



MailXML 9.0

System Messages Specification

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Abstract

This document describes the messaging protocol for use by mailers and their consignees. The Mail.XML™ Transaction Protocol defines the roles and responsibilities of Shippers and Consignees and defines the format and method for message exchange. This messaging protocol is designed to be XML and Web-Services compliant and to work with FAST.

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About Mail.XML™

Mail.XML™ is bringing a paradigm change to the industry by increasing business function specific B2B (Business to Business) communication within the industry that supports automation and in the end enables cost avoidance and higher profits through improved competence and effectiveness of communication. Mail.XML is designed to increase efficiency and lower costs by removing many manual data entry processes and enabling quick near real time communication between business partners. Mail.XML currently supports container based scheduling, pick up and drop off business processes, as well as identifying different business entities responsible for performing different services such as quality of mailing, address correction, and delivery confirmation on a mailing.

The core focus of Mail.XML is communication between industry members and from industry to the final mail processing and delivery organization that delivers the mail to the end consumer, e.g., USPS.

In the next few versions of Mail.XML the focus moves across mailing supply chain channels, and includes advanced functions such as payment; automated verification; enabling first, second, and third party communication and incorporating presort planning, printing, and distribution processes.

What's New in Mail.XML Version 9.0

With this release, the Mail.XML Messaging Protocol moves to Version 9.0. This is a MAJOR release that corrects technical errors, implements new message sets for Transportation and Mail.dat interfaces and supports ongoing USPS modernization and automation efforts for 2010 and 2011.

About Schema Modularization

As of the release of MailXML 9.0, Mail.XML messages are now grouped into 6 message types.

- Transportation Messages
- Mailing Messages
- Data Distribution Messages
- Identification Messages
- Supply Chain Messages
- System Messages

The underlying schemas have been modularized to reflect these distinct message sets. In addition three “shared” or “common” schemas have been developed. One stores simple

type definitions that can be shared across message sets. A second common module is made up of common elements and complex types that are shared across two or more message sets. The final common module is made up of system messages and the attributes, elements and complex types that are *unique* to these messages.

MailXML schema modules are designed to stand alone, enabling those interested in one or more message sets to develop and validate just those message sets without the requirement to address the entire MailXML specification. Each module will validate by itself or in combination with all other message sets when the entire MailXML Specification is considered. In addition each module will be versioned separately. Version numbers are contained within the namespace designation. Modules will be documented individually as well.

The following MailXML XSD modules/namespaces have been developed:

- **mailxml_tm.xsd:** This module contains all the transportation (or FAST) messages and the attributes, elements and complex types that are *unique* to these messages. *Namespace=mailxml tm:*
- **mailxml_mm.xsd:** This module contains all the mailing messages and the attributes, elements and complex types that are *unique* to these messages. *Namespace=mailxml mm:*
- **mailxml_dd.xsd:** This module contains all the data distribution messages (eDoc) and the attributes, elements and complex types that are *unique* to these messages. *Namespace=mailxml dd:*
- **mailxml_id.xsd:** This module contains all the identification messages and the attributes, elements and complex types that are *unique* to these messages. *Namespace=mailxml id:*
- **mailxml_sc.xsd:** This module contains all the supply chain messages and the attributes, elements and complex types that are *unique* to these messages. *Namespace=mailxml sc:*
- **mailxml.xsd:** This module contains all the system messages and the attributes, elements and complex types that are *unique* to these messages. Note that in order for the <MessageResponseRetrievalResponse to work, all the other message modules are included by the system.xsd
Namespace=mailxml:
- **mailxml_defs.xsd:** This module contains all the common definitions of attributes, elements and complex types that are used across one or more message types. *Namespace=mailxml defs:*
- **mailxml_base.xsd:** This module contains all the simple types that are used anywhere in mailxml. These can be considered a building block for any message group. *Namespace=mailxml base:*
- **mailxml.xsd:** This module contains the system messages of MailXML and is used to build custom profiles for MailXML. *Namespace=mailxml:*

The Mail.XML™ Messaging Roadmap

The Mail.XML Messaging Specification has been organized into a set of documents. This *Schemas Specification* is one document in a set of documents that make up the

Mail.XML Specification 9.0. Updates in this Specification are NOT backwardly compatible with previous versions. Other documents in the specification set include:

