



RIXML Interactions Standard Data Dictionary

RIXML Interactions Standard Version 1.0

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Preface

Copyright and incorporation information

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Schema revision history

Date	Version	Comments
01 Nov 2017	1.0	Initial production release of the RIXML Interactions Standard.

NOTE: This *Data Dictionary* represents and update to the *documentation* for RIXML Interactions Standard version 1.0; however, there are no changes to the standard itself.

Section 1: Introduction

About RIXML.org

RIXML.org is a consortium of buy-side financial services firms, sell-side financial services firms, and technology vendors who provide products and services for creating and distributing investment research and/or capturing interactions between research providers and research consumers. The goals of RIXML.org are to define an open protocol that will improve the process of categorizing, aggregating, comparing, sorting, searching, and distributing global financial research, and to define an open protocol that allows service providers, consumers, and interaction report aggregators to comply with the EU's MiFID II reporting requirements.

The individuals who represent their firms include both IT experts and business-side project managers who represent the analysts, portfolio managers, and others who both produce and consume investment research.

About the RIXML Interactions Standard

The RIXML Interactions Standard is designed to help firms comply with the European Union's revised Markets in Financial Instruments Directive (MiFID II).

The member firms of RIXML have collaborated with nonmember firms and buy-side firms to define a set of components, rules, lists, and recommendations that enable clear description of investment interactions. This new standard enables service providers to capture detailed information about each interaction and to provide separate interactions records to each service consumer with information about the event. The standard has been designed to accommodate a range of interaction types, from one-on-one interactions to conference calls to multi-session conferences.

About this data dictionary

This data dictionary provides the full set of tags used in the RIXML Interactions standard, along with definitions and the object model, formatted in a way that is easier to read than the actual XSD schema files. This document is one component of the RIXML Interactions release packet, and is intended to be used in conjunction with the other components of the release. In particular, the *RIXML Implementation Guide* provides critical background information and guidance about implementing the RIXML Interactions Standard.

This data dictionary also defines some best practices for implementing the RIXML Interactions Standard.

RIXML Interactions Standard release packet

This data dictionary is one part of the RIXML Interactions Standard release packet. Please check the rixml.org website to make sure you are using the most up-to-date release packet, which includes the following components:

- RIXML Interactions Data Dictionary (this document) – human-readable catalog of attributes and elements, with descriptions
- RIXML Interactions schema files

Each of these documents is available in the *Technical > Interactions Standard* section of the [RIXML.org](http://rixml.org) website.

Additionally, although the *RIXML Research Implementation Guide* (available in the *Technical > Research Standard* section of the website) was created for the RIXML Research Standard, it contains valuable information about our organization, our approach to creating all of our standards, and best practices for implementing them. It will be updated in the future with additional information specific to the Interactions Standard; however, much of the information it currently contains is relevant to the Interactions Standard as well as the Research Standard.

Where can I get more information?

A wealth of additional information can be found on the [RIXML.org](http://rixml.org) website, particularly in the *Technical* section.

Additionally, firms that are working to adopt RIXML will find the support of the [RIXML.org](http://rixml.org) organization in assisting to answer any questions:

RIXML Program Office
c/o Jordan & Jordan
5 Hanover Square
New York, NY 10004
Phone: 212-655-2945
Email: rixml@jandj.com
Fax: 212-422-8570

How can I provide feedback?

You can provide any feedback or suggestions to rixml@jandj.com. A summary of our process for incorporating changes can be found in the “Updates” portion of Section 2 of this document.

Section 2: Best Practices and Common Mistakes

Below is additional information covering the more technical aspects of the RIXML Research standard. The information here should be used in conjunction with the information in the *Implementation Guide*.

File management

RIXML file extension is *.xml*

RIXML interaction files should have an '.xml' file extension, not '.rixml'

CORRECT: interaction18524898.xml

INCORRECT: interaction18524898.rixml

Perform all transactions via RIXML

For any interaction record submitted using RIXML, any other transaction involving that record – including revisions, recalls and deletions – should be achieved by sending a RIXML file. Bypassing this process by manually performing any operation (such as an emergency delete) by phone or e-mail request also bypasses the automated processing, controls, quality checks, and audit trails built into vendor ingestion systems, and will often result in future problems.

Formatting

Tags are order-specific

Tags must be placed in your RIXML file in exactly the same order as they are specified in the RIXML Interactions schema.

Required tags are required

Be sure to include all required tags.

Highly recommended tags should be included whenever possible

Technically speaking, a tag that is highly recommended is actually optional; however, the member firms of RIXML.org have determined that it is best practice to use it. Some vendors may choose to reject submissions that do not have the Highly recommended tags.

Tag names are case-sensitive

Tag names must be spelled exactly as documented

CORRECT: <firstName >

INCORRECT: <FirstName > or <FIRSTNAME>

Make sure to escape (but not double-escape) special XML characters

There are several characters that have special meaning in XML. In English, placing a question mark or exclamation point in the middle of a sentence would likely confuse a reader. Likewise, characters like ‘&’ and ‘<’ are used for XML ‘punctuation’. If you need to use such characters within your tag data (e.g., your title includes “Property & Casualty”), you need to ‘escape’ them. You do this by using ‘&’ instead of ‘&’. These codes are called XML *entities*. A full list can be found in the XML documentation on the W3C.org web site.

- CORRECT: “Property & Casualty” for “Property & Casualty”
- CORRECT: enclose your data within a CDATA section which informs XML parsers that the text within the section is to be interpreted literally.
- INCORRECT: not escaping: “Property & Casualty” would not appear correctly; consequences would depend on the XML parser and downstream software.
- INCORRECT: double-escaping: “Property ‘&amp; Casualty” would often be displayed as “Property & Casualty,” although consequences would depend on the XML parser and downstream software.

