response.ResponseCode* |
| **Document Status Code** | *DocumentReferenceResponseParentDocs.DocumentReferenceResponse.Status.StatusReasonCode* |
| **ID (of the document)** | *DocumentReferenceResponseParentDocs.DocumentReferenceResponse.DocumentReference.ID* |
| **Issue Date (of the document)** | *DocumentReferenceResponseParentDocs.DocumentReferenceResponse.DocumentReference.IssueDate* |
| **Document Type Code** | *DocumentReferenceResponseParentDocs.DocumentReferenceResponse.DocumentReference.DocumentTypeCode* |
| **Sender Party Endpoint ID** | *DocumentReferenceResponseParentDocs.DocumentReferenceResponse.SenderParty.EndpointID* |
| **Receiver Party Endpoint ID** | *DocumentReferenceResponseParentDocs.DocumentReferenceResponse.ReceiverParty.EndpointID* |

For each matching document, if information exists about its parent, then this information is also returned for correlation purposes:

|  |  |
| --- | --- |
| **Element** | **Xpath** |
| **Response Code** (applicable for a response message only) | *DocumentReferenceResponseParentDocs.ParentDocument.Response.ResponseCode* |
| **Document Status Code** | *DocumentReferenceResponseParentDocs.ParentDocument.Status.StatusReasonCode* |
| **ID** | *DocumentReferenceResponseParentDocs.ParentDocument.DocumentReference.ID* |
| **Issue Date (of the document)** | *DocumentReferenceResponseParentDocs.ParentDocument.DocumentReference.IssueDate* |
| **Document Type Code** | *DocumentReferenceResponseParentDocs.ParentDocument.DocumentReference.DocumentTypeCode* |
| **Sender Party Endpoint ID** | *DocumentReferenceResponseParentDocs.ParentDocument.SenderParty.EndpointID* |
| **Receiver Party Endpoint ID** | *DocumentReferenceResponseParentDocs.ParentDocument.ReceiverParty.EndpointID* |

# System submits the Query Response

* System responds with the Query Request Response built at the previous step.
* This closes the https connection between the Issuer and the System.
* Use Case Ends.

# Alternative Flows

# A1: At step 3.2 “System queries the message repository” and no search criteria is being specified

* The system queries for documents using the default values specified in the parameters table
* Use Case continues at step 3.3 System builds the Query Response.

# A2: At step 3.2 “System queries the message repository” and only Receiver Party Endpoint ID is filled in with the Endpoint ID of the request Sender Party

* The System queries for documents:
* With the specified parameters
* Where the **request Sender Party** is the Receiver of the document;
* In this case, the Query Request returns the same search results as the Inbox Request service.
* Use Case continues at step 3.3 System builds the Query Response.

# A3: At step 3.2 “System queries the message repository”, invalid document types are identified in the Set of Document Types specified in the request

* The System queries for documents of the valid document types (the invalid document types are ignored) and for these it applies the other parameters;
* Use Case continues at step 3.3 System builds the Query Response.

# A4: At step 3.2 “System queries the message repository”, invalid Endpoint IDs are identified in the Set of Endpoint IDs specified in the request

* The System queries for documents of the valid Endpoint IDs (the invalid Endpoint IDs are ignored) and for these it applies the other parameters.
* Use Case continues at step 3.3 System builds the Query Response.

# A5: At step 3.3 “System builds the Query Response” and no document matches the query criteria

* The System builds a Query Request response with no Matching Documents (i.e. empty content).
* Use Case continues at step 3.4 System submits the Query Response

# A6: At step 3.2 “System queries the message repository” and only Sender Party Endpoint ID is filled in with the Endpoint ID of the request Sender Party

* The system queries for documents:
* With the specified parameters
* Where the **request Sender Party** is the Sender of the document
* Use Case continues at step 3.3 System builds the Query Response.

# Exceptional Flows

# E1: At step 3.2 “System queries the message repository” and a technical failure is reported

* The System submits a SOAP Fault [4]
* This closes the https connection between the Issuer and the System
* The Use Case Ends.

# E2: At step 3.3 “System builds the Query Response” and a technical failure is reported regarding the connection with the service’s caller

* The System detects when the service’s caller closes its connection
* In this case the System cannot respond to the subsequent request
* The Use Case Ends.

# Sub flows

N/A

# Special Requirements

N/A

# Preconditions

N/A

# Post conditions

* Following the basic and alternate flows, the System responds to the Query Request with a Query Request Response.
* In case of a technical failure, the System submits a SOAP fault to the Issuer.

# Additional Information

N/A