- *Mail.XML™ 9.0: Primer* provides an introduction and overview of the Mail.XML 8.0 Specification and an overview of the Mail.XML messages.
- *Mail.XML™ 9.0: System Messages Specification* documents all transportation messages
- *Mail.XML™ 9.0: Transportation Messaging Specification* documents all transportation messages
- *Mail.XML™ 9.0: Mailing Message Specification* documents all mailing messages
- *Mail.XML™ 9.0: Data Distribution Messaging Specification* documents all data distribution messages
- *Mail.XML™ 9.0: Identification Message Specification* documents all identification messages
- *Mail.XML™ 9.0: Supply Chain Messaging Specification* documents all supply chain messages
- *Mail.XML™ 9.0: Simple Types Specification* documents all simple types used across MailXML messages
- *Mail.XML™ 9.0: System Specification* documents all simple types used across MailXML messages
- *Mail.XML™ 9.0: Fault and Return Information Specification* documents all fault and return codes.
- *Mail.XML™ 9.0: Schemas* contains the .XSDs that make up the Mail.dat Transaction Messaging Specification.

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1 Index

1.1 System Message Element Index

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1.2 System Message Complex Type Index

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2 System Message Elements

element **DeliveryResponse**

diagram	<p>Response sent to USPS by a customer when any delivery is pushed. For example when a delivery point validation delivery is pushed by USPS this response is returned by the receiver.</p>
namespace	http://idealliance.org/maildat/Specs/md091/mailxml80A/mailxml
used by	element messageResponseRetrievalResponseType/QueryResults
annotation	documentation Response sent to USPS by a customer when any delivery is pushed. For example when a delivery point validation delivery is pushed by USPS this response is returned by the receiver.

element **DeliveryResponse/UserLicenseCode**

diagram	
namespace	http://idealliance.org/maildat/Specs/md091/mailxml80A/mailxml


element **DeliveryResponse/MaildatJobID**

diagram	
namespace	http://idealliance.org/maildat/Specs/md091/mailxml80A/mailxml

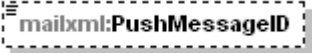
element **DeliveryResponse/CustomerGroupID**

diagram	
namespace	http://idealliance.org/maildat/Specs/md091/mailxml80A/mailxml


element **DeliveryResponse/MailingGroupID**

diagram	
namespace	http://idealliance.org/maildat/Specs/md091/mailxml80A/mailxml

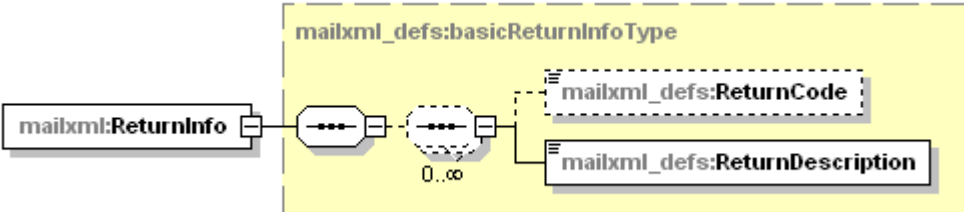
element **DeliveryResponse/PushMessageID**

diagram	
namespace	http://idealliance.org/maildat/Specs/md091/mailxml80A/mailxml

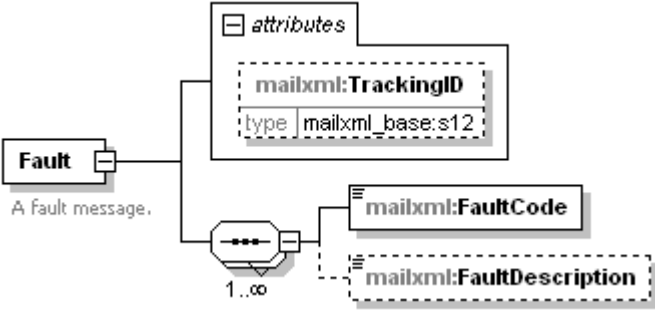
element **DeliveryResponse/DeliveryType**

diagram	
namespace	http://idealliance.org/maildat/Specs/md091/mailxml80A/mailxml

element **DeliveryResponse/ReturnInfo**

diagram	
namespace	http://idealliance.org/maildat/Specs/md091/mailxml80A/mailxml


element **Fault**

diagram						
namespace	http://idealliance.org/maildat/Specs/md091/mailxml80A/mailxml					
attributes	Name	Type	Use	Default	Fixed	annotation
	mailxml:TrackingID	mailxml_base:s12				
annotation	documentation A fault message.					