Default values

Hard-coding text or other values in any XML tag is strongly discouraged.

There are several reasons that it may be tempting to have automated systems simply fill in default values. These automations:

- may not collect all the information about each interaction that is necessary to fully populate all the RIXML tags
- may populate a field with a default value when in some cases, omitting the field would be a more accurate choice

There are some cases in which default values can be accurately applied. For example,

- information in the provider tag, which provides the information about the report’s publisher, will generally be the same for all reports published by that publisher. In that case, it is fine to hard code that information.
- if you are only capturing interactions that have occurred, you can safely automate every record to be tagged with interaction status type *Delivered*. Or, if you are only capturing the actual attendees of meetings, you can safely automate every participant’s status as *Attended*.

Aside from these extremely clear-cut situations, hard-coded values should not be applied. For optional fields, it is preferable to omit tags or leave them blank until your firm’s infrastructure can be adjusted to apply these tags accurately.

Enumeration lists

Please make sure to consult the “Enumeration Lists” section of the *Implementation Guide* for critical information regarding RIXML’s use of enumeration lists in fields with a restricted string type. Below is some additional information on the technical details of the proper use of enumeration lists in RIXML.

Enumerated values are case-sensitive

Enumerated tag values must be spelled exactly as documented, including case.

CORRECT: “AnalystFX” or “HeadOfBusiness”

INCORRECT: “analyst-fx”, “ANALYSTFX”, “HeadofBusiness”, “headofbusiness”

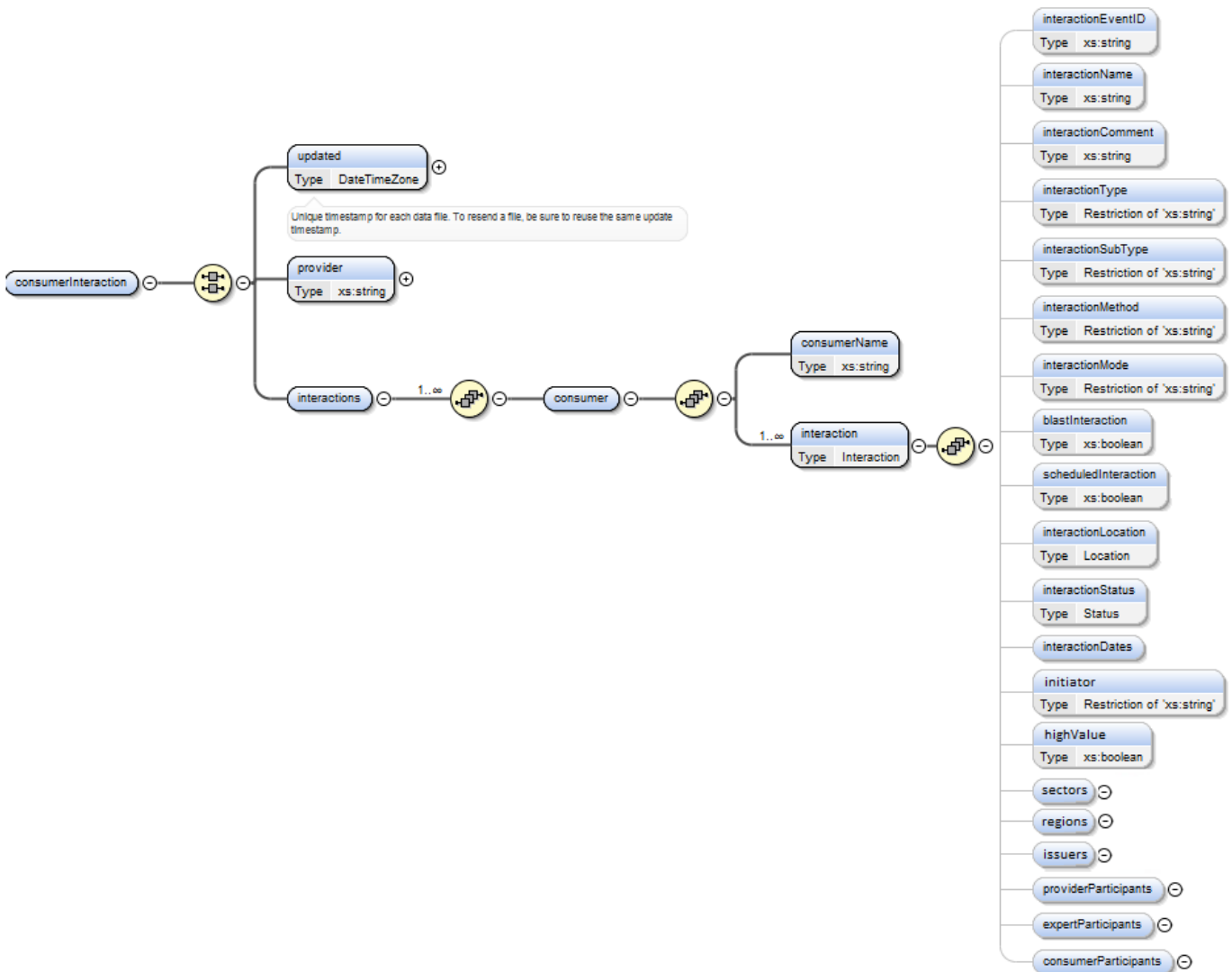
Enumerated values are exclusive

Enumerated tag values are exclusive – you can’t make up your own for tags that the RIXML Interactions Standard provides a set list of values. Additionally, “” (null) is not valid for enumerated tags. If the tag is included, a valid value must also be included. The way to use your own values is via the enumeration value of “Other” where applicable.

