

Mail.XML Version 23.1

System Messages Specification

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Working Group Chair

Bob Schimek, Quad

Technical Director

Shariq Mirza, DTAC Associate, Assurety Consulting & Solutions

Editor:

Shariq Mirza, DTAC Associate, Assurety Consulting & Solutions

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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.

Mail.XML and Mail.dat are trademarks of DTAC.

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 23.1?

With this release, the Mail.XML Messaging Protocol moves to Version 23.1. This release supports structure changes required by mailing industry and Postal Service.

Changes supported by Mail.XML 23.1 include:

- CR 2411 – Modification to RateCategoryType, to include a value of B2 to represent High Density Flats Carrier Route Bundles on Pallets
- CR 2412 – Updates to CharacteristicIncentiveType to include enumerations from 0X to 9X to make values consistent with list of Content values and with Mail.dat
- CR 2410 – Updates to ZoneICType to support Zone 10 (represented as value A) for USPS competitive products

About Mail.XML Schema Modularization

Today Mail.XML messages are grouped into 8 message types.

- Transportation Messages (TM)
- Mailing Messages (MM)
- Data Distribution Messages (DD)
- Dynamic Payment Template Messages
- Identification Messages (ID)
- Supply Chain Messages (SC)
- Informed Visibility (IV)
- System Messages
- Base: Shared simple types
- Definitions: Shared complex types and elements

The simple types shared across 2 or more modules are found in the Base schema. Likewise, the shared definitions module contains complex type definitions and elements that are shared across 2 or more modules.

Mail.XML Module Versioning Rules

The following versioning rules will be followed:

The Mail.XML wrapper schema**(.xsd) will always be given the next higher version number (or Errata designation) when any update is made to base, defs or any module. The name of the .xsd file will indicate the new version and the new version number will be used in the namespace and target declarations: xmlns:mailxml=<http://idealliance.org/Specs/mailxml23.1/mailxml>
targetNamespace=<http://idealliance.org/Specs/mailxml23.1/mailxml>

- When updates are made, only those modules that are updated will be given the next higher version number (or Errata letter designation).

- If updates are made to the base or defs, then the base and defs XSDs will be given the next higher version number (or Errata designation) and all modules that call to them will also be given the next higher version number (or Errata designation).

For example:

- If the wrapper version is labeled as `xmlns:mailxml="http://idealliance.org/Specs/mailxml23.1A/mailxml"` then at least one of the XSDs is at same version such as filename = 'Mail.XML_23.1A.xsd' <- Errata A
- If the wrapper version is labeled as `xmlns:mailxml="http://idealliance.org/Specs/mailxml23.1B/mailxml"` then at least one of the XSDs is at same version such as filename = 'Mail.XML_23.1B.xsd' <- Errata B
- If the wrapper version is labeled as `xmlns:mailxml="http://idealliance.org/Specs/mailxml23.1/mailxml"` then at least one of the XSDs is at same version such as filename = 'Mail.XML_23.1.xsd' <- Major Version

Mail.XML 23.1 XSD Modules:

The following Mail.XML XSD modules/namespaces are used:

Note: Actual xsd filenames include the version number (e.g. *mailxml_base_23.1.xsd*).

- `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 (eDoc) and the attributes, elements and complex types that are unique to these messages. Namespace=`mailxml_mm`:
- `mailxml_iv.xsd`: This module contains informed visibility messages and the attributes, elements and complex types that are unique to these messages. Namespace=`mailxml_iv`:
- `mailxml_dd.xsd`: This module contains all the data distribution messages 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_defs.xsd`: This module contains all the common definitions of attributes, elements and
`mailxml_base.xsd`: This module contains simple types that are shared across two or more modules that make up Mail.XML. These can be considered a building block for any message group. Namespace=`mailxml_base`:
- `mailxml.xsd`: This module contains the system messages of Mail.XML and is used to build custom profiles for Mail.XML. Namespace=`mailxml`:

The Mail.XML™ 23.1 Messaging Documentation Set

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

- Mail.XML™ 23.1: Transportation Messaging Specification documents all transportation messages
- Mail.XML™ 23.1: Mailing Messaging Specification documents all mailing messages

- Mail.XML™ 23.1: Informed Visibility Specification documents all informed visibility messages
- Mail.XML™ 23.1: Data Distribution Messaging Specification documents all data distribution messages
- Mail.XML™ 23.1: Identification Messaging Specification documents all identification messages
- Mail.XML™ 23.1: Supply Chain Messaging Specification documents all supply chain messages
- Mail.XML™ 23.1: System Messaging Specification documents all systems and fault messages
- Mail.XML™ 23.1: Simple Types Specification documents all simple types used across Mail.XML messages
- Mail.XML™ 23.1: Common Definitions Specification documents all shared elements and complex types.
- Mail.XML™ 23.1: Schemas contains the .XSDs that make up the Mail.XML Messaging Specification