attribute **Fault/@TrackingID**

namespace	http://idealliance.org/maildat/Specs/md091/mailxml80A/mailxml
-----------	---

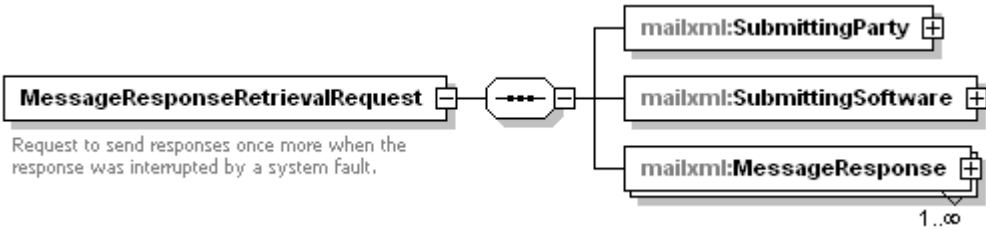
element **Fault/FaultCode**

diagram	 A diagram of the mailxml:FaultCode element, represented as a rectangle with a small square icon on the left side.
namespace	http://idealliance.org/maildat/Specs/md091/mailxml80A/mailxml

element **Fault/FaultDescription**

diagram	 A diagram of the mailxml:FaultDescription element, represented as a dashed rectangle with a small square icon on the left side.
namespace	http://idealliance.org/maildat/Specs/md091/mailxml80A/mailxml

element **MessageResponseRetrievalRequest**

diagram	 A diagram of the MessageResponseRetrievalRequest element. It shows a main box labeled MessageResponseRetrievalRequest with the text "Request to send responses once more when the response was interrupted by a system fault." below it. This box is connected to a central connector box, which then branches into three sub-elements: mailxml:SubmittingParty , mailxml:SubmittingSoftware , and mailxml:MessageResponse . The mailxml:MessageResponse element has a multiplicity of 1..∞ indicated below it.
namespace	http://idealliance.org/maildat/Specs/md091/mailxml80A/mailxml
annotation	documentation Request to send responses once more when the response was interrupted by a system fault.

element **MessageResponseRetrievalRequest/SubmittingParty**

diagram						
namespace	http://idealliance.org/maildat/Specs/md091/mailxml80A/mailxml					
attributes	Name	Type	Use	Default	Fixed	annotation
	mailxml_defs:MailerID6	mailxml_base:mailerID6Type				
	mailxml_defs:MailerID9	mailxml_base:mailerID9Type				
	mailxml_defs:CRID	mailxml_base:CRIDType				
	mailxml_defs:SchedulerID	mailxml_base:s12				
	mailxml_defs:MaildatUserLicense	mailxml_base:userLicenseCodeType				

element **MessageResponseRetrievalRequest/SubmittingSoftware**

diagram						
namespace	http://idealliance.org/maildat/Specs/md091/mailxml80A/mailxml					
attributes	Name	Type	Use	Default	Fixed	annotation
	mailxml_defs:SoftwareName	xs:string	required			
	mailxml_defs:Vendor	xs:string	required			
	mailxml_defs:Version	xs:string	required			
	mailxml_defs:ApprovalDate	xs:date				
	mailxml_defs:ApprovalKey	xs:string				

element **MessageResponseRetrievalRequest/MessageResponse**

diagram						
namespace	http://idealliance.org/maildat/Specs/md091/mailxml80A/mailxml					
attributes	Name	Type	Use	Default	Fixed	annotation
	mailxml:TrackingID	mailxml_base:s12	required			

element **MessageResponseRetrievalResponse**

diagram	
namespace	http://idealliance.org/maildat/Specs/md091/mailxml80A/mailxml
annotation	documentation Response to the Message Response Retrieval Request that resends interrupted responses.