CORRECT: “Onsite” or “Offsite” or “N/A”

INCORRECT: “Conference” and “”

Section 3: Interactions Class Diagram: High Level Relationships



Section 4: Elements

This section provides the list of all simple and complex elements in the RIXML Interactions Standard.

consumerInteraction

consumerInteraction is the root tag for an interaction record.

Path:

consumerInteraction

Elements:

provider (Required, String)

Indicates the name of the provider firm. Details about individual participants from the provider firm (optional) are contained in providerParticipants element.

Complex Elements:

interactions (Required, multiples allowed)

Complex Types:

updated (Required, DateTimeZone complex type)

Unique timestamp for each data file. To resend a file, be sure to reuse the same update timestamp.

interactions

Container element for the details about the consumer + interaction combination.

Path:

consumerInteraction / interactions

Complex Elements:

consumer (Required)

consumer

Container element containing the consumer name details and the details of the specific interaction.

Path:

consumerInteraction / interactions / consumer

Elements:

consumerName (Required, String)

Indicates the name of the consumer firm. Details about individual participants from the consumer firm (optional) are contained in consumerParticipants element.

Complex Types:

interaction (Required, Multiples allowed, Interaction complex type)

interaction

Container element containing the details about the specific interaction.

Path:

consumerInteraction / interactions / consumer / interaction

Elements:

interactionEventID (Optional, String)

Unique identifier used to identify each interaction event (a meeting, conference call, email, etc.). In cases where an event included multiple service consumers, there will be separate interaction record sent to each service consumer that contains only the attendee information for attendees from that firm. This InteractionEventID tag is the unique identifier for the event itself.

interactionID (Optional, String)

If present, identifier must be unique across all interactions for all time.

interactionName (Optional, String)

The “title” of the interaction, a name or short description that all participants would recognize to identify or describe the event.

interactionComment (Optional, String)

Free text comment field.

interactionType (Optional, interactionTypeEnum)

The type of meeting from the standpoint of assigning value to the meeting. In cases where multiple types could apply, the type that represents the highest-priority attendee should be chosen (e.g., a meeting with an analyst and a sales person should be defined as AnalystMarketing, not Sales).

interactionSubType (Optional, interactionSubTypeEnum)

Indicates the number of service consumer firms participated in the interaction. Used by some firms as a component of determining value of an interaction.

interactionMethod (Optional, interactionMethodEnum)

Indicates whether the method of the interaction was transfer of research, delivery of electronic data, or an interaction between individuals.

interactionMode (Optional, interactionModeEnum)

Enumeration list field that indicates the way an interaction was conducted (in person, email, data feed, etc.).

blastInteraction (Optional, Boolean)

Flag to indicate whether the interaction is considered a blast interaction by the interaction provider. Used in conjunction with InteractionMode, but only used if mode is VoiceMail or Email. For all other InteractionModes, this tag should be omitted entirely rather than being set to No.

scheduledInteraction (Optional, Boolean)

Flag to identify whether an interaction is delivered on a regular basis (data feed, etc).

initiator (Highly recommended, initiatorEnum)

Identifies whether the interaction was initiated by the interaction producer, consumer, or a third-party corporate participant. Not required, but highly recommended to include this element for the initiator of the interaction; can be omitted or set to False for other participants.

highValue (Optional, Boolean)

Flag to indicate whether the interaction provider predicts the interaction to be perceived as high value by the interaction consumer.

Complex Elements:

interactionLocation (Optional, Location complex type)

interactionStatus (Optional, Status complex type)

interactionDates (Optional, Date complex type)

sectors (Optional, String)

regions (Optional, Region simple type)

issuers (Optional, Issuer complex type)

providerParticipants (Optional, Participant complex type)

expertParticipants (Optional, Participant complex type)

consumerParticipants (Optional, Participant complex type)

interactionLocation

Container element for location and venue information.

Path:

consumerInteraction / interactions / consumer / interaction / interactionLocation

Complex Types:

Location (Required, Location Complex Type)

interactionVenue

Container element for the venue information for the interaction.

Path:

consumerInteraction / interactions / consumer / interaction / interactionLocation / Location / interactionVenue

Complex Types:

Venue (Required, Venue Complex Type)

InteractionStatus

Container element for the status information for the interaction.

Path:

consumerInteraction / interactions / consumer / interaction / interactionStatus

Complex Types:

Status (Required, Status complex type)

interactionDates

Container element containing details of the date stamp(s) associated with the interaction.

Path:

consumerInteraction / interactions / consumer / interaction / interactionDates

Complex types:

interactionDate (Required, Multiples allowed, Date complex element)

sectors

Container element containing one or more *sector* elements related to the interaction.

Path:

consumerInteraction / interactions / consumer / interaction / sectors

Elements:

sector (Required if Sectors is used, Multiples allowed, String)

Name of the sector indicated in the *Sectors* element related to the interaction.

regions

Container element containing one or more *region* elements related to the interaction.

Path:

consumerInteraction / interactions / consumer / interaction / regions

Element:

region (Required if Regions is used, Multiples allowed, Region simple type)

Simple type containing information about each region indicated in *regions* element.

issuers

Container element containing one or more *Issuer* complex types related to the interaction.

Path:

consumerInteraction / interactions / consumer / interaction / Issuers

Complex Types:

Issuer (Required, Multiples allowed, Issuer complex type)

issuerIDs

Container element containing the identifier of the issuer related to the interaction.

Path:

ConsumerInteraction / interactions / consumer / interaction / issuers / Issuer / issuerIDs

Complex Elements:

issuerID (Required, multiples allowed)

issuerID

Complex element containing issuerID string and the attribute indicating what type of issuerID it is.