Table of Contents

ABSTRACT	2
ABOUT MAIL.XML™	2
WHAT’S NEW IN MAIL.XML VERSION 23.1?	3
ABOUT MAIL.XML SCHEMA MODULARIZATION	3
MAIL.XML MODULE VERSIONING RULES	3
MAIL.XML 23.1 XSD MODULES:.....	4
THE MAIL.XML™ 23.1 MESSAGING DOCUMENTATION SET	4
1 INDEX.....	7
2 ELEMENTS.....	8

1 Index

schema name: [mailxml_sc 23.1.xsd](#)
attributeFormDefault: **qualified**
elementFormDefault: **qualified**
targetNamespace: **http://idealliance.org/Specs/mailxml23.1/mailxml_sc**

Complex types

[CSQBlockType](#)

[linkageType](#)

[linkingContainerIDType](#)

Simple types

[adjustmentStatusType](#)

[adjustmentType](#)

[containerInfoIncludedInResponseFlagType](#)


[creditDebitIndicator](#)

2 Elements


complexType **CSQBlockType**

diagram	
namespace	http://idealliance.org/Specs/mailxml23.1/mailxml_sc
children	mailxml_sc:UserLicenseCode mailxml_sc:MaildatJobID mailxml_sc:CustomerGroupID mailxml_sc:MailingGroupID mailxml_sc:ContainerKeysInfo mailxml_sc:ContainerDetail mailxml_sc:ConsolidatorCommunicationInfo mailxml_sc:PaymentInfo mailxml_sc:ApptInfo mailxml_sc:eDocFacility mailxml_sc:PlannedAppointmentFacility mailxml_sc:InductionFacility mailxml_sc:PreInductionInfo mailxml_sc:ContainerReleaseInfo mailxml_sc:InductionCloseoutInfo mailxml_sc:InductionIssues mailxml_sc:PostInductionInfo
used by	element ContainerStatusNotification/CSQBlockType

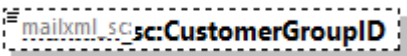
element **CSQBlockType/UserLicenseCode**

diagram			
namespace	http://idealliance.org/Specs/mailxml23.1/mailxml_sc		
type	mailxml_base:userLicenseCodeType		
facets	Kind	Value	Annotation
	minLength	1	
	maxLength	4	
	whiteSpace	preserve	


element **CSQBlockType/MaildatJobID**

diagram			
namespace	http://idealliance.org/Specs/mailxml23.1/mailxml_sc		
type	mailxml_base:jobIDType		
facets	Kind	Value	Annotation
	minLength	1	
	maxLength	8	
	whiteSpace	preserve	


element **CSQBlockType/CustomerGroupID**

diagram			
namespace	http://idealliance.org/Specs/mailxml23.1/mailxml_sc		
type	mailxml_base:s25		
facets	Kind	Value	Annotation
	minLength	1	
	maxLength	25	
	whiteSpace	preserve	


element **CSQBlockType/MailingGroupID**

diagram			
namespace	http://idealliance.org/Specs/mailxml23.1/mailxml_sc		
type	xs:nonNegativeInteger		

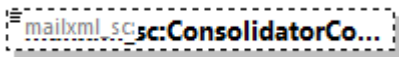
element **CSQBlockType/ContainerKeysInfo**

diagram										
namespace	http://idealliance.org/Specs/mailxml23.1/mailxml_sc									
type	mailxml_base:yesNo									
facets	<table><tr><th>Kind</th><th>Value</th><th>Annotation</th></tr><tr><td>enumeration</td><td>Yes</td><td></td></tr><tr><td>enumeration</td><td>No</td><td></td></tr></table>	Kind	Value	Annotation	enumeration	Yes		enumeration	No	
Kind	Value	Annotation								
enumeration	Yes									
enumeration	No									

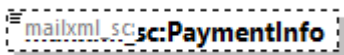
element **CSQBlockType/ContainerDetail**

diagram										
namespace	http://idealliance.org/Specs/mailxml23.1/mailxml_sc									
type	mailxml_base:yesNo									
facets	<table><tr><th>Kind</th><th>Value</th><th>Annotation</th></tr><tr><td>enumeration</td><td>Yes</td><td></td></tr><tr><td>enumeration</td><td>No</td><td></td></tr></table>	Kind	Value	Annotation	enumeration	Yes		enumeration	No	
Kind	Value	Annotation								
enumeration	Yes									
enumeration	No									