element **MessageResponseRetrievalResponse/MessageResponseRetrievalAccept**

diagram													
namespace	http://idealliance.org/maildat/Specs/md091/mailxml80A/mailxml												
attributes	<table><thead><tr><th>Name</th><th>Type</th><th>Use</th><th>Default</th><th>Fixed</th><th>annotation</th></tr></thead><tbody><tr><td>mailxml:TrackingID</td><td>mailxml_base:s12</td><td>required</td><td></td><td></td><td></td></tr></tbody></table>	Name	Type	Use	Default	Fixed	annotation	mailxml:TrackingID	mailxml_base:s12	required			
Name	Type	Use	Default	Fixed	annotation								
mailxml:TrackingID	mailxml_base:s12	required											

element **MessageResponseRetrievalResponse/MessageResponseRetrievalReject**

diagram													
namespace	http://idealliance.org/maildat/Specs/md091/mailxml80A/mailxml												
attributes	<table><thead><tr><th>Name</th><th>Type</th><th>Use</th><th>Default</th><th>Fixed</th><th>annotation</th></tr></thead><tbody><tr><td>mailxml:TrackingID</td><td>mailxml_base:s12</td><td>required</td><td></td><td></td><td></td></tr></tbody></table>	Name	Type	Use	Default	Fixed	annotation	mailxml:TrackingID	mailxml_base:s12	required			
Name	Type	Use	Default	Fixed	annotation								
mailxml:TrackingID	mailxml_base:s12	required											

element **NotificationResponse**

diagram	
namespace	http://idealliance.org/maildat/Specs/md091/mailxml80A/mailxml
used by	element messageResponseRetrievalResponseType/QueryResults
annotation	documentation Standard response to a USPS notification to indicate the notification has been received.

element **NotificationResponse/UserLicenseCode**

diagram	
namespace	http://idealliance.org/maildat/Specs/md091/mailxml80A/mailxml

element **NotificationResponse/MaidatJobID**

diagram	
namespace	http://idealliance.org/maildat/Specs/md091/mailxml80A/mailxml


element **NotificationResponse/CustomerGroupID**

diagram	
namespace	http://idealliance.org/maildat/Specs/md091/mailxml80A/mailxml

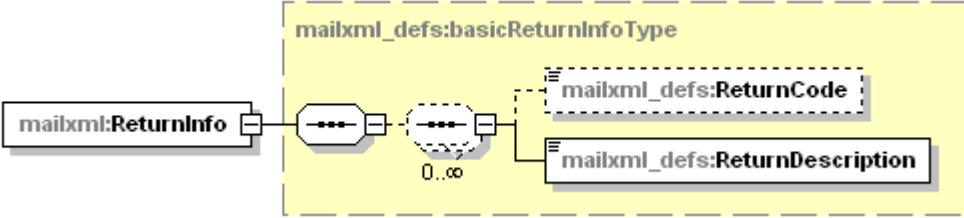
element **NotificationResponse/MailingGroupID**

diagram	
namespace	http://idealliance.org/maildat/Specs/md091/mailxml80A/mailxml

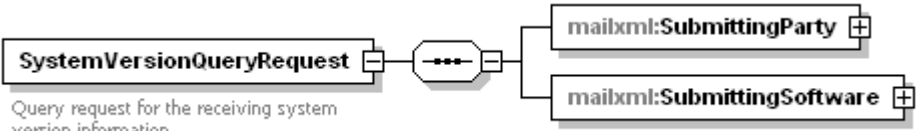
element **NotificationResponse/NotificationDate**

diagram	 A rectangular box with a small icon on the left and the text mailxml:NotificationDate inside.
namespace	http://idealliance.org/maildat/Specs/md091/mailxml80A/mailxml

element **NotificationResponse/ReturnInfo**

diagram	 A diagram showing the structure of the mailxml:ReturnInfo element. It starts with a box labeled mailxml:ReturnInfo connected to a sequence container (a rectangle with three dots). This container is followed by a choice container (a dashed rectangle labeled mailxml_defs:basicReturnInfoType). Inside the choice container, there is a dashed box for mailxml_defs:ReturnCode and a solid box for mailxml_defs:ReturnDescription . A cardinality 0..∞ is shown below the choice container.
namespace	http://idealliance.org/maildat/Specs/md091/mailxml80A/mailxml

element **SystemVersionQueryRequest**

diagram	 A diagram showing the structure of the SystemVersionQueryRequest element. It starts with a box labeled SystemVersionQueryRequest with the text "Query request for the receiving system version information." below it. This is connected to a sequence container (a rectangle with three dots), which is then connected to a choice container (a rectangle with two branches). The two branches lead to boxes labeled mailxml:SubmittingParty and mailxml:SubmittingSoftware , each with a plus sign in a small box to its right.
namespace	http://idealliance.org/maildat/Specs/md091/mailxml80A/mailxml
annotation	documentation Query request for the receiving system version information.