Path:

ConsumerInteraction / interactions / consumer / interaction / issuers / Issuer / issuerIDs / issuerID

Attributes:

type (Required)

Attribute to indicate what type of identifier (ticker, CUSIP, Bloomberg code, etc.) an identifier is.

issuerParticipants

Element that aggregates the issuerParticipants related to the interaction. Each person is represented by a separate Participant container element.

Path:

ConsumerInteraction / interactions / consumer / interaction / issuers / Issuer / issuerParticipants

Complex Types:

Participant (Required, Multiples allowed, Participant complex type)

providerParticipants

Element that aggregates information regarding participants from interaction provider firm represented by the *provider* tag. Each person is represented by a separate Participant container element.

Path:

ConsumerInteraction / interactions / consumer / interaction / issuers / Issuer / providerParticipants

Complex Types:

Participant (Required, Multiples allowed, Participant complex type)

expertParticipants

Container element for expert participants of an interaction. Each person is represented by a separate Participant container element.

Path:

ConsumerInteraction / interactions / consumer / interaction / issuers / Issuer / expertParticipants

Complex Types:

Participant (Required, Multiples allowed, Participant complex type)

consumerParticipants

Container element for participants from interaction consumer firm. Each person is represented by a separate Participant container element.

Path:

ConsumerInteraction / interactions / consumer / interaction / issuers / Issuer / consumerParticipants

Complex Types:

Participant (Required, Multiples allowed, Participant complex type)

roles

Element to capture the role associated with a participant. Indicates the person's role within their firm, not role in the context of the interaction.

Path:

Participant / Roles

Complex Elements:

role (Required, RoleEnum)

Enumeration list-limited tag defining the person's role within his/her firm. May or may not match person's title. The RoleEnum list contains guidance regarding which roles are valid for each participant type (consumer, corporate, third party, or provider).

Section 5: Types

Standard XML Types

The following standard XML types are used in the RIXML Interactions Standard:

boolean

For fields that are defined as Boolean type, valid terms are:

1 (which indicates true)

0 (which indicates false)

date

Used for tags requiring a standard date/time stamp in format "YYYY-MM-DD"

dateTime

Used for tags requiring a standard date/time stamp in format "YYYY-MM-DDThh:mm:ss"

int

Used for tags requiring a signed 32-bit integer.

string

Used for free-text tag fields. Can contain letters, numbers, characters, spaces, line breaks, and tabs. Tags that are restricted strings are limited to the values provided in the associated enumeration list (see section 6 of this document).

Complex Types defined in the RIXML Interactions Standard

DateTimeZone

Complex type combining a dateTime field with an optional timezone reference.

Used by:

consumerInteraction / updated

Elements:

datetime (Required, dateTime)

The timestamp for the interaction update.

timezone (Optional, String)

Extension of datetime to include timezone information.

Location

Complex type containing details of the location of an interaction.

Used by:

consumerInteraction / interactions / consumer / interaction / interactionLocation / Location

Complex Types:

interactionVenue (Required)

Venue

Complex type containing details of a venue.

Used by:

consumerInteraction / interactions / consumer / interaction / interactionLocation / Location / interactionVenue / Venue

Elements:

venueType (Required, venueTypeEnum)

This is used to indicate the type of venue for the interaction.

venueName (Optional, String)

Name of venue for the interaction.

city (Required, String)

City where the venue is physically located.

country (Optional, String)

Country where the venue is physically located.

Status

Complex type containing the information pertaining to each instance of an interactionStatus tag used in an interaction record. As the status of the interaction changes, additional instances can be added, each with an associated timestamp.

Used by:

consumerInteraction / interactions / consumer / interaction / interactionStatus / Status

Elements:

interactionStatusDate (Optional, date)

Date/time for the associated status. All times local.

interactionStatusType (Optional, interactionStatusTypeEnum)

Indicates the type of status represented by the interactionStatusDate timestamp. Firms that will be using this schema to disseminate information exclusively for interactions that actually occurred will likely only use the "Delivered" status type. Firms that use this schema for internal systems and/or for disseminating information about events at various stages of interaction lifecycle will use the other enumerations as well.

Date

Complex type containing the information pertaining to each instance of an interactionDate tag used in an interaction record.

Used by:

consumerInteraction / interactions / consumer / interaction / interactionDates / interactionDate / Date

Elements:

interactionDateTime (Optional, dateTime)

Timestamp representing the date/time type indicated in the interactionDateType.

interactionDuration (Optional, int)

Duration of interaction, expressed in minutes.

interactionDateType (Optional, interactionDateTypeEnum)

Type of interaction date/time represented by the interactionDateTime timestamp.

Issuer

Complex type to collect information about the issuer.

Used by:

consumerInteraction / interactions / consumer / interaction / issuers / Issuer

Elements:

issuerName (Optional, String)

Firm name of the issuer.

isPublic (Optional, Boolean)

Flag to indicate whether the issuer is a publicly traded company.

Complex Elements:

issuerIDs

issuerParticipants (Optional)

Participant

Container element for the information about each individual participating in the interaction.