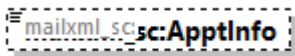
element **CSQBlockType/ConsolidatorCommunicationInfo**

diagram										
namespace	http://idealliance.org/Specs/mailxml23.1/mailxml_sc									
type	mailxml_base:yesNo									
facets	<table><tr><th>Kind</th><th>Value</th><th>Annotation</th></tr><tr><td>enumeration</td><td>Yes</td><td></td></tr><tr><td>enumeration</td><td>No</td><td></td></tr></table>	Kind	Value	Annotation	enumeration	Yes		enumeration	No	
Kind	Value	Annotation								
enumeration	Yes									
enumeration	No									

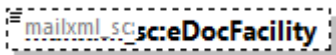
element **CSQBlockType/PaymentInfo**

diagram										
namespace	http://idealliance.org/Specs/mailxml23.1/mailxml_sc									
type	mailxml_base:yesNo									
facets	<table><tr><td>Kind</td><td>Value</td><td>Annotation</td></tr><tr><td>enumeration</td><td>Yes</td><td></td></tr><tr><td>enumeration</td><td>No</td><td></td></tr></table>	Kind	Value	Annotation	enumeration	Yes		enumeration	No	
Kind	Value	Annotation								
enumeration	Yes									
enumeration	No									


element **CSQBlockType/ApptInfo**

diagram										
namespace	http://idealliance.org/Specs/mailxml23.1/mailxml_sc									
type	mailxml_base:yesNo									
facets	<table><tr><th>Kind</th><th>Value</th><th>Annotation</th></tr><tr><td>enumeration</td><td>Yes</td><td></td></tr><tr><td>enumeration</td><td>No</td><td></td></tr></table>	Kind	Value	Annotation	enumeration	Yes		enumeration	No	
Kind	Value	Annotation								
enumeration	Yes									
enumeration	No									

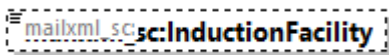
element **CSQBlockType/eDocFacility**

diagram										
namespace	http://idealliance.org/Specs/mailxml23.1/mailxml_sc									
type	mailxml_base:yesNo									
facets	<table><tr><td>Kind</td><td>Value</td><td>Annotation</td></tr><tr><td>enumeration</td><td>Yes</td><td></td></tr><tr><td>enumeration</td><td>No</td><td></td></tr></table>	Kind	Value	Annotation	enumeration	Yes		enumeration	No	
Kind	Value	Annotation								
enumeration	Yes									
enumeration	No									


element **CSQBlockType/PlannedAppointmentFacility**

diagram										
namespace	http://idealliance.org/Specs/mailxml23.1/mailxml_sc									
type	mailxml_base:yesNo									
facets	<table><tr><th>Kind</th><th>Value</th><th>Annotation</th></tr><tr><td>enumeration</td><td>Yes</td><td></td></tr><tr><td>enumeration</td><td>No</td><td></td></tr></table>	Kind	Value	Annotation	enumeration	Yes		enumeration	No	
Kind	Value	Annotation								
enumeration	Yes									
enumeration	No									


element **CSQBlockType/InductionFacility**

diagram										
namespace	http://idealliance.org/Specs/mailxml23.1/mailxml_sc									
type	mailxml_base:yesNo									
facets	<table><tr><th>Kind</th><th>Value</th><th>Annotation</th></tr><tr><td>enumeration</td><td>Yes</td><td></td></tr><tr><td>enumeration</td><td>No</td><td></td></tr></table>	Kind	Value	Annotation	enumeration	Yes		enumeration	No	
Kind	Value	Annotation								
enumeration	Yes									
enumeration	No									

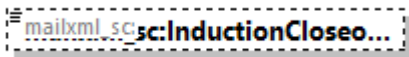
element **CSQBlockType/PreInductionInfo**

diagram										
namespace	http://idealliance.org/Specs/mailxml23.1/mailxml_sc									
type	mailxml_base:yesNo									
facets	<table><tr><th>Kind</th><th>Value</th><th>Annotation</th></tr><tr><td>enumeration</td><td>Yes</td><td></td></tr><tr><td>enumeration</td><td>No</td><td></td></tr></table>	Kind	Value	Annotation	enumeration	Yes		enumeration	No	
Kind	Value	Annotation								
enumeration	Yes									
enumeration	No									