element **SystemVersionQueryRequest/SubmittingParty**

diagram						
namespace	http://idealliance.org/maildat/Specs/md091/mailxml80A/mailxml					
attributes	Name	Type	Use	Default	Fixed	annotation
	mailxml_defs:MailerID6	mailxml_base:mailerID6Type				
	mailxml_defs:MailerID9	mailxml_base:mailerID9Type				
	mailxml_defs:CRID	mailxml_base:CRIDType				
	mailxml_defs:SchedulerID	mailxml_base:s12				
	mailxml_defs:MaildatUserLicense	mailxml_base:userLicenseCodeType				

element **SystemVersionQueryRequest/SubmittingSoftware**

diagram						
namespace	http://idealliance.org/maildat/Specs/md091/mailxml80A/mailxml					
attributes	Name	Type	Use	Default	Fixed	annotation
	mailxml_defs:SoftwareName	xs:string	required			
	mailxml_defs:Vendor	xs:string	required			
	mailxml_defs:Version	xs:string	required			
	mailxml_defs:ApprovalDate	xs:date				
	mailxml_defs:ApprovalKey	xs:string				

element **SystemVersionQueryResponse**

diagram						
namespace	http://idealliance.org/maildat/Specs/md091/mailxml80A/mailxml					
used by	element	messageResponseRetrievalResponseType/QueryResults				
annotation	documentation	Response to a query for the receiving system version information.				

element **SystemVersionQueryResponse/QueryResults**

diagram						
---------	--	--	--	--	--	--

namespace	http://idealliance.org/maildat/Specs/md091/mailxml80A/mailxml
-----------	---

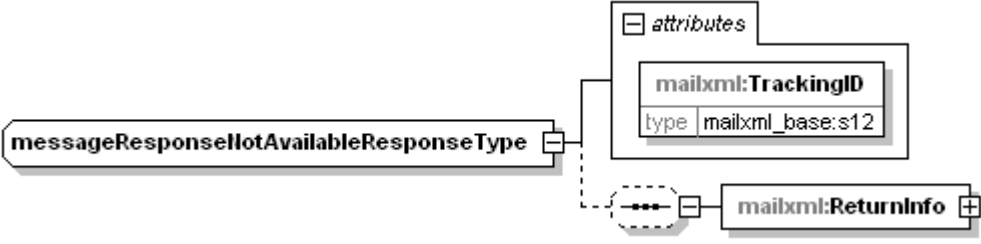
element SystemVersionQueryResponse/QueryResults/SoftwareStatus

diagram						
namespace	http://idealliance.org/maildat/Specs/md091/mailxml80A/mailxml					
attributes	Name	Type	Use	Default	Fixed	annotation
	mailxml_defs:SoftwareName	xs:string	required			
	mailxml_defs:Vendor	xs:string	required			
	mailxml_defs:Version	xs:string	required			
	mailxml_defs:ApprovalDate	xs:date				
	mailxml_defs:ApprovalKey	xs:string				

element SystemVersionQueryResponse/QueryResults/ReturnInfo

diagram						
namespace	http://idealliance.org/maildat/Specs/md091/mailxml80A/mailxml					

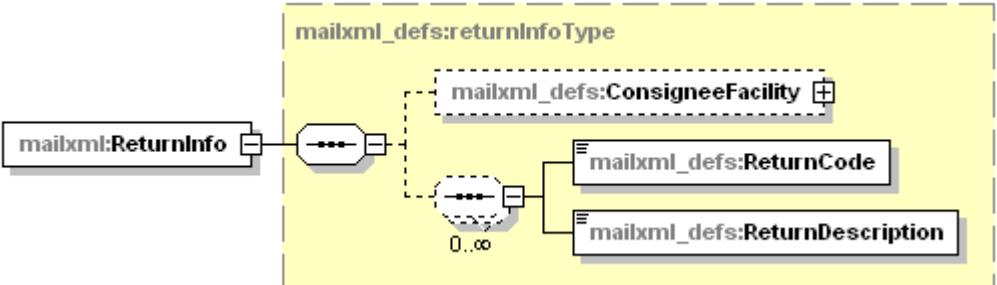
complexType messageResponseNotAvailableResponseType

diagram						
namespace	http://idealliance.org/maildat/Specs/md091/mailxml80A/mailxml					
used by	element MessageResponseRetrievalResponse/MessageResponseRetrievalReject					
attributes	Name	Type	Use	Default	Fixed	annotation
	mailxml:TrackingID	mailxml_base:s12	required			