Used by:

ConsumerInteraction / interactions / consumer / interaction / issuers / Issuer / issuerParticipants / Participant

consumerInteraction / interactions / consumer / interaction / consumerParticipants / Participant

consumerInteraction / interactions / consumer / interaction / ProviderParticipants / Participant

consumerInteraction / interactions / consumer / interaction / expertParticipants / Participant

Elements:

participantID (optional, String)

A unique identifier used to identify each participant in the interaction. For accurate identification it is required that the personID be unique for a given publisher, but the implementation of the ID is left to the publishers to implement as they deem fit. Examples: email address, combination of LastName and FirstName, combination of internal employee ID and RIXML publisher ID. For interaction records that are submitted to or through a third-party aggregator, this tag will be used in conjunction with the ParticipantIDType tag below.

isHost (optional, Boolean)

Optional flag to indicate whether an individual served as the host of the interaction.

status (optional, statusEnum)

Indicates the status of the individual in the context of the interaction. (NOTE: not to be confused with the Status complex type, which contains information surrounding the status of the interaction itself.)

Complex Elements:

roles (Required, Multiples allowed)

Complex Types:

person (Required, Multiples allowed, Person complex type)

Person

Complex type collecting the information about each person participating in the interaction.

Used by:

ConsumerInteraction / interactions / consumer / interaction / issuers / Issuer / issuerParticipants / Participant / Person

consumerInteraction / interactions / consumer / interaction / consumerParticipants / Participant / Person

consumerInteraction / interactions / consumer / interaction / ProviderParticipants / Participant / Person

consumerInteraction / interactions / consumer / interaction / expertParticipants / Participant / Person

Elements:

firstName (Required, String)

Participant's first name.

lastName (Required, String)

Participant's last name.

email (Optional, String)

Participant's email address.

title (Optional, String)

Title of the person at his/her firm; not the individual's role within the interaction.

Tag

Tags are key-value pairs that are used to add ad-hoc or custom information to an element.

Used by:

Tag

Elements:

key (Required, String)

The name of the element that is being added to the record. Some third-party aggregators may provide specific **key** elements that they require. May also be used to provide information required by internal systems, or as needed to satisfy consumer-firm requirements.

value (Required, String)

The value of the element defined in the related **key** element.

scope (Required, String)

Optional element used to specify the conditions under which this key-value pair should be used.

This can specify a particular output target or permissioning level.

Simple Types defined in the RIXML Interactions Standard

Region

Simple type to collect information about the region, using the Region enumeration list.

Used by:

consumerInteraction / interactions / consumer / interaction / regions / region

Section 6: Enumeration lists

Listing of all the enumerated values used in any restricted string tags.

interactionDateTypeEnum

Enumeration Values:

CancellationDate

DateDue

DateRequested

DeliveryDate

EndDate

ExpirationDate

InitialContactDate

StartDate

n/a

interactionMethodEnum

Enumeration Values:

Electronic

Electronically delivered data.

Interaction

Interaction between individuals.

Research

Research originated content.

interactionModeEnum

Enumeration Values:

BespokeData

Data delivered for a bespoke work request.

Call

Phone call.

DataFeed

Creation or update to an existing automated data set request.

Email

Electronic communication via email only, not IM.

IM

Electronic text communication via IM provider such as Bloomberg or Symphony.

Inperson

Meeting with participants physically present.

Video

Video conference.

VoiceMail

Voicemail message.

Other

Other type of meeting not fitting one of the above criteria.

interactionStatusTypeEnum

Enumeration Values:

Accepted
Confirmed
Delivered
New
Offered
Postponed
WaitListed

interactionSubTypeEnum

First number indicates number of client firms attending the meeting (regardless of the number of individuals).

Enumeration Values:

1x1
2x1
3x1
Group

interactionTypeEnum

Enumeration Values:

AnalystMarketing

Planned in-person, video and audio meetings with research analyst and one or more other buy-side firms present. Excludes account review meetings, sales meetings, trader meetings and general (unscheduled) phone calls. Meaningful, unscheduled phone discussions to be allocated to "Incoming/Outgoing Call" with an indication of subject discussed and duration.

BankerMeeting

Meeting hosted by research provider to discuss investment banking opportunities.

BespokeAccess

Client(s) being taken to visit a corporate to talk to their management team.

BespokeWork

One-off custom research project specifically requested by client and created solely for its use. Excludes company models, non-company models, comp sheets, organized meetings or the provision of automated data sets.

Conference

Meetings with any corporate at a broker-sponsored conference.

DealRoadshow

Meeting or call with a corporate that has an impending IPO or secondary offering in the works

ExpertMeeting

Meeting or call with current or former government official or industry expert regardless of venue or encompassing event.

FieldTrip

Visit to the working sites of a corporate.

ModelAccess

The provision of an interactive spreadsheet forecasting company / non-company valuations, target prices, scenarios and / or outcomes. It excludes comp sheets and automatically generated quantitative data sets Company name, ticker or suitable description to metadata should be added.

NonDealRoadshow

Meeting or Call with a corporate that does NOT have an impending IPO or secondary offering pending, generally at a client's office.

RelationshipMeeting

Interaction between a relationship manager and a client to discuss relationship or account reviews

Sales

Interaction with a sellside generalist salesperson.

SalesSpecialist

Interaction with a sellside specialist salesperson.

Social

Social event between the broker and investor (ex: sporting event).

initiatorEnum**Enumeration Values:**

Consumer

Corporate

Provider

regionEnum**Enumeration Values:**

Asia (ex-Japan)

Australia

EEMA

Japan

Latin America

MEA

North America

United States

roleEnum

There is one Role enumeration list that contains the roles appropriate for all participant types (provider, corporate, third party, and consumer). The list below breaks the full list into categories to indicate which roles are appropriate for each participant type. Note that some roles are valid in more than one participant type; these appear in each of the appropriate lists below.