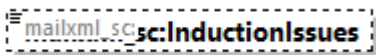
element **CSQBlockType/ContainerReleaseInfo**

diagram										
namespace	http://idealliance.org/Specs/mailxml23.1/mailxml_sc									
type	mailxml_base:yesNo									
facets	<table><tr><th>Kind</th><th>Value</th><th>Annotation</th></tr><tr><td>enumeration</td><td>Yes</td><td></td></tr><tr><td>enumeration</td><td>No</td><td></td></tr></table>	Kind	Value	Annotation	enumeration	Yes		enumeration	No	
Kind	Value	Annotation								
enumeration	Yes									
enumeration	No									


element **CSQBlockType/InductionCloseoutInfo**

diagram										
namespace	http://idealliance.org/Specs/mailxml23.1/mailxml_sc									
type	mailxml_base:yesNo									
facets	<table><tr><th>Kind</th><th>Value</th><th>Annotation</th></tr><tr><td>enumeration</td><td>Yes</td><td></td></tr><tr><td>enumeration</td><td>No</td><td></td></tr></table>	Kind	Value	Annotation	enumeration	Yes		enumeration	No	
Kind	Value	Annotation								
enumeration	Yes									
enumeration	No									

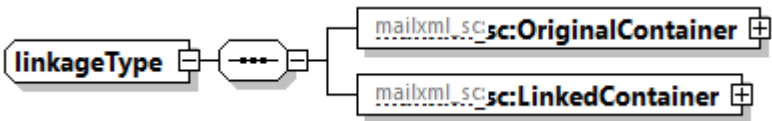
element **CSQBlockType/InductionIssues**

diagram										
namespace	http://idealliance.org/Specs/mailxml23.1/mailxml_sc									
type	mailxml_base:yesNo									
facets	<table><tr><th>Kind</th><th>Value</th><th>Annotation</th></tr><tr><td>enumeration</td><td>Yes</td><td></td></tr><tr><td>enumeration</td><td>No</td><td></td></tr></table>	Kind	Value	Annotation	enumeration	Yes		enumeration	No	
Kind	Value	Annotation								
enumeration	Yes									
enumeration	No									

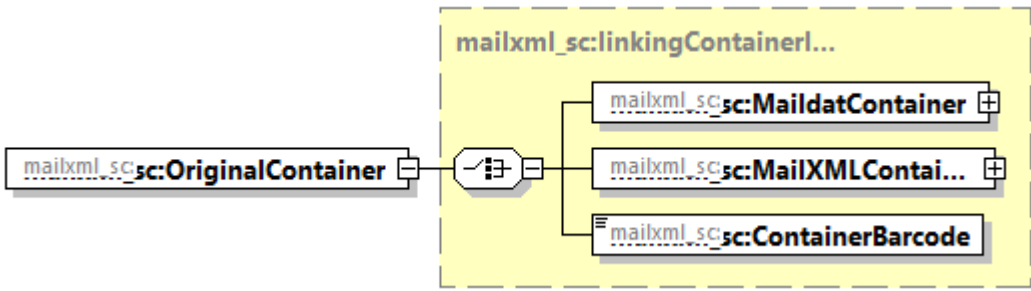
element **CSQBlockType/PostInductionInfo**

diagram										
namespace	http://idealliance.org/Specs/mailxml23.1/mailxml_sc									
type	mailxml_base:yesNo									
facets	<table><tr><th>Kind</th><th>Value</th><th>Annotation</th></tr><tr><td>enumeration</td><td>Yes</td><td></td></tr><tr><td>enumeration</td><td>No</td><td></td></tr></table>	Kind	Value	Annotation	enumeration	Yes		enumeration	No	
Kind	Value	Annotation								
enumeration	Yes									
enumeration	No									

complexType **linkageType**

diagram	
namespace	http://idealliance.org/Specs/mailxml23.1/mailxml_sc
children	mailxml_sc:OriginalContainer mailxml_sc:LinkedContainer
used by	<p>elements</p> <p>OriginalContainerLinkageCancelRequest/CancelLinkage OriginalContainerLinkageCancelResponse/OriginalContainerLinkageCancelAccept/CancelLinkage OriginalContainerLinkageCancelResponse/OriginalContainerLinkageCancelReject/CancelLinkage OriginalContainerLinkageCreateRequest/CreateLinkage OriginalContainerLinkageCreateResponse/LinkedContainerCreateAccept/LinkageCreated OriginalContainerLinkageCreateResponse/LinkedContainerCreateReject/LinkageRejected</p>

element **linkageType/OriginalContainer**

diagram	
namespace	http://idealliance.org/Specs/mailxml23.1/mailxml_sc
type	mailxml_sc:linkingContainerIDType
children	mailxml_sc:MaildatContainer mailxml_sc:MailXMLContainer mailxml_sc:ContainerBarcode