attribute messageResponseNotAvailableResponseType/@TrackingID

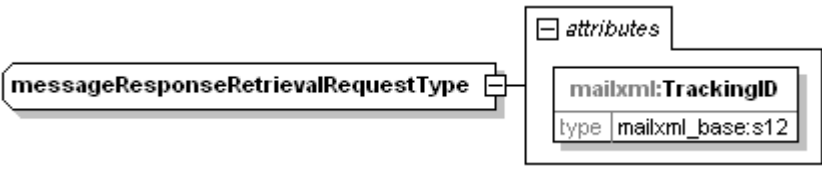
namespace	http://idealliance.org/maildat/Specs/md091/mailxml80A/mailxml
-----------	---

element messageResponseNotAvailableResponseType/ReturnInfo

diagram						
namespace	http://idealliance.org/maildat/Specs/md091/mailxml80A/mailxml					

3 System Message Complex Types

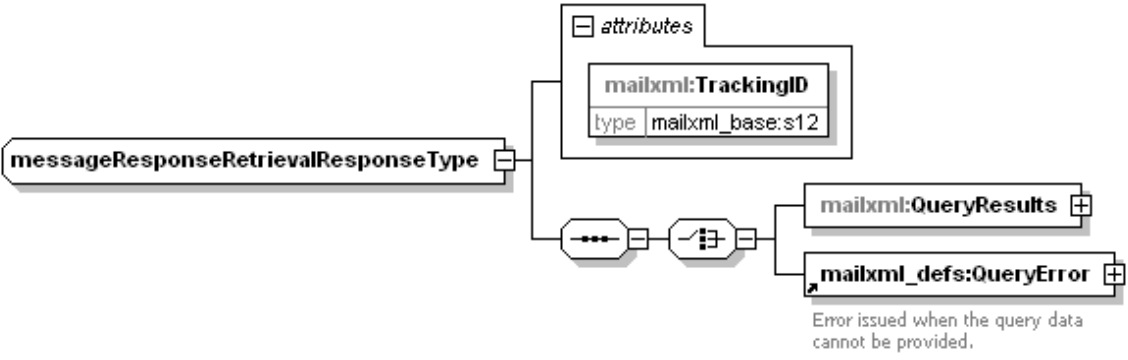
complexType messageResponseRetrievalRequestType

diagram						
namespace	http://idealliance.org/maildat/Specs/md091/mailxml80A/mailxml					
used by	element MessageResponseRetrievalRequest/MessageResponse					
attributes	Name mailxml:TrackingID	Type mailxml_base:s12	Use required	Default	Fixed	annotation

attribute messageResponseRetrievalRequestType/@TrackingID

namespace	http://idealliance.org/maildat/Specs/md091/mailxml80A/mailxml
-----------	---

complexType messageResponseRetrievalResponseType

diagram						
namespace	http://idealliance.org/maildat/Specs/md091/mailxml80A/mailxml					
used by	element MessageResponseRetrievalResponse/MessageResponseRetrievalAccept					
attributes	Name mailxml:TrackingID	Type mailxml_base:s12	Use required	Default	Fixed	annotation

attribute messageResponseRetrievalResponseType/@TrackingID

namespace	http://idealliance.org/maildat/Specs/md091/mailxml80A/mailxml
-----------	---

element messageResponseRetrievalResponseType/QueryResults

diagram



namespace	http://idealliance.org/maildat/Specs/md091/mailxml80A/mailxml
-----------	---

element **messageResponseRetrievalResponseType/QueryResults/ReturnInfo**

diagram	<p>The diagram illustrates the structure of the <code>messageResponseRetrievalResponseType/QueryResults/ReturnInfo</code> element. It shows a sequence of components: a dashed box labeled <code>mailxml:ReturnInfo</code> (with a cardinality of 1), followed by a sequence of two elements within a yellow dashed box labeled <code>mailxml_defs:basicReturnInfoType</code>. The first element in this box is <code>mailxml_defs:ReturnCode</code> (with a cardinality of 1), and the second is <code>mailxml_defs:ReturnDescription</code> (with a cardinality of 0..∞). The elements are connected by a sequence line with a cardinality of 1 at the start and 0..∞ at the end.</p>
namespace	http://idealliance.org/maildat/Specs/md091/mailxml80A/mailxml

XML Schema documentation generated by [XMLSpy](http://www.altova.com/xmlspy) Schema Editor <http://www.altova.com/xmlspy>