Enumeration Values valid for CONSUMER participants:

BrokerLiason
Compliance
ConsumerAnalyst
ConsumerClientManagement
ConsumerCoordinator
ConsumerIT
ConsumerSales
DirectorOfResearch
PorfolioManager
Other

Enumeration Values valid for CORPORATE participants:

BoardMember
BoardSecretary
BusinessDevelopment
CEO
CFO
Chairman
CIO-Information
CIO-Investment
CMO
COO
CRO
CSO
CTO
Director
Executive
ExecVicePresident
Founder
GeneralCounsel
HeadOfBusiness
InvestorRelations
ManagingDirector
ManagingPartner
Partner
President
RegionalHead

SeniorVicePresident
Treasurer
ViceChairman
VicePresident
Other

Enumeration Values valid for THIRD-PARTY participants:

DataScientist
GovernmentExpert
IndustryExpert
MacroStrategist
MedicalExpert
Regulator
Other

Enumeration Values valid for PROVIDER participants:

AnalystEquity
AnalystFixedIncome
AnalystFX
BusinessDevelopment
Compliance
COO
DirectorOfResearch
InvestmentBanker
MacroStrategist
ProviderClientManagement
ProviderCoordinator
ProviderIT
ProviderManagement
ProviderSales
SpecialistSales
Other

statusEnum

Enumeration Values:

Accepted
Attended
Canceled
LateCancel
NoShow
Rejected

venueTypeEnum

Enumeration Values:

Offsite

Interaction occurred at a place other than the client office.

Onsite

Interaction occurred at the client office.

N/A

Interaction was a non-physical meeting.

Section 7: RIXML Interactions Schema

Below is a copy of the schema for the RIXML Interactions Standard. Note that this is for reference only; the official, current version of the RIXML Interactions Standard can be found at: http://www.rixml.org/technical/interactions_standard

```
xmlns:xs="http://www.w3.org/2001/XMLSchema" version="2.1.1">
  <xs:element name="consumerInteraction">
    <xs:complexType>
      <xs:all>
        <xs:element name="updated" type="DateTimeZone">
          <xs:annotation>
            <xs:documentation>Unique timestamp for each data file. To resend a file, be sure to reuse the
            same update timestamp.</xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="provider" type="xs:string"/>
        <xs:element minOccurs="1" name="interactions">
          <xs:complexType>
            <xs:sequence maxOccurs="unbounded">
              <xs:element name="consumer">
                <xs:complexType>
                  <xs:sequence>
                    <xs:element name="consumerName" type="xs:string"/>
                    <xs:element name="interaction" type="Interaction"
                      maxOccurs="unbounded"/>
                  </xs:sequence>
                </xs:complexType>
              </xs:element>
            </xs:sequence>
          </xs:complexType>
        </xs:element>
      </xs:all>
    </xs:complexType>
  </xs:element>
  <xs:complexType name="Interaction">
    <xs:sequence>
      <xs:element minOccurs="0" name="interactionEventID" type="xs:string"/>
      <xs:element minOccurs="0" name="interactionName" type="xs:string"/>
      <xs:element name="interactionComment" type="xs:string" maxOccurs="1" minOccurs="0"/>
      <xs:element name="interactionType" minOccurs="0">
        <xs:simpleType>
          <xs:restriction base="xs:string">
            <xs:enumeration value="AnalystMarketing"/>
            <xs:enumeration value="BankerMeeting"/>
            <xs:enumeration value="BespokeAccess"/>
            <xs:enumeration value="Conference"/>
            <xs:enumeration value="BespokeWork"/>
            <xs:enumeration value="DealRoadshow"/>
            <xs:enumeration value="FieldTrip"/>
            <xs:enumeration value="ExpertMeeting"/>
            <xs:enumeration value="ModelAccess"/>
            <xs:enumeration value="NonDealRoadshow"/>
            <xs:enumeration value="RelationshipMeeting"/>
          </xs:restriction>
        </xs:simpleType>
      </xs:element>
    </xs:sequence>
  </xs:complexType>
</xs:schema>
```

```

        <xs:enumeration value="Sales"/>
        <xs:enumeration value="SalesSpecialist"/>
        <xs:enumeration value="Social"/>
    </xs:restriction>
</xs:simpleType>
</xs:element>
<xs:element name="interactionSubType" minOccurs="0">
    <xs:simpleType>
        <xs:restriction base="xs:string">
            <xs:enumeration value="1x1"/>
            <xs:enumeration value="2x1"/>
            <xs:enumeration value="3x1"/>
            <xs:enumeration value="Group"/>
        </xs:restriction>
    </xs:simpleType>
</xs:element>
<xs:element name="interactionMethod" minOccurs="0">
    <xs:simpleType>
        <xs:restriction base="xs:string">
            <xs:enumeration value="Research"/>
            <xs:enumeration value="Electronic"/>
            <xs:enumeration value="Interaction"/>
        </xs:restriction>
    </xs:simpleType>
</xs:element>
<xs:element name="interactionMode" minOccurs="0">
    <xs:simpleType>
        <xs:restriction base="xs:string">
            <xs:enumeration value="VoiceMail"/>
            <xs:enumeration value="Email"/>
            <xs:enumeration value="IM"/>
            <xs:enumeration value="BespokeData"/>
            <xs:enumeration value="DataFeed"/>
            <xs:enumeration value="Other"/>
            <xs:enumeration value="Video"/>
            <xs:enumeration value="Inperson"/>
            <xs:enumeration value="Call"/>
        </xs:restriction>
    </xs:simpleType>
</xs:element>
<xs:element minOccurs="0" name="blastInteraction" type="xs:boolean"/>
<xs:element minOccurs="0" name="scheduledInteraction" type="xs:boolean"/>
<xs:element minOccurs="0" name="interactionLocation" type="Location"/>
<xs:element minOccurs="0" name="interactionStatus" type="Status"/>
<xs:element minOccurs="0" name="interactionDates">
    <xs:complexType>
        <xs:sequence maxOccurs="unbounded">
            <xs:element name="interactionDate" type="Date" minOccurs="0"/>
        </xs:sequence>
    </xs:complexType>
</xs:element>
<xs:element minOccurs="0" name="initiator">
    <xs:simpleType>
        <xs:restriction base="xs:string">
            <xs:enumeration value="Corporate"/>
            <xs:enumeration value="Consumer"/>
            <xs:enumeration value="Provider"/>
        </xs:restriction>
    </xs:simpleType>
</xs:element>