element **linkageType/LinkedContainer**

diagram	
namespace	http://idealliance.org/Specs/mailxml23.1/mailxml_sc
type	mailxml_sc:linkingContainerIDType
children	mailxml_sc:MaildatContainer mailxml_sc:MailXMLContainer mailxml_sc:ContainerBarcode

complexType **linkingContainerIDType**

diagram	
namespace	http://idealliance.org/Specs/mailxml23.1/mailxml_sc
children	mailxml_sc:MaildatContainer mailxml_sc:MailXMLContainer mailxml_sc:ContainerBarcode
used by	elements linkageType/LinkedContainer linkageType/OriginalContainer

element **linkingContainerIDType/MaildatContainer**


diagram	
namespace	http://idealliance.org/Specs/mailxml23.1/mailxml_sc

type	mailxml_defs:maildatContainerIDType					
attributes	Name	Type	Us e	Defaul t	Fixe d	Annotatio n
	mailxml_defs:UserLicenseCode	mailxml_base:userLicenseCodeType				
	mailxml_defs:MaildatJobID	mailxml_base:jobIDType				
	mailxml_defs:ContainerID	mailxml_base:s06				
	mailxml_defs:UniqueContainerBarcode	mailxml_base:IMcbType				

element **linkingContainerIDType/MailXMLContainer**

diagram	<p>The diagram shows a container element labeled 'mailxml_sc:MailXMLContai...' connected to a dashed box labeled 'mailxml_defs:MailXMLContai...'. Inside this dashed box are four child elements: 'mailxml_defs:fs:MailingGroupID', 'mailxml_defs:fs:CustomerGrou...', 'mailxml_defs:fs:ContainerID', and 'mailxml_defs:fs:ContainerBarc...'.</p>
namespace	http://idealliance.org/Specs/mailxml23.1/mailxml_sc
type	mailxml_defs:MailXMLContainerIDType
children	mailxml_defs:MailingGroupID mailxml_defs:CustomerGroupID mailxml_defs:ContainerID mailxml_defs:ContainerBarcode

element **linkingContainerIDType/ContainerBarcode**

diagram										
namespace	http://idealliance.org/Specs/mailxml23.1/mailxml_sc									
type	mailxml_base:IMcbType									
facets	<table><tr><td>Kind</td><td>Value</td><td>Annotation</td></tr><tr><td>minLength</td><td>21</td><td></td></tr><tr><td>maxLength</td><td>24</td><td></td></tr></table>	Kind	Value	Annotation	minLength	21		maxLength	24	
Kind	Value	Annotation								
minLength	21									
maxLength	24									

simpleType **adjustmentStatusType**

namespace	http://idealliance.org/Specs/mailxml23.1/mailxml_sc
type	restriction of xs:string
used by	element PostageAdjustmentCreateRequest/PostageAdjustment/AdjustmentStatus

facets	Kind	Value	Annotation
	enumeration	R	
	enumeration	X	
	enumeration	C	
	enumeration	P	
	enumeration	T	

simpleType **adjustmentType**

namespace	http://idealliance.org/Specs/mailxml23.1/mailxml_sc		
type	restriction of xs:string		
used by	element	PostageAdjustmentCreateRequest/PostageAdjustment/AdjustmentType	
facets	Kind	Value	Annotation
	enumeration	1	
	enumeration	2	
	enumeration	3	
	enumeration	4	

simpleType **containerInfoIncludedInResponseFlagType**

namespace	http://idealliance.org/Specs/mailxml23.1/mailxml_sc		
type	restriction of xs:string		
used by	element	ContainerStatusQueryRequest/ContainerInfoIncludedInResponseFlag	
facets	Kind	Value	Annotation
	enumeration	ContainerDetail	
	enumeration	PalletHandoffInfo	
	enumeration	ConsolidatorCommunicationInfo	
	enumeration	PaymentInfo	
	enumeration	AppointmentInfo	
	enumeration	FacilityInfo	
	enumeration	PreInductionValidation	
	enumeration	ContainerReleaseInfo	
	enumeration	InductionCloseoutInfo	
	enumeration	InductionIssues	
	enumeration	PostInductionValidation	
	enumeration	All	

simpleType **creditDebitIndicator**

namespace	http://idealliance.org/Specs/mailxml23.1/mailxml_sc		
type	restriction of xs:string		
used by	element	PostageAdjustmentCreateRequest/PostageAdjustment/CreditDebitIndicator	

facets	Kind	Value	Annotation
	enumeration	C	
	enumeration	D	