```

```

    </xs:simpleType>
  </xs:element>
  <xs:element minOccurs="0" name="highValue" type="xs:boolean"/>
  <xs:element name="sectors" minOccurs="0">
    <xs:complexType>
      <xs:sequence>
        <xs:element minOccurs="1" name="sector" type="xs:string"
          maxOccurs="unbounded"/>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
  <xs:element minOccurs="0" name="regions">
    <xs:complexType>
      <xs:sequence>
        <xs:element name="region" type="Region" maxOccurs="unbounded"/>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
  <xs:element minOccurs="0" name="tags">
    <xs:complexType>
      <xs:sequence>
        <xs:element maxOccurs="unbounded" minOccurs="1" name="tag" type="xs:string"
          />
      </xs:sequence>
    </xs:complexType>
  </xs:element>
  <xs:element minOccurs="0" name="issuers">
    <xs:complexType>
      <xs:sequence maxOccurs="unbounded">
        <xs:element name="issuer" type="Issuer"/>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
  <xs:element minOccurs="0" name="providerParticipants">
    <xs:complexType>
      <xs:sequence maxOccurs="unbounded">
        <xs:element name="participant" type="Participant"/>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
  <xs:element maxOccurs="1" minOccurs="0" name="expertParticipants">
    <xs:complexType>
      <xs:sequence maxOccurs="unbounded">
        <xs:element name="participant" type="Participant"/>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
  <xs:element name="consumerParticipants" minOccurs="0">
    <xs:complexType>
      <xs:sequence maxOccurs="unbounded">
        <xs:element name="participant" type="Participant"/>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
</xs:sequence>
</xs:complexType>
<xs:complexType name="Location">
  <xs:sequence>

```

```

    <xs:element name="interactionVenue" type="Venue"/>
  </xs:sequence>
</xs:complexType>
<xs:complexType name="Venue">
  <xs:sequence>
    <xs:element minOccurs="1" name="venueType">
      <xs:simpleType>
        <xs:restriction base="xs:string">
          <xs:enumeration value="Onsite"/>
          <xs:enumeration value="Offsite"/>
          <xs:enumeration value="N/A"/>
        </xs:restriction>
      </xs:simpleType>
    </xs:element>
    <xs:element minOccurs="0" name="venueName" type="xs:string"/>
    <xs:element minOccurs="1" name="city" type="xs:string"/>
    <xs:element name="country" type="xs:string" minOccurs="0"/>
  </xs:sequence>
</xs:complexType>
<xs:complexType name="Status">
  <xs:sequence>
    <xs:element minOccurs="0" name="interactionStatusDate" type="xs:date"/>
    <xs:element minOccurs="0" name="interactionStatusType">
      <xs:simpleType>
        <xs:restriction base="xs:string">
          <xs:enumeration value="Delivered"/>
          <xs:enumeration value="New"/>
          <xs:enumeration value="Postponed"/>
          <xs:enumeration value="Confirmed"/>
          <xs:enumeration value="Accepted"/>
          <xs:enumeration value="WaitListed"/>
          <xs:enumeration value="Offered"/>
        </xs:restriction>
      </xs:simpleType>
    </xs:element>
  </xs:sequence>
</xs:complexType>
<xs:complexType name="Date">
  <xs:sequence maxOccurs="1">
    <xs:element minOccurs="0" name="interactionDateTime" type="xs:dateTime"/>
    <xs:element minOccurs="0" name="interactionDuration" type="xs:int"/>
    <xs:element minOccurs="0" name="interactionDateType">
      <xs:simpleType>
        <xs:restriction base="xs:string">
          <xs:enumeration value="StartDate"/>
          <xs:enumeration value="EndDate"/>
          <xs:enumeration value="InitialContactDate"/>
          <xs:enumeration value="ExpirationDate"/>
          <xs:enumeration value="DateRequested"/>
          <xs:enumeration value="DateDue"/>
          <xs:enumeration value="DeliveryDate"/>
          <xs:enumeration value="CancellationDate"/>
          <xs:enumeration value="n/a"/>
        </xs:restriction>
      </xs:simpleType>
    </xs:element>
  </xs:sequence>
</xs:complexType>

```



```

<xs:complexType name="Issuer">
  <xs:sequence>
    <xs:element name="issuerName" type="xs:string" minOccurs="0"/>
    <xs:element minOccurs="0" name="isPublic" type="xs:boolean"/>
    <xs:element minOccurs="0" name="issuerIDs">
      <xs:complexType>
        <xs:sequence maxOccurs="unbounded" minOccurs="0">
          <xs:element name="issuerID" maxOccurs="1" minOccurs="0">
            <xs:complexType>
              <xs:simpleContent>
                <xs:extension base="xs:string">
                  <xs:attribute name="type"/>
                </xs:extension>
              </xs:simpleContent>
            </xs:complexType>
          </xs:element>
        </xs:sequence>
      </xs:complexType>
    </xs:element>
  </xs:sequence>
</xs:complexType>
<xs:complexType name="Participant">
  <xs:sequence>
    <xs:element name="person" type="Person" minOccurs="1"/>
    <xs:element minOccurs="0" name="participantID" type="xs:string"/>
    <xs:element minOccurs="0" name="isHost" type="xs:boolean"/>
    <xs:element minOccurs="0" name="roles">
      <xs:complexType>
        <xs:sequence maxOccurs="unbounded" minOccurs="1">
          <xs:element name="role" minOccurs="1">
            <xs:simpleType>
              <xs:restriction base="xs:string">
                <xs:enumeration value="DirectorOfResearch"/>
                <xs:enumeration value="PorfolioManager"/>
                <xs:enumeration value="ConsumerAnalyst"/>
                <xs:enumeration value="BrokerLiason"/>
                <xs:enumeration value="ConsumerCoordinator"/>
                <xs:enumeration value="ConsumerIT"/>
                <xs:enumeration value="ConsumerSales"/>
                <xs:enumeration value="ConsumerClientManagement"/>
                <xs:enumeration value="Compliance"/>
                <xs:enumeration value="CEO"/>
                <xs:enumeration value="CFO"/>
                <xs:enumeration value="COO"/>
                <xs:enumeration value="CIO-Information"/>
                <xs:enumeration value="CIO-Investment"/>
                <xs:enumeration value="CTO"/>
                <xs:enumeration value="CMO"/>
                <xs:enumeration value="CRO"/>
                <xs:enumeration value="CSO"/>
                <xs:enumeration value="Executive"/>
              </xs:restriction>
            </xs:simpleType>
          </xs:element>
        </xs:sequence>
      </xs:complexType>
    </xs:element>
  </xs:sequence>
</xs:complexType>

```

```

        <xs:enumeration value="Chairman"/>
        <xs:enumeration value="Founder"/>
        <xs:enumeration value="President"/>
        <xs:enumeration value="BoardMember"/>
        <xs:enumeration value="BoardSecretary"/>
        <xs:enumeration value="ExecVicePresident"/>
        <xs:enumeration value="SeniorVicePresident"/>
        <xs:enumeration value="VicePresident"/>
        <xs:enumeration value="Director"/>
        <xs:enumeration value="ManagingPartner"/>
        <xs:enumeration value="GeneralCounsel"/>
        <xs:enumeration value="ViceChairman"/>
        <xs:enumeration value="ManagingDirector"/>
        <xs:enumeration value="Partner"/>
        <xs:enumeration value="InvestorRelations"/>
        <xs:enumeration value="RegionalHead"/>
        <xs:enumeration value="HeadOfBusiness"/>
        <xs:enumeration value="Treasurer"/>
        <xs:enumeration value="BusinessDevelopment"/>
        <xs:enumeration value="IndustryExpert"/>
        <xs:enumeration value="GovernmentExpert"/>
        <xs:enumeration value="DataScientist"/>
        <xs:enumeration value="Regulator"/>
        <xs:enumeration value="MedicalExpert"/>
        <xs:enumeration value="MacroStrategist"/>
        <xs:enumeration value="InvestmentBanker"/>
        <xs:enumeration value="AnalystEquity"/>
        <xs:enumeration value="AnalystFX"/>
        <xs:enumeration value="AnalystFixedIncome"/>
        <xs:enumeration value="ProviderCoordinator"/>
        <xs:enumeration value="ProviderIT"/>
        <xs:enumeration value="ProviderSales"/>
        <xs:enumeration value="SpecialistSales"/>
        <xs:enumeration value="ProviderManagement"/>
        <xs:enumeration value="ProviderClientManagement"/>
        <xs:enumeration value="Other"/>
    </xs:restriction>
</xs:simpleType>
</xs:element>
</xs:sequence>
</xs:complexType>
</xs:element>
<xs:element minOccurs="0" name="status" maxOccurs="1">
    <xs:simpleType>
        <xs:restriction base="xs:string">
            <xs:enumeration value="Attended"/>
            <xs:enumeration value="Accepted"/>
            <xs:enumeration value="Canceled"/>
            <xs:enumeration value="Rejected"/>
            <xs:enumeration value="NoShow"/>
            <xs:enumeration value="LateCancel"/>
        </xs:restriction>
    </xs:simpleType>
</xs:element>
</xs:sequence>
</xs:complexType>
<xs:complexType name="Person">
    <xs:sequence>

```

```

    <xs:element name="firstName" type="xs:string"/>
    <xs:element name="lastName" type="xs:string"/>
    <xs:element name="email" type="xs:string" minOccurs="0"/>
    <xs:element name="title" minOccurs="0" type="xs:string"> </xs:element>
  </xs:sequence>
</xs:complexType>
<xs:complexType name="Tag">
  <xs:annotation>
    <xs:documentation>Tags are key-value pairs that are used to add ad-hoc or custom information to an
    element.</xs:documentation>
  </xs:annotation>
</xs:complexType>
<xs:complexType name="DateTimeZone">
  <xs:annotation>
    <xs:documentation>Extension of datetime to include timezone information.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="datetime" type="xs:dateTime"/>
    <xs:element name="timezone" type="xs:string" minOccurs="0"/>
  </xs:sequence>
</xs:complexType>
<xs:simpleType name="Region">
  <xs:restriction base="xs:string">
    <xs:enumeration value="North America"/>
    <xs:enumeration value="Latin America"/>
    <xs:enumeration value="MEA"/>
    <xs:enumeration value="Asia (ex-Japan)"/>
    <xs:enumeration value="Japan"/>
    <xs:enumeration value="EEMA"/>
    <xs:enumeration value="United States"/>
    <xs:enumeration value="Australia"/>
  </xs:restriction>
</xs:simpleType>
</xs:schema